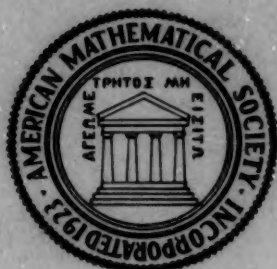


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Editorial Office: University of Michigan, Ann Arbor, Michigan. Editorial correspondence should be addressed to MATHEMATICAL REVIEWS, 611 Church St., PO Box 8604, Ann Arbor, Michigan 48107, USA.

Subscription information: Subscription prices for the year 1984 of Mathematical Reviews including the annual index are \$2200 list, \$1650 institutional member, \$208 individual member (\$233 outside the United States), \$142 reviewer (\$167 outside the United States). Nonindividual subscribers outside the United States and India must pay a postage surcharge of \$35; nonindividual subscribers in India must pay a postage surcharge of \$45. Combination paper and microfiche subscription prices are \$2926 list, \$2195 institutional member. Microfiche of each issue will be mailed the fastest way possible as each issue is published.

Back number information: Back number prices per volume: Volumes

1–12, \$450 list, \$338 member; Volumes 13–44, \$600 list, \$450 member; Volumes 45–58, \$900 list, \$675 member. Back number prices for 1980 are \$1900 list, \$1425 member; for 1981, \$2200 list, \$1650 member; for 1982 or 1983, \$2800 list, \$2100 member. Back volumes are available in microform from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

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US Postal Service Publication No. 333940

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Printed in the United States of America
ISSN 0025-5629

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Issue year 1984, annual index

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- (Grishani, D. M.) See Systems research, (**84g:00026**)
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- Ivakhnenko, O. G. New accents in the theory of self-organization of models. (**84e:00018**)
- (Klir, George J.) See Progress in cybernetics and systems research, (**84f:00031**)
- Loginov, B. V. (with Yaroshevskii, M. G.) Synthesis of biological and technological ideas in the 19th century as a prerequisite for cybernetics. (**84d:01035**)
- (Manoil, Dinu) See Staicu, Constantin I., (**84j:00014**)
- Marchuk, G. I. ★Математическое моделирование в проблеме окружающей среды. (Russian) [Mathematical modeling in the problem of the environment] (**84c:92059**)
- Markov, Yu. G. The functional approach and modern science. (Russian) (**84d:00018**)
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- (Sadovskii, V. N.) See Systems research, (**84g:00026**)
- Staicu, Constantin I. ★Restricted and general dimensional analysis. (**84j:00014**)
- Taylor, Alan B. Differential equations and the real world. (**84c:35112**)
- (Tomlinson, Rolfe) See Progress in cybernetics and systems research, (**84f:00033**)
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- ★Angewandte Mechanik. Band 1. (German) [Applied mechanics. Vol. 1] (**84j:70002a**)

- Current problems in applied mathematics and mathematical modeling ★Актуальные проблемы прикладной математики и математического моделирования. (Russian) [Current problems in applied mathematics and mathematical modeling] (**84f:00029**)
- Progress in cybernetics and systems research ★Progress in cybernetics and systems research. Vol. VIII. (**84f:00031**)
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- Systems research ★Системные исследования. (Russian) [Systems research] (**84g:00026**)

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secondary classifications:

- Lévy-Leblond, Jean-Marc Physique et mathématiques. [Physics and mathematics] (**84c:00014**)
- Tserkovnikov, Yu. A. A method for solving infinite systems of equations for two-time temperature Green functions. (Russian. English summary) (**84d:82016**)
- 00A99 Miscellaneous topics
- Booss, B. Profound purely mathematical results have (or can have) far-reaching practical consequences: current main fields of research and personal experiences. (Danish) (See **84c:00016**)
- (with Niss, M.) Mathematics and the real world—catalogue of questions. (See **84c:00016**)
- Some ideas on the launching of a debating journal on "mathematics and the real world". (See **84c:00016**)
- Hansson, Bengt Comments on Patrick Suppes's "Rational allocation of resources to scientific research". **84h:00028b**
- Niss, M. See Booss, B., (See **84c:00016**)
- Shelov, S. D. Semantics of a term (the mathematical term in logos and lexis). (Russian) **84d:00022**
- Suppes, Patrick Rational allocation of resources to scientific research. **84h:00028a**
- See also Hansson, Bengt, **84h:00028b** and Yudin, Boris, **84h:00028c**
- Yudin, Boris Allocation of the resources to scientific research: a comment to the report by P. Suppes. **84h:00028c**

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- Gindikin, S. G. ★Рассказы о физиках и математиках. (Russian) [Stories about physicists and mathematicians] (**84d:01085**)
- Gleizer, G. I. ★История математики в школе: IV-VI классы. (Russian) [History of mathematics for grades IV-VI] (**84i:01001**)
- Hofmann, Karl Heinrich Eine Stilkunde des Raumbegriffs—Spekulationen zwischen Kunst- und Mathematikgeschichte. [Stylistics of the concept of space—speculations between the history of art and the history of mathematics] (**84d:01006**)
- Jha, Ganganand Singh Mathematics in literature. (**84c:01013**)
- Zassenhaus, Hans J. Rubik's cube: a toy, a Galois tool, group theory for everybody. (**84c:20010**)

01-XX HISTORY AND BIOGRAPHY [See also the classification number -03 in the other sections.]

- Kramer, Edna E. ★The nature and growth of modern mathematics. **84c:01001**

secondary classifications:

- Neu, John A. One hundred seventh critical bibliography of the history of science and its cultural influences (to January 1982). (**84i:00026**)
- Bibliography:
History of science and its cultural influences See Neu, John A., (**84i:00026**)

01-01 Elementary exposition, textbooks

- Gleizer, G. I. ★История математики в школе: IV-VI классы. (Russian) [History of mathematics for grades IV-VI] **84i:01001**
- Mejlbo, Lars C. On the early history of infinite series. (Danish. English summary) **84h:01001**

secondary classifications:

- Lucchini, Gabriele See Manara, Carlo Felice, (**84c:01002**)
- Manara, Carlo Felice (with Lucchini, Gabriele) ★Momenti del pensiero matematico. (Italian) [Moments of mathematical thought] (**84c:01002**)
- Popp, Walter ★Wege des exakten Denkens. (German) [Paths of exact thinking] (**84i:01014**)
- Rider, Robin E. ★A bibliography of early modern algebra, 1500-1800. (**84g:01007**)
- Bibliography:
Early modern algebra See Rider, Robin E., (**84g:01007**)

01-02 Advanced exposition (research surveys, monographs, etc.)

01-06 Proceedings, conferences, etc.

- (Bolzano, Bernard) See Impact of Bolzano's epoch on the development of science, **84g:01004**
- (Bos, Henk J. M.) See Social history of nineteenth century mathematics, **84k:01001**

- (Costabel, Pierre) See Simeon-Denis Poisson and the science of his time. 84m:01003
- (Crossley, John N.) See Conference: Australian, History of Mathematics. 84e:01001
- (Dimitrov, Evgeni) See Opening addresses, contributions and bibliography of the new members of the Macedonian Academy of Sciences and Arts. 84e:01003
- (Dugac, Pierre) See Proceedings: Seminar on the History of Mathematics. 84e:01004; Proceedings: Seminar on the history of mathematics. 84m:01002 and Simeon-Denis Poisson and the science of his time. 84m:01003
- (Einstein, Albert) See Einstein-Centenary, 84j:01001a and Problems of physics: classical and modern. 84j:01001b
- (Gordeev, D. I.) See History and methodology of the natural sciences. 84b:01001 and 84g:01003
- (Ilomets, T.) See Tartu State University. History of development, training of personnel, and scientific research. 2, 2. 84k:01002
- (Keil, Gundolf) See Studies of scientific prose texts. 84k:01021a
- (Mehrtens, Herbert) See Social history of nineteenth century mathematics. 84k:01001
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- Erdélyi, Arthur (with Magnus, Wilhelm; Oberhettinger, Fritz; Tricomi, Francesco G.) ★Higher transcendental functions. Vol. I. (84h:33001a)
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- (with Magnus, Wilhelm; Oberhettinger, Fritz; Tricomi, Francesco G.) ★Higher transcendental functions. Vol. III. (84h:33001c)
- (Goldfeld, Dorian) See Rademacher, Hans, (84h:10001)
- Grossberg, Stephen ★Studies of mind and brain. (84c:92065)
- Gryaznov, B. S. ★Логика, рациональность, творчество. (Russian) [Logic, rationality, creativity] (84k:00020)
- Hall, A. Rupert ★From Galileo to Newton. (84a:01017)
- Harsanyi, John C. ★Papers in game theory. (84g:90166)
- (Hildenbrand, Werner) See Debreu, Gerard, (84g:90004)
- Hohl, Wolfgang ★Informatik-Sammlung. Katalog mit historischen Erläuterungen. (German) [Collection on informatics. Catalogue with historical explanations] (84f:01035)
- (Khayyām, Omar) See Œuvre algébrique d'al-Khayyām, (84a:01008)
- (Kung, Joseph P. S.) See Young tableaux in combinatorics, invariant theory, and algebra. (84b:05006)
- Magnus, Wilhelm See Erdélyi, Arthur; et al., (84h:33001a); (84h:33001b) and (84h:33001c)
- Oberhettinger, Fritz See Erdélyi, Arthur; et al., (84h:33001a); (84h:33001b) and (84h:33001c)
- Quine, Willard Van Orman ★Mathematical logic. (84c:03002)
- Rademacher, Hans ★Higher mathematics from an elementary point of view. (84h:10001)
- (Rashed, Roshdi) See Œuvre algébrique d'al-Khayyām, (84a:01008)
- (Rees, Mina) See Erdélyi, Arthur; et al., (84h:33001a)
- Robinson, Enders Anthony ★Time series analysis and applications. (84b:62143)
- (Sarf, Herbert E.) See Debreu, Gerard, (84g:90004)
- (Siekman, Jörg) See Automation of reasoning, (84f:03011a) and (84f:03011b)
- Tricomi, Francesco G. See Erdélyi, Arthur; et al., (84h:33001a); (84h:33001b) and (84h:33001c)
- (Wartofsky, Marx W.) See Grossberg, Stephen, (84c:92065)
- (Watson, E. C.) See Erdélyi, Arthur; et al., (84h:33001a)
- (Wrightson, Graham) See Automation of reasoning, (84f:03011a) and (84f:03011b)
- Automation of reasoning ★Automation of reasoning. 1. (84f:03011a)
- ★Automation of reasoning. 2. (84f:03011b)
- Bibliography:
Gryaznov, B. S. See Gryaznov, B. S., (84k:00020)
- Œuvre algébrique d'al-Khayyām ★L'Œuvre algébrique d'al-Khayyām. (Arabic) [The works on algebra of Khayyām] (84a:01008)
- Works on algebra of al-Khayyām ★L'Œuvre algébrique d'al-Khayyām. (Arabic) [The works on algebra of Khayyām] (84a:01008)
- Young tableaux in combinatorics, invariant theory, and algebra ★Young tableaux in combinatorics, invariant theory, and algebra. (84b:05006)

01A80 Sociology (and profession) of mathematics

- Berg, Jan Discussion contribution to the paper of Prof. Jensen. (See 84g:01004)
- Bloor, David Hamilton and Peacock on the essence of algebra. (See 84k:01001)
- (Borden, Carla M.) See Muses flee Hitler, 84m:01048a
- Bottazzini, Umberto Mathematics in a unified Italy. (See 84k:01001)
- Brentjes, Sonja Studien zur sozialen Stellung ostislamischer mathematiker und Astronomen vom 8. bis zum 12. Jahrhundert. [Studies on the eastern Islamic mathematicians and astronomers from the 8th through the 12th centuries] (See 84j:01002)
- Dhombres, J. Mathematicians and the French Revolution, 1789–1799. (See 84i:00012)
- Enros, Philip C. Cambridge University and the adoption of analytics in early nineteenth-century England. (See 84k:01001)
- Fang, Joong A "mathematical talent" in the age of androgyny. 84i:01126
- Folta, Jaroslav See Nový, Luboš, 84d:01083
- Glas, E. Mathematics between logic and society in the work of Felix Klein (1849–1925). 84f:01123
- Gross, Horst-Eckart The employment of mathematicians in insurance companies in the 19th century. (See 84k:01001)
- Händler, Wolfgang Rechner von A bis Z—von Antikythera bis Zuse. [Computers from A to Z—from Antikythera to Zuse] 84b:01062
- Hoch, Paul K. The reception of Central European refugee physicists of the 1930s: U.S.S.R., U.K., U.S.A. 84j:01083
- Hodgkin, Luke Mathematics and revolution from Lacroix to Cauchy. (See 84k:01001)
- Bliev, L. G. The mathematical profession. (Bulgarian) 84i:01127
- (Jackson, Jarrell C.) See Muses flee Hitler, 84m:01048a
- Jahnke, Hans Niels (with Otte, Michael) Origins of the program of "arithmetization of mathematics". (See 84k:01001)
- Jensen, Uffe Juul Theories: units of historical reconstruction or historical units. (See 84g:01004)
- (Klein, Felix) See Glas, E., 84f:01123
- Mehrtens, Herbert Social history of mathematics. (See 84k:01001)
- Questions to Prof. Jensen. (See 84g:01004)
- Nový, Luboš (with Folta, Jaroslav) Science as a social phenomenon in the scientific revolution of the end of the 19th and beginning of the 20th century. 84d:01083
- Otte, Michael See Jahnke, Hans Niels, (See 84k:01001)

- Reingold, Nathan Refugee mathematicians in the United States, 1933-1941: reception and reaction. **84m:01048b**
- Rogers, Leo A survey of factors affecting the teaching of mathematics outside the universities in Britain in the nineteenth century. (See **84k:01001**)
- Schneider, Ivo Forms of professional activity in mathematics before the nineteenth century. (See **84k:01001**)
- Schubring, Gert The conception of pure mathematics as an instrument in the professionalization of mathematics. (See **84k:01001**)
- Struik, Dirk J. Mathematics in the early part of the nineteenth century. (See **84k:01001**)
- Muses flee Hitler ★The muses flee Hitler. **84m:01048a**

secondary classifications:

- Agassi, Joseph Lakatos on proof and on mathematics. (**84i:00028**)
- Albuquerque, Luis Pedro Nunes and Diogo de Sá. (Portuguese) (**84k:01022**)
- (Bos, Henk J. M.) See Social history of nineteenth century mathematics. (**84k:01001**)
- (Gani, J.) See Making of statisticians. (**84d:62002**)
- Golan, Jonathan S. ★Iyunim bälgebräh modernit. Kerek I. (Hebrew) [Studies in modern algebra. Vol. I] (**84b:00002a**)
- ★Iyunim bälgebräh modernit. Kerek II. (Hebrew) [Studies in modern algebra. Vol. II] (**84b:00002b**)
- Hahn, Roger Science in the early 19th century: another view. (See **84g:01004**)
- Karimullin, A. G. (with Laptev, B. L.) ★Что читал Н. И. Лобачевский. (Russian) [What N. I. Lobachevskii read] (**84e:01067**)
- Laitko, Hubert B. Bolzano on the relations between knowledge circulation and knowledge production. (See **84g:01004**)
- Laptev, B. L. See Karimullin, A. G., (**84e:01067**)
- (Lobachevskii, N. I.) See Karimullin, A. G.; et al., (**84e:01067**)
- (Mehrtens, Herbert) See Social history of nineteenth century mathematics. (**84k:01001**)
- Mikulinsky, S. R. The historical features of the development of science in the first half of the 19th century. (See **84g:01004**)
- (Nunes, Pedro) See Albuquerque, Luis, (**84k:01022**)
- (de Sá, Diogo) See Albuquerque, Luis, (**84k:01022**)
- (Schneider, Ivo) See Social history of nineteenth century mathematics. (**84k:01001**)
- Berlin ★Social history of nineteenth century mathematics. (**84k:01001**)
- Bibliography:
- Social history of mathematics ★Social history of nineteenth century mathematics. (**84k:01001**)
- Making of statisticians ★The making of statisticians. (**84d:62002**)
- Social history of nineteenth century mathematics ★Social history of nineteenth century mathematics. (**84k:01001**)
- Workshop:
- Social History of Nineteenth Century Mathematics ★Social history of nineteenth century mathematics. (**84k:01001**)

01A99 Miscellaneous topics

- Abalyaev, R. N. The first printed multiplication table in Russia. (Russian) **84i:01128**
- Abramyan, A. G. Three manuscripts on the calendar and cosmography. (Armenian. Russian summary) (See **84i:01003**)
- Allasia, Giampietro An analysis of the concepts of mean: historical and critical profile. (Italian. English summary) **84f:01124**
- Apokin, I. A. Laws in the development of automata technology. (Russian. English summary) **84k:01073**
- (Bacon, Francis) See Urbach, Peter, **84d:01089**
- Biermann, Kurt-R. Aus der Vorgeschichte der Euler-Ausgabe, 1783-1907. [From the prehistory of the Euler edition, 1783-1907] (See **84m:01021**)
- (Bolzano, Bernard) See Kolyadko, V. I., **84f:01128**
- Borgato, Maria Teresa Some historical notes on Euclid's *Elements* in the teaching of mathematics in Italy. (Italian) **84j:01084**
- Burckhardt, Johann Jakob Die Euler-Kommission der Schweizerischen Naturforschenden Gesellschaft—ein Beitrag zur Editionsgeschichte. [The Euler Commission of the Schweizerische Naturforschende Gesellschaft—a contribution to the edition history] (See **84m:01021**)
- Euleriana—Verzeichnis des Schrifttums über Leonhard Euler.
- [Euleriana—inventary of the literature about Leonhard Euler] (See **84m:01021**)
- Crombie, A. C. Styles of thinking and historiography of science. **84f:01125**
- Dudley, Underwood Formulas for primes. **84g:01081**
- Emmer, Michele The history of capillarity: from the beginnings to the seventeenth century. (Italian) **84g:01085**
- Fagot, Anne M. Probabilities and causes: on life tables, causes of death, and etiological diagnoses. **84h:01098**
- Finocchiaro, Maurice A. On the methodological problems of the history of science: an analytical approach. **84d:01084**
- (Galilei, Galileo) See Rozin, V. M., **84h:01103**
- Gheorghiev, Gh. The unity of mathematics and the integration of the natural sciences. (Romanian. French summary) **84k:01074**
- Gindikin, S. G. ★Рассказы о физиках и математиках. (Russian) [Stories about physicists and mathematicians] **84d:01085**
- Glaser, Anton ★History of binary and other nondecimal numeration. **84f:01126**
- (Hamming, Richard Wesley) See Glaser, Anton, **84f:01126**
- Hecht, Konrad Zum römischen Fuss. [On the Roman foot] **84f:01127**
- Hermann, Armin Die Funktion von Briefen in der Entwicklung der Physik. (English summary) [The function of correspondence in the development of physics] **84h:01099**
- Hofmann, Karl Heinrich Eine Stilkunde des Raumbegriffs—Spekulationen zwischen Kunst- und Mathematikgeschichte. [Stylistics of the concept of space—speculations between the history of art and the history of mathematics] **84d:01086**
- Hoppensteadt, Frank C. Some influences of population biology on mathematics. (See **84m:01001**)
- Hunter, J. Stuart The birth of a journal. **84e:01105**

- Jaki, Stanley L. Das Gravitations-Paradoxon des unendlichen Universums. (English summary) [The gravitational paradox of the infinite universe] **84c:01071**
- (Kikuchi, Shinichi) See Nougaro, Jean, **84d:01087**
- Knobloch, Eberhard Einfluß der Symbolik und des Formalismus auf die Entwicklung des mathematischen Denkens. (English summary) [The influence of symbolism and formalism on the development of mathematical thought] **84h:01100**
- Kolyadko, V. I. ★Ерпапа Болзано. (Russian) [Bernard Bolzano] **84f:01128**
- Kroker, Evelyn Ungedruckte Quellen zur Technikgeschichte in Wirtschaftsarchiven. (English summary) [Unprinted sources of the history of technology in industrial archives] **84c:01072**
- Kuratsowski, Kazimierz In the service of science and the nation. (Portuguese) **84i:01129**
- Medeiros, L. A. Some aspects of the evolution of the concept of derivative. (Portuguese) **84g:01086**
- Merkulova, N. M. On the history of the problem of flight. (Russian. English summary) **84i:01130**
- Meurers, Joseph Regiomontanus und der geistesgeschichtliche Gang astronomischer Forschung. [Regiomontanus and the humanistic-historical path of astronomical research] **84f:01129**
- Mucke, Hermann Planetariums-Demonstrationen zur Zeit und zum Werk Regiomontanus. [Planetarium demonstrations for the time and for the work of Regiomontanus] **84h:01101**
- North, J. D. Astrolabes and the hour-line ritual. **84h:01102**
- Nougaro, Jean La science des eaux à travers les âges. [Hydrology through the ages] **84d:01087**
- Pisot, Charles Souvenirs mathématiques. [Mathematical recollections] **84i:01131**
- (Popper, Karl) See Urbach, Peter, **84d:01089**
- Rozin, V. M. An attempt at studying the scientific heritage of Galileo Galilei. (Russian. English summary) **84h:01103**
- Rumyantsev, V. V. On the development of the optic-mechanics analogy in the works of N. G. Chetaev. (Russian) **84g:01087**
- S'ayad, Mohammad Reza Tables for the comparison of calendars. (Farsi) **84d:01088**
- Severin, Gregory M. ★The Paris Codex: decoding an astronomical ephemeris. **84i:01132**
- Sheinin, O. B. On the history of medical statistics. **84g:01088**
- Teodorescu, Nicolae Victor La notion de système à travers les siècles. I. [The notion of system through the centuries. I] **84f:01130**
- Urbach, Peter Francis Bacon as a precursor to Popper. **84d:01089**
- Vachor, D. K. The earliest mathematical journals. (Bulgarian) **84g:01089**
- Wells, Ellen B. Scientists' libraries: a handlist of printed sources. **84k:01075**
- Anniversary:
- Birth of Bolzano, Bernard See Kolyadko, V. I., **84f:01128**
- Biography:
- Bolzano, Bernard See Kolyadko, V. I., **84f:01128**

secondary classifications:

- Aubin, Jean-Pierre General overview. (**84h:00018**)
- Barviková, Hana (with Hrochová, Mária) ★Czechoslovak history of science. Selected bibliography 1970-1980. (**84b:00013**)
- Blauber, I. V. (with Mirkii, E. M.; Sadovskii, V. N.) Die wissenschaftliche Disziplin: Begriff, Phänomen, Forschungsgegenstand. [The scientific discipline: idea, phenomenon, subject of research] (See **84j:01003**)
- Bondi, Hermann See Ollerenshaw, Kathleen, (**84c:05031**)
- Browkin, Jerzy The meaning of Galois theory in modern mathematics and its role in the education of young mathematicians. (Polish. English and Russian summaries) (**84j:12001**)
- Fogel, Robert William "Scientific" history and traditional history. (**84f:00026**)
- Folta, Jaroslav Problems of mathematization of science and the study of revolutionary changes in scientific research. (**84d:00020**)
- Galane, E. General concepts of graphs and an application of the (classical) topological type of Euler. (Greek) (**84j:05076**)
- Gericke, Helmuth Zur Geschichte des isoperimetrischen Problems. [On the history of the isoperimetric problem] (**84c:52001**)
- Godart, O. (with Turek, J.) Le développement de l'hypothèse de l'atome primitif. (English summary) [The development of the primeval atom hypothesis. I] (**84c:83005a**)
- (with Turek, J.) Le développement de l'hypothèse de l'atome primitif. II. [The development of the primeval atom hypothesis. II] (**84c:83005b**)
- Hrochová, Mária See Barviková, Hana, (**84b:00013**)
- Kahane, Jean-Pierre Le 13ème problème de Hilbert: un carrefour de l'algèbre, de l'analyse et de la géométrie. [Hilbert's 13th problem: an intersection of algebra, analysis and geometry] (**84h:12031**)
- Kinowska, Małgorzata See Michalczyk, Barbara; et al., (**84h:00006**); (**84i:00025a**) and (**84i:00025b**)
- Knuth, Donald E. Algorithms in modern mathematics and computer science. (**84h:00010**)
- Kordos, Marek (with Włodarski, Ludomir) ★O geometrii dla postronnych. (Polish) [Geometry for the layman] (**84c:51001**)
- Lear, Jonathan ★Aristotle and logical theory. (**84h:03015**)
- Maistrov, L. E. (with Petrenko, O. L.) ★Приборы и инструменты исторического значения. (Russian) [Devices and instruments of historical significance] (**84g:01005**)
- Mezzorani, G. The concept of reference system and the requirement of covariance of physical laws in the historical development of physics. Didactic implications. (Italian) (**84h:70003**)
- Michalczyk, Barbara (with Sadurska, Wanda; Kinowska, Małgorzata) Current bibliography of the history of science and technology. No. 46 (April-June, 1982). (Polish) (**84h:00006**)
- (with Kinowska, Małgorzata) Current bibliography of the history of science and technology. No. 47 (Oct.-Dec. 1981). (Polish) (**84i:00025a**)
- (with Sadurska, Wanda; Kinowska, Małgorzata) Current bibliography of the history of science and technology. No. 45 (January-March, 1982). (Polish) (**84i:00025b**)
- Mirkii, E. M. See Blauber, I. V.; et al., (See **84j:01003**)

- Ollerenshaw, Kathleen (with Bondi, Hermann) Magic squares of order four. (84:05031)
 Petrenko, O. L. See Maistrov, L. E. (84:01005)
 Rogers, Leo Infinitesimals, continuity and meaning. (84:03139b)
 Rybníkov, K. A. On the truth of mathematical knowledge. (Russian. English summary) (84:00027)
 Sadoski, V. N. See Blauberg, I. V.; et al. (See 84:01003)
 Sadurska, Wanda See Michalczyk, Barbara; et al. (84:00006) and (84:00025b)
 Tall, David Elementary axioms and pictures for infinitesimal calculus. (84:03139c)
 Teodorescu, Nicolae Victor La modélisation mathématique et la musique. [Mathematical modeling and music] (84:00044a)
 La modélisation mathématique et la musique. II. [Mathematical modeling and music. II] (84:00044b)
 Todorov, I. T. Physics and mathematics. (Bulgarian) (84:00035)
 Tomelat, Marie-Antoinette Science et philosophie: Einstein et Spinoza. [Science and philosophy: Einstein and Spinoza] (84:00015)
 Turek, J. See Godart, O. (84:03005a) and (84:03005b)
 Vigier, Jean-Pierre Nonlocality, causality and aether in quantum mechanics. (84:01013)
 Walter, Johann On the foundations of thermodynamics. (84:00005)
 Włodarski, Ludomir See Kordos, Marek. (84:051001)
 Acta Historiae Rerum Naturalium necnon Technicarum See Barviková, Hana; et al. (84:00013)
 Bibliography:
 Czechoslovak history of science See Barviková, Hana; et al. (84:00013)
 History of science and technology See Michalczyk, Barbara; et al. (84:00006); (84:00025a) and (84:00025b)
 Trends in mathematics ★Trends in mathematics. (84:00016)

03-XX MATHEMATICAL LOGIC AND FOUNDATIONS

03-01 Elementary exposition, textbooks

- Bocheński, I. M. ★Compendio de lógica matemática. (Spanish) [A précis of mathematical logic] 84:03001
 Cutland, Nigel ★Введение в логику. (Russian) [Computability] 84:03001
 van Dalen, Dirk ★Logic and structure. 84:03002
 (Fernández González, Rodolfo) See Bocheński, I. M. 84:03001
 Goe, George ★Lezioni di logica. (Italian) [Lectures on logic] 84:03002
 Marek, Wiktor (with Onyszkiewicz, Janusz) ★Elements of logic and foundations of mathematics in problems. 84:03001
 Martin, Donald A. The use of set-theoretic hypotheses in the study of measure and topology. 84:03001
 (Maslov, S. Yu.) See Cutland, Nigel. 84:03001
 (Muchnik, A. A.) See Cutland, Nigel. 84:03001
 Onyszkiewicz, Janusz See Marek, Wiktor. 84:03001
 Pogorzelski, Witold A. (with Wojtylak, Piotr) ★Elements of the theory of completeness in propositional logic. 84:03001
 Potthoff, Klaus ★Einführung in die Modelltheorie und ihre Anwendungen. (German) [Introduction to model theory and its applications] 84:03001
 Quine, Willard Van Orman ★Mathematical logic. 84:03002
 (Tarantowicz-Marek, Elzbieta) See Marek, Wiktor; et al. 84:03001
 Wang, Hao ★Shuli luoji tongshu jianghua. (Chinese) [Popular lectures on mathematical logic] 84:03002
 Wojtylak, Piotr See Pogorzelski, Witold A. 84:03001
 Zahn, Peter ★Ein argumentativer Weg zur Logik. (German) [An argumentative approach to logic] 84:03003

secondary classifications:

- Asser, Günter ★Einführung in die mathematische Logik. Teil III. (German) [Introduction to mathematical logic. Part III] (84:03032a)
 ★Einführung in die mathematische Logik. Teil III. (German) [Introduction to mathematical logic. Part III] (84:03032b)
 Barth, E. M. (with Krabbe, E. C. W.) ★From axiom to dialogue. (84:03004)
 Cools, M. See Kaufmann, Arnold; et al. (84:03064b)
 (Dragalin, A. G.) See Vopěnka, P. (84:03126)
 Dubois, T. See Kaufmann, Arnold; et al. (84:03064b)
 Fitting, Melvin ★Proof methods for modal and intuitionistic logics. (84:03036)
 (Ibarra Aispuro, Fernando) See Kaufmann, Arnold. (84:03064a) and (84:03064b)
 Ingleton, A. W. An introduction to nonstandard analysis. (84:03139a)
 Kaufmann, Arnold ★Introducción a la teoría de los subconjuntos borrosos para el uso de ingenieros. Tomo I. (Spanish) [Introduction to the theory of fuzzy subsets for the use of engineers. Vol. I] (84:03064a)
 (with Dubois, T.; Cools, M.) ★Ejercicios con soluciones sobre la teoría de los subconjuntos borrosos. (Spanish) [Exercises with solutions in the theory of fuzzy subsets] (84:03064b)
 Kechris, Alexander S. An overview of descriptive set theory. (84:03114)
 Krabbe, E. C. W. See Barth, E. M. (84:03004)
 Richter, Michael M. ★Ideale Punkte, Monaden und Nichtstandard-Methoden. (German) [Ideal points, monads and nonstandard methods] (84:03107)
 Vopěnka, P. ★Математика в альтернативной теории множеств. (Russian) [Mathematics in the alternative set theory] (84:03126)
 (Zadeh, L. A.) See Kaufmann, Arnold. (84:03064a)
 Ziarski, Paweł Indicators and incompleteness of Peano arithmetic. (84:03095)

03-02 Advanced exposition (research surveys, monographs, etc.)

- (Barwise, K. Jon) See Handbook: Mathematical logic. 84:03004a and 84:03004b
 Beller, A. (with Jensen, Ronald Björn; Welch, P. H.) ★Coding the universe. 84:03002
 Chang, Chin Liang (with Lee, Richard Char Tung) ★Математическая логика и автоматическое доказательство теорем. (Russian) [Mathematical logic and automatic theorem proving] 84:03003

- (Davydov, G. V.) See Chang, Chin Liang; et al. 84:03003
 (Dvornikov, S. G.) See Handbook: Mathematical logic. 84:03004b
 (Ershov, Yu. L.) See Handbook: Mathematical logic. 84:03004b
 (Grishin, V. N.) See Handbook: Mathematical logic. 84:03004a
 Hatcher, William S. ★The logical foundations of mathematics. 84:03003
 Jensen, Ronald Björn See Beller, A.; et al. 84:03002
 (Kanovet, V. G.) See Handbook: Mathematical logic. 84:03004a
 (Lavrov, I. A.) See Handbook: Mathematical logic. 84:03004b
 Lee, Richard Char Tung See Chang, Chin Liang. 84:03003
 (Maslov, S. Yu.) See Chang, Chin Liang; et al. 84:03003
 (Mints, G. E.) See Chang, Chin Liang; et al. 84:03003
 (Orevkov, V. P.) See Chang, Chin Liang; et al. 84:03003
 Shelah, Saharon ★Proper forcing. 84:03002
 (Sochilina, A. V.) See Chang, Chin Liang; et al. 84:03003
 Welch, P. H. See Beller, A.; et al. 84:03002
 Handbook:

Mathematical logic ★Справочная книга по математической логике. Часть II. (Russian) [Handbook of mathematical logic. Part II] 84:03004a

★Справочная книга по математической логике. Часть III. (Russian) [Handbook of mathematical logic. Part III] 84:03004b

secondary classifications:

- Baudisch, Andreas (with Rothmaler, Philipp) ★Vorlesungen zur Einführung in die Theorie des Shelah'schen "forking". (German) [Introductory lectures on the theory of Shelah's "forking"] (84:03030)
 van Benthem, J. F. A. K. ★The logic of time. (84:03035)
 Bibel, Wolfgang ★Automated theorem proving. (84:03048)
 Chong, Chi Tat Degree theory: from ω to singular cardinals. (84:03059)
 (Dummett, Michael) See Prys Williams, A. G. (84:03051)
 (Dzgoev, V. D.) See Handbook: Mathematical logic. (84:03051)
 (Ershov, Yu. L.) See Handbook: Mathematical logic. (84:03051)
 Fitting, Melvin ★Fundamentals of generalized recursion theory. (84:03086)
 (Goncharov, S. S.) See Handbook: Mathematical logic. (84:03051)
 Herre, H. Miscellaneous results and problems in extended model theory. (84:03095)
 van der Hoeven, G. F. ★Projections of lawless sequences. (84:03132)
 Ishmuratov, A. T. ★Логические теории временных контекстов. (Russian) [Logical theories of temporal contexts] (84:03055)
 Nute, Donald ★Topics in conditional logic. (84:03039)
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 (Taimanov, A. D.) See Handbook: Mathematical logic. (84:03051)
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- Baker, G. P. (with Hacker, P. M. S.) Discussions: Dummett's Frege or through a looking-glass darkly. (84j:03009)
- Berka, Karel Zur Auffassung des apagogischen Beweises bei B. Bolzano. [On the conception of apagogic proof in the work of B. Bolzano] (84g:01032)
- Biryukova, L. G. The beginnings of the constructive approach in 19th century mathematics: the "Größenlehre" of Robert Grassmann. (Russian. English summary) (84i:01033)
- Bocharov, V. A. Algebraic reconstructions of syllogistics. (Russian) (84c:03012)
- (Bolzano, Bernard) See Laugwitz, Detlef, (84c:01037); Berka, Karel, (84g:01032) and Kurzweil, Jaroslav, (84j:01069)
- (Boole, George) See Smith, G. C., (84f:01088) and (84h:01055)
- Bos, E. P. Peter of Mantua's tract on *Appellatio* and his interpretation of immanent forms. (See 84h:01024)
- Braakhuis, H. A. H. Paul of Pergula's commentary on the *Sophismata* of William Heytesbury. (See 84h:01024)
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- Conti, Alessandro D. Some notes on the *Expositio super Universalia Porphyrii et Artem Veterem Aristotelis* by Paul of Venice: analogies and differences with the corresponding comments of Walter Burley. (Italian) (See 84h:01024)
- Courtenay, William J. The early stages in the introduction of Oxford logic into Italy. (See 84h:01024)
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- (De Morgan, Augustus) See Smith, G. C., (84f:01088)
- Dorn, G. See Czermak, J.; et al., (84c:03003)
- Ebbesen, Sten (with Pinborg, Jan) *De ente rationis, De definitione accidentis, De probatione terminorum*. (See 84h:01024)
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- Federici Vescovini, Graziella The comment of Angelo di Fossombrone to *De tribus praedicamentis* of William Heytesbury. (Italian) (See 84h:01024)
- Fedorov, B. I. The objective and the subjective in the construction of proofs. (Russian) (84j:01045)
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- (Gödel, Kurt) See Krawczyk, Stanisław, (84j:01068) and Dawson, John W., Jr., (84m:01038)
- Griffin, Nicholas (with Zak, Gad) Russell on specific and universal relations: *The principles of mathematics*, §55. (84d:03008)
- Hacker, P. M. S. See Baker, G. P., (84j:03009)
- Heinzmann, Gerhard Konstruktivistische Gesichtspunkte der Philosophie der Mathematik von Ferdinand Gonseth (1890–1975). [Constructivist aspects of the philosophy of mathematics of Ferdinand Gonseth (1890–1975)] (84f:00019)
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- Hughes, Martin Absolute rotation. (84c:01020)
- Johnstone, Henry W., Jr. The syllogism on the negative-entailing interpretation of affirmative propositions. (84c:03026)
- Kaliba, P. See Czermak, J.; et al., (84c:03003)
- (Kant, Immanuel) See Coffa, J. Alberto, (84c:03008a) and Hintikka, Jaakko, (84c:03008b)
- Karger, Elizabeth La supposition matérielle comme supposition significative: Paul de Venise, Paul de Pergula. [Material supposition as significative supposition: Paul of Venice, Paul of Pergula] (See 84h:01024)
- Karpenko, A. S. Aristotle, Łukasiewicz and factor-semantics. (84c:03075)
- Kneepkens, C. H. The mysterious Buser again: William Buser of Heusden and the *Obligations* tract *Ob rogatum*. (See 84h:01024)
- Krajewski, Stanisław Kurt Gödel and his work. (Polish) (84j:01068)
- Kurepa, Djuro Ensembles ordonnés et ramifications de points. [Ordered sets and pseudotrees] (84c:04004a)
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- de Libera, Alain Apollinaire Offredi critique de Pierre de Mantoue: le *Tractatus de instanti* et la logique du changement. [Apollinaris Offredi Cremonensis, critic of Peter of Mantua: the *Tractatus de instanti* and the logic of change] (See 84h:01024)
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- Malatesta, Michele Conditional propositions in the *Compendium logices* of G. Savonarola. (Italian) (84d:01014)
- Markowski, Mieczysław Die Anschauungen des Walter Burleigh über die Universalien. [The views of Walter Burleigh on universals] (See 84h:01024)
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- ★ The Boole-De Morgan correspondence, 1842–1864. (84f:01088)
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- European, Medieval Logic and Semantics ★English logic in Italy in the 14th and 15th centuries. (84h:01024)

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Handbook:

- Mathematical logic ★Справочная книга по математической логике. Часть IV. (Russian) [Handbook of mathematical logic. Part IV] 84j:03006

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Study group:

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- Lorenz, Kuno On the criteria for the choice of the rules of dialogic logic. (84d:03032)
- Lorenzen, P. Die dialogische Begründung von Logikkalkülen. [The dialogical foundation of logical calculi] (84d:03031)
- Lowe, E. J. A simplification of the logic of conditionals. (84b:03039)
- Maddy, Penelope Proper classes. (84j:03095)
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- Makinson, David Quantificational reefs in deontic waters. (84a:03023)
- Manders, Kenneth L. On the space-time ontology of physical theories. (84d:03020)
- Martin, Edwin Alexander, Jr. Referentiality in Frege's *Grundgesetze*. (84g:03005)
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- Matijasevich, Yu. V. What should we do having proved a decision problem to be unsolvable? (84j:03091)
- McMichael, Alan A set theory with Frege-Russell cardinal numbers. (84g:03080)
- Moll, Konrad ★Der junge Leibniz. II. (German) [The young Leibniz. II] (84g:01029)
- Moutafakis, Nicholas J. Rescher's logic of preference and linguistic analysis. (84c:03024)
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- Norwich, Kenneth H. To perceive is to doubt: the relativity of perception. (84m:00024)
- Oberschelp, Walter Zur Verhältnis von Mathematik, Informatik und Philosophie. [On the relationship of mathematics, computer science and philosophy] (84c:00025)
- Ohlström, Peter A new reconstruction of the master argument of Diodorus Cronus. (84b:01007)
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- Pearce, David Comments on a criterion of theoreticity. (84c:03029)
- Pieters, Jean Frege et le projet des *Grundlagen*. [Frege and the *Grundlagen* project] (84d:00013)
- (Plotnikov, A. M.) See Logic and philosophical categories. (84c:03004)
- (Popovich, M. V.) See Understanding as a logical-epistemological problem. (84a:03001)
- Przełęcz, Marian Set theory as an ontology for semantics. (84b:03048)
- Conceptual continuity through theory changes. (84b:03030)
- Putnam, Hilary Comment on J. A. Fodor's "Cognitive science and the twin-earth problem" [Notre Dame J. Formal Logic 23 (1982), no. 2, 98-118]. (84c:03088c)
- (Quine, Willard Van Orman) See Burdick, Howard. (84d:03025)
- Rescher, Nicholas The epistemology of inductive reasoning in Leibniz. (84c:03002)
- Resnik, Michael D. Mathematics as a science of patterns: ontology and reference. (84b:00012a)
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- Root, Michael (with Wallace, John) Meaning and interpretation. (84b:03074)
- Rosado Haddock, Guillermo E. Identity statements in the semantics of sense and reference. (84m:03026)
- (Rouanet, H.) See Suppes, Patrick. (84c:03030)
- Rozeboom, William W. Nicod's criterion: subtler than you think. (84c:03047)
- Russo, Giuseppe ★Annibale Pastore: proposals and limitations of *The logic of the raising to power*. (84c:01050)
- Ruzavin, G. I. ★Философские проблемы оснований математики. (Russian) [Philosophical problems of the foundations of mathematics] (84m:00025)
- Schotch, Peter K. See Jennings, Raymond E. (84c:03036)
- Schwabl, H.-D. See Leitsch, A. (84c:00024)
- Seager, William The principle of continuity and the evaluation of theories. (84b:01039)
- Shaw, Mildred L. G. (with Gaines, Brian R.) Eliciting entailment. (See 84f:00032)
- Simons, Peter M. Truth-functions. (84c:03024)
- Sluga, Hans D. ★Gottlob Frege. (84c:01008)
- (Sneed, Joseph D.) See Niiniluoto, Ilkka. (84b:03024)
- Staffler, Marinus Dirk ★Time and again. (84b:00030)
- Steiner, Mark Mathematical realism. (84k:00028)
- Stern, Cindy D. Lewis' counterfactual analysis of causation. (84c:03025)
- Suppes, Patrick ★Logique du probable. (French) [The logic of the probable] (84c:03030)
- Taylor, Barry On the need for a meaning-theory in a theory of meaning. (84b:03077)
- Tiles, Mary Kant, Wittgenstein and the limits of logic. (84b:00014)
- Tomberlin, James E. Contrary-to-duty imperatives and conditional obligation. (84a:03024)
- Tsetlin, G. S. From logicism to proceduralism (an autobiographical account). (84b:00016)
- Tuomela, Raimo Action generation. (84c:03045)
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- Wilson, Catherine Leibniz and atomism. (84c:01026)
- Winterbourne, A. T. On the metaphysics of Leibnizian space and time. (84c:01027)
- Wittgenstein, Ludwig ★Remarks on the foundations of mathematics. (84f:00024)
- (von Wright, Georg Henrik) See Wittgenstein, Ludwig. (84f:00024)
- Yourgau, Paule Knowledge and relevant alternatives. (84c:03049)
- Bibliography:
- Gryaznov, B. S. See Gryaznov, B. S.. (84c:00020)
- Pastore, Annibale See Russo, Giuseppe. (84c:01050)
- Logic and philosophical categories ★Логика и философские категории. (Russian) [Logic and philosophical categories] (84c:03004)
- Reduction, time and reality ★Reduction, time and reality. (84g:03008)
- Understanding as a logical-epistemological problem ★Понимание как логико-эпистемологическая проблема. (Russian) [Understanding as a logical-epistemological problem] (84a:03001)

03Bxx General logic

secondary classifications:

Nederpelt, R. P. Sentences in proofs. (Dutch) (84b:00022)

03B05 Classical propositional logic

- Popov, S. V. Diagrams of natural deductions. (Russian) 84c:03013
- Prešić, Marica D. On the embedding of propositional models. 84b:03023
- Rezeš, Adrian On a theorem of Tarski. 84b:03019
- Rose, Alan A generalisation of the concept of functional completeness and applications to modus ponens. 84j:03023
- Surma, Stanislaw J. On the axiomatic treatment of the Sheffer function. 84c:03014

secondary classifications:

- Brown, Cynthia See Goldberg, Allen; et al.. (84d:68038a) and (84d:68038b)
- Ciriulis, Janis On the EA-fragment of classical propositional logic. (84a:03013)
- Dywan, Zdzisław The connective of necessity of modal logic S5 is metalogical. (84j:03034)
- Franco, John (with Paull, Marvin) Probabilistic analysis of the Davis-Putnam procedure for solving the satisfiability problem. (84c:68038)
- Goldberg, Allen (with Purdom, Paul; Brown, Cynthia) Average time analyses of simplified Davis-Putnam procedures. (84d:68038a)
- (with Purdom, Paul; Brown, Cynthia) Corrigendum: "Average time analyses of simplified Davis-Putnam procedures" [Inform. Process. Lett. 15 (1982), no. 2, 72-75]. (84d:68038b)
- Karakhanyan, L. M. See Sapozhenko, A. A.. (84h:94026)
- Kramosil, Ivan Three semantical interpretations of a statistical theoremhood testing procedure. (84c:03030)
- Lewis, Harry R. Satisfiability problems for propositional calculi. (See 84b:94002)
- Ma, Hua Xiao A simplified algorithm for finding Boolean differences and its applications in engineering. (Chinese. English summary) (84g:94026)
- Malov, K. M. Quantifiers and operations of linking of graphs. (Russian) (84m:05078)
- Mundici, Daniele Complexity of Craig's interpolation. (84b:03081)
- Negru, I. S. Implication calculi with a single variable. (Russian) (84j:03027)
- Novotny, Miroslav Remarks on sequents defined by means of information systems. (84d:68103)
- Paull, Marvin See Franco, John. (84c:68038)
- Pogorzański, Witold A. (with Wojtylak, Piotr) ★Elements of the theory of completeness in propositional logic. (84g:03001)
- Purdom, Paul See Goldberg, Allen; et al.. (84d:68038a) and (84d:68038b)
- Sapozhenko, A. A. (with Karakhanyan, L. M.) Negative effects associated with elimination of inessential variables. (84h:94026)
- Voishvillo, E. K. The concepts of intensional information and the intensional relation of logical entailment (intensional analysis). (Russian) (84a:03025)
- Wojtylak, Piotr See Pogorzański, Witold A.. (84g:03001)

03B10 Pure first-order logic (including many-sorted logic)

- Bacon, John First-order logic based on inclusion and abstraction. 84b:03020
- Bencivenga, Ermanno Semantic tableaux for a logic with identity. 84c:03015
- Chankvetadze, O. E. On some criteria of N. Bourbaki's quantified theory and the corresponding criteria of the Ω -calculus. (Russian. English and Georgian summaries) 84c:03025
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- Ecsedi-Tóth, P. (with Turi, L.) On enumerability of interpolants. 84b:03021
- Englebretsen, George A further note on a proof by Sommers. 84b:03024
- Faust, Don H. The Boolean algebra of formulas of first-order logic. 84f:03007
- Ferrari, Pier Luigi Certain extensions of first-order theories via logical selection operators. (Italian. English summary) 84d:03016
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- Herzberger, Hans G. The algebra of supervalueations. 84b:03025
- Kawecki, Wojciech Semantic entailment in the calculus of quantifiers. (Polish. Russian summary) 84j:03024
- Kirin, V. G. On decomposition of formulas of a first-order language. 84c:03016
- Kleinknecht, Reinhard Eliminability, noncreativity and explicit definability. 84j:03025
- Lehmann, Scott Slightly nonstandard logic. 84b:03026

Motohashi, Nobuyoshi ε -theorems and elimination theorems of uniqueness conditions. **84c:03027**

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Bertolet, Rod Russell and Strawson, indexical and improper descriptions. **(84i:03012)**

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Ma, Xi Wen A relational approach in semantics. (Chinese. English summary) **(84e:68013)**

Mundici, Daniele Complexity of Craig's interpolation. **(84h:03081)**

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Myers, Dale See Hanf, William P., **(84m:03096)**

Polzat, Bruno Deux ou trois choses que je sais de L_n . [Two or three things I know about L_n] **(84h:03055)**

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Zahn, Peter ★Ein argumentativer Weg zur Logik. (German) [An argumentative approach to logic] **(84f:03003)**

03B15 Higher-order logic and type-theory

Asser, Günter ★Einführung in die mathematische Logik. Teil III. (German)

[Introduction to mathematical logic. Part III] **84k:03032a**

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Crabbé, Marcel The axiom of choice in type theory with ambiguity axioms. (See **84i:03008**)

Geach, P. T. Second-order quantification in Frege. (Spanish) **84a:03011**

Kiselev, A. A. (with Kogalovskii, S. R.) Some remarks on higher-order monadic languages. (Russian) **84c:03033**

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Mikeladze, Z. N. A class of logical concepts. (Russian) **84k:03034**

Skvortsov, D. P. On some ways of constructing formal languages with quantifiers over finite sequences. (Russian) **84m:03011**

Tichý, Pavel Foundations of partial type theory. **84c:03017**

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Bergstra, Jan A. (with Terlouw, J.) Standard model semantics for DSL. A data type specification language. **(84f:68010)**

Boffa, Maurice Algèbres de Boole atomiques et modèles de la théorie des types. [Atomic Boolean algebras and models of type theory] **(84g:03085)**

Arithmetic and theory of types. (See **84i:03008**)

Christian, Curt C. Zur Problematik des logischen Atomismus. [Problems of logical atomism] **(84i:03014)**

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Gilmore, Paul C. Combining unrestricted abstraction with universal quantification. **(84c:03065)**

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Jansohn, Hans-Stephan (with Landwehr, Rudolf; Wrightson, Graham) An interactive proof system for higher order logic. (See **84f:00034**)

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Kůrka, Petr See Hájek, Petr, **(84c:03035)**

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Leivant, Daniel See Fortune, Steven; et al., **(84j:03029)**

Muller, David E. (with Schupp, Paul E.) Groups, the theory of ends, and context-free languages. **(84k:20016)**

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Pétry, André Une caractérisation algébrique des structures satisfaisant les mêmes sentences stratifiées. [An algebraic characterization of structures satisfying the same stratified sentences] **(84c:03063)**

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Schwichtenberg, Helmut On Martin-Löf's theory of types. (See **84k:03006**)

Terlouw, J. See Bergstra, Jan A., **(84f:68010)**

Thomas, Wolfgang A hierarchy of sets of infinite trees. (See **84h:68003**)

Wrightson, Graham See Jansohn, Hans-Stephan; et al., (See **84f:00034**)

Zbierski, Paweł Nonstandard interpretations of higher order theories. **(84d:03073)**

03B20 Subsystems of classical logic

Bezhanishvili, M. N. Wajsberg's definition of the concept of an n th-order thesis. (Russian) **84k:03035**

Bocharov, V. A. Algebraic reconstructions of syllogistics. (Russian) **84a:03012**

Brusentsov, N. P. Representation of syllogistics in predicate logic. (Russian) **84j:03026**

Cirulis, Jānis On the EA -fragment of classical propositional logic. **84a:03013**

Dahn, Bernd I. Partial isomorphisms and intuitionistic logic. **84m:03012**

Fabiano, Adelina Completeness of intuitionistic logic with respect to models with covering. (Italian. English summary) **84d:03018**

Henschen, L. See Wos, L.; et al., **84g:03018**

Johnstone, Henry W., Jr. The syllogism on the negative-entailing interpretation of affirmative propositions. **84c:03026**

Kuznetsov, A. V. Means for detection of nondeducibility and inexpressibility. (Russian) **84k:03036**

Leblanc, H. See Morgan, C. G., **84c:03027**

Marković, Zoran On axiomatizability and preservation in Kripke models. **84a:03014**

Meredith, David Separating minimal, intuitionist, and classical logic. **84k:03037**

Mints, G. E. (with Ty-ugu, È. Kh.) Completeness of structural synthesis rules. (Russian) **84m:03013**

Morgan, C. G. (with Leblanc, H.) Probabilistic semantics for intuitionistic logic. **84c:03027**

Negru, I. S. Implication calculi with a single variable. (Russian) **84j:03027**

Ratsa, M. F. Functional completeness in intuitionistic propositional logic. (Russian) **84h:03028**

Smirnov, V. A. Formal inference, deduction theorems and theories of implication. (Russian) **84k:03038**

Smith, Brian T. See Wos, L.; et al., **84g:03018**

Smith, Robin Completeness of an ethetic syllogistic. **84c:03028**

Tamura, Saburo On NBN-systems. **84c:03018a**

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Troelstra, A. S. On a second-order propositional operator in intuitionistic logic. **84a:03015**

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Font, Josep M. An implication connective for classical and intuitionistic modal logics. (Catalan) (See **84i:03003**)

Li, Xiang The first-order theory of Kripke's semantical analysis of nonclassical logics. (Chinese. English summary) **(84h:03038)**

Mizutani, Chiharu Definability theorem for the intuitionistic predicate logic with equality. **(84b:03080)**

Popov, S. V. Diagrams of natural deductions. (Russian) **(84c:03013)**

Prawitz, Dag Beweise und die Bedeutung und Vollständigkeit der logischen Konstanten. [Proofs and the meaning and completeness of the logical constants] **(84c:03021)**

Rautenberg, Wolfgang 2-element matrices. **(84m:03035)**

Rezus, Adrian On a theorem of Tarski. **(84h:03019)**

Shi, Nian Dong See Yue, Yu Jun, **(84j:03058)**

Shum, A. A. Finite axiomatization of the logic of infinite problems in an extended language. (Russian) **(84a:03027)**

Yashin, A. D. Intuitionistic predicate logic with the connective "tomorrow". (Russian. English summary) **(84d:03027)**

Yue, Yu Jun (with Shi, Nian Dong) Notes on the W_L calculus. (Chinese. English summary) **(84j:03058)**

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03B25 Decidability of theories and sets of sentences

Baudisch, Andreas Decidability and stability of free nilpotent Lie algebras and free nilpotent p -groups of finite exponent. **84c:03019**

Burris, Stanley The first order theory of Boolean algebras with a distinguished group of automorphisms. **84f:03008**

Buszkowski, Wojciech Some decision problems in the theory of syntactic categories. **84m:03014**

Ferro, Alfredo Some decidability questions in set theory. (Italian) (See **84k:03006**)

Haran, Dan (with Jarden, Moshe) Bounded statements in the theory of algebraically closed fields with distinguished automorphisms. **84m:03015**

Hodgson, Bernard R. Décidabilité par automate fini. [Decidability by finite automata] **84m:03016**

Jarden, Moshe See Haran, Dan, **84m:03015**

Jurie, Pierre-François Décidabilité de la théorie élémentaire des anneaux booléens à opérateurs dans un groupe fini. (English summary) [Decidability of the elementary theory of Boolean rings with operators in a finite group] **84a:03016**

Karpiński, Marek Decidability of "Skolem matrix emptiness problem" entails constructibility of exact regular expression. **84k:03039**

Koppelberg, Sabine On Boolean algebras with distinguished subalgebras. **84a:03017a**

On Boolean algebras with distinguished subalgebras. **84a:03017b**

Mundici, Daniele Natural limitations of decision procedures for arithmetic with bounded quantifiers. **84k:03040**

Rozenblat, B. V. See Vazhenin, Yu. M., **84j:03028**

Semenov, A. L. Logical theories of one-place functions on the natural number series. (Russian) **84i:03033**

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Arnon, Dennis S. (with McCallum, Scott) Cylindrical algebraic decomposition by quantifier elimination. **(84m:03044)**

- Baur, Walter On the elementary theory of pairs of real closed fields. II. (84j:03072)
- Ben-Ari, Mordechai (with Halpern, Joseph Y.; Pnueli, Amir) Deterministic propositional dynamic logic: finite models, complexity, and completeness. (84c:03033)
- Chlebisek, Bogdan S. On the decidability of propositional algorithmic logic. (84c:03022)
- Cresswell, M. J. \mathbf{KM} and the finite model property. (84h:03035)
- Ehrenfeucht, Andrzej (with Karhumäki, Juhani; Rozenberg, Grzegorz) The (generalized) Post correspondence problem with lists consisting of two words is decidable. (84c:68035)
- Gurevich, Yuri Crumbly spaces. (84g:03044)
- Existential interpretation. II. (84h:03059)
- Halpern, Joseph Y. See Ben-Ari, Mordechai; et al., (84c:03033)
- Huber-Dyson, Verena Finiteness conditions and the word problem. (84i:20032)
- Decision problems in group theory. (84d:20032)
- Ibarra, Oscar H. Counter machines and number-theoretic problems. (See 84b:94001)
- (with Rosier, Louis E.) On the decidability of equivalence for deterministic pushdown transducers. (84j:68052)
- Karhumäki, Juhani See Ehrenfeucht, Andrzej; et al., (84c:68035)
- Kesel'man, D. Ya. Solvability of theories of certain classes of elimination graphs. (84m:05076)
- Kiselev, A. A. (with Kogalovskii, S. R.) Some remarks on higher-order monadic languages. (Russian) (84c:03033)
- Kogalovskii, S. R. See Kiselev, A. A., (84c:03033)
- Kostyrko, V. F. On elementary \exists -theory of semigroups. (84c:20029)
- Kreinovich, V. Ya. (with Oswald, Urs) A decision method for the universal theorems of Quine's New Foundations. (84h:03071)
- McCallum, Scott See Arnon, Dennis S., (84m:03044)
- Muller, David E. (with Schupp, Paul E.) Groups, the theory of ends, and context-free languages. (84c:20016)
- Myasnikov, A. G. (with Remeslennikov, V. N.) Definability of the set of Mal'tsev bases and elementary theories of finite-dimensional algebras. I. (Russian) (84d:03039)
- Oswald, Urs A decision method for the existential theorems of \mathbf{NF}_2 . (84c:03062)
- See also Kreinovich, V. Ya., (84h:03071)
- Pnueli, Amir See Ben-Ari, Mordechai; et al., (84c:03033)
- Remeslennikov, V. N. See Myasnikov, A. G., (84d:03039)
- Rosier, Louis E. See Ibarra, Oscar H., (84j:68052)
- Rozenberg, Grzegorz See Ehrenfeucht, Andrzej; et al., (84c:68035)
- Rozenblatt, B. V. Positive theories of some varieties of semigroups. (Russian) (84c:20032)
- Schmerl, James H. Decidability and \aleph_0 -categoricity of theories of partially ordered sets. (84j:03037)
- Schmitt, Peter H. The elementary theory of torsion-free abelian groups with a predicate specifying a subgroup. (84h:03053)
- Schupp, Paul E. See Muller, David E., (84c:20016)
- Senizergues, Gérard The equivalence problem for N.T.S. languages is decidable. (See 84b:68003)
- de Swart, H. C. M. A Gentzen- or Beth-type system, a practical decision procedure and a constructive completeness proof for the counterfactual logics VC and VCS. (84h:03048)
- Tamura, Saburo On NBN-systems. (84c:03018a)
- Toffalori, Carlo Sheaves of pairs of algebraically closed fields. (Italian. English summary) (84i:12030)
- Tulipani, Sauro Invariants of elementary equivalence for an axiomatic class of general measure spaces. (Italian. English summary) (84c:03037)
- A use of the method of interpretations for decidability or undecidability of measure spaces. (84i:03087)
- Valentini, Silvio Cut elimination in a modal sequent calculus for K. (Italian summary) (84f:03019)
- Vazhenin, Yu. M. Semigroups with one defining relation whose elementary theories are decidable. (Russian) (84c:20060)
- 03B30 Foundations and axiomatics of classical theories
- Balzer, Wolfgang (with Mühlhölzer, Felix) Klassische Stoßmechanik. [Classical mechanics of collisions] 84i:03034
- Bonet, Eduard Theory of measurement. (Catalan) (See 84i:03003)
- Costantini, Domenico (with Galavotti, Maria Carla; Rosa, Rodolfo) A rational reconstruction of elementary particle statistics. (Italian) 84d:03019
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- Dalla Chiara Scabia, Maria Luisa (with Toraldo di Francia, G.) Logic and physics. (Italian) (See 84i:03006)
- Ellett, Frederick S., Jr. (with Ericson, David P.) The logic of causal methods in social science. 84c:03042
- Ericson, David P. See Ellett, Frederick S., Jr., 84c:03042
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- Root, Michael (with Wallace, John) Meaning and interpretation. **84h:03074**
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- Sgall, Petr See Materna, Pavel, **84m:03040**
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- Stokhof, Martin See Groenendijk, Jeroen, **84h:03063**
- Szabolcsi, Anna The semantics of topic-focus articulation. **84h:03076**
- Taylor, Barry On the need for a meaning-theory in a theory of meaning. **84h:03077**
- Thompson, Bruce Syllogisms using "few", "many", and "most". **84j:03067** (Vasilescu, Lucrăția) See Marcus, Salomon, **84j:03066**
- Wallace, John See Root, Michael, **84h:03074**
- Zifonun, Gisela See Diller, Werner, **84f:03025b**
- secondary classifications:
- Apostel, Leo The future of Piagetian logic. **(84g:03009)**
- Bach, Kent Referential/attributive. **(84c:03011)**
 Russell was right (almost). **(84c:03007)**
- Baker, Lynne Rudder On making and attributing demonstrative reference. **(84h:03011)**
- van Benthem, J. F. A. K. ★ The logic of time. **(84i:03035)**
- Brownstein, Don Hard-core extensionalism and the analysis of belief. **(84d:03006)**
- Carlson, Lauri Plural quantifiers and informational independence. **(84h:03091)**
- Croddy, W. Stephen What is a singular term? **(84c:03003)**
- Descles, Jean-Pierre Opérations constitutives d'énoncés. [Constitutive operations of statements] **(84c:68051)**
- Engelberg, Klaus-Jürgen A new approach to formal syntax. **(84i:68127)**
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- Hoche, Hans-Ulrich Zur Methodologie von Kombinations-tests in der analytischen Philosophie. (English summary) [On the methodology of combination tests in analytical philosophy] **(84h:03014)**
- Ishmuratov, A. T. ★ Логические теории временных контекстов. (Russian) [Logical theories of temporal contexts] **(84h:03055)**
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- Kříž, Blažej Generalized grammatical categories in the sense of Kunze. **(84a:68082)**
- LePore, Ernest The concept of meaning and its role in understanding language. **(84c:03023)**
- Martin, R. M. On the language of causal talk: Scriven and Suppes. **(84h:03017a)**
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- Mortensen, Chris (with Priest, Graham) The truth teller paradox. **(84c:03018)**
- Moutafakis, Nicholas J. Rescher's logic of preference and linguistic analysis. **(84c:03024)**
- Partee, Barbara Hall Montague grammar, mental representations, and reality. **(84h:03019)**
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- Sántha, Miklós La logique intensionnelle et les langues naturelles. [Intensional logic and natural languages] **(84c:03041)**
- Shekhtman, V. B. Semantics of modal propositions. (Russian) **(84m:03027)**
- Simons, Peter M. Individuals, groups and manifolds. **(84c:03023)**
- Stahl, Gérold Analyse et applications des suites de questions. [Analysis and applications of sequences of questions] **(84c:03033)**
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- Tichý, Pavel Foundations of partial type theory. **(84c:03017)**
- Vandamme, F. ★ Language and logic. **(84j:03020)**
- Cybernetic linguistics ★ Кибернетическая лингвистика. (Russian) [Cybernetic linguistics] **(84j:03005)**
- 03B99 None of the above, but in this section
- Czelakowski, Janusz Equivalential logics. II. **84m:03041**
- van Fraassen, Basiaan C. Quantification as an act of mind. **84g:03034**
- Heiner, Ronald A. See Packard, Dennis J., **84c:03039**
- Kuhn, Steven T. An axiomatization of predicate functor logic. **84c:03038**
- Orłowska, Ewa Dependencies of attributes in Pawlak's information systems. **84h:03091**
- Packard, Dennis J. (with Heiner, Ronald A.) Inconsistency resolution and collective choice. **84c:03039**
- Pogorzelski, Witold A. On Hilbert's operation on logical rules. I. **84c:03040**
- Ulrich, Dolph Answer to a question raised by Harrop. **84c:03092**
- Wójcicki, Ryszard Referential matrix semantics for propositional calculi. **84a:03030**
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- Zakrevskii, A. D. On a formalization of polysyllogistics. (Russian) **84h:03093**
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- Bacon, John First-order logic based on inclusion and abstraction. **(84h:03020)**
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- Osipov, G. S. Two problems from the theory of semiotic control models. I. Representations of semiotic models. **(84f:92068a)**
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- Parikh, Rohit Some applications of topology to program semantics. **(84d:68015)**
- Sickel, Sharon Specification and derivation of programs. **(84c:68004)**
- Tokarz, M. Theorems derivable from the McNaughton criterion. (Russian) **(84h:03077)**
- Torrens Torrell, Antoni The general deduction principle. (Catalan. English summary) **(See 84i:03003)**
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- 03Cxx Model theory
- (Dzgoev, V. D.) See Handbook: Mathematical logic, **84h:03051**
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- 03C05 Equational classes, universal algebra [See also 08Axx.]
- Andréka, Hajnal (with Németi, István) A general axiomatizability theorem formulated in terms of cone-injective subcategories. **84a:03031a**
- Baldwin, John T. (with McKenzie, Ralph N.) Counting models in universal Horn classes. **84m:03042**
- Bergstra, Jan A. (with Meyer, John-Jules Ch.) The equational specification of finite minimal unoids using only unary hidden functions. **84m:03043**
- Buys, A. (with Heidema, J.) Radicals and subdirect products in models. **84h:03094**
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- McKenzie, Ralph N. See Baldwin, John T., **84m:03042**
- Meyer, John-Jules Ch. See Bergstra, Jan A., **84m:03043**
- Németi, István (with Sain, Ildikó) Cone-implicational subcategories and some Birkhoff-type theorems. **84a:03031b**
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- secondary classifications:
- Baldwin, John T. (with Berman, Joel; Glass, A. M. W.; Hodges, Wilfrid) A combinatorial fact about free algebras. **(84c:08009)**
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- Bankston, Paul (with Fox, Ralph) On categories of algebras equivalent to a quasivariety. **(84g:08026)**
- Berman, Joel See Baldwin, John T.; et al., **(84c:08009)**
- Budkin, A. I. Independent axiomatizability of quasivarieties of groups. (Russian) **(84b:20029)**
- Fleischer, Isidore Subdirect decomposability into irreducibles. **(84g:08003)**

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 Givant, Steven See Baldwin, John T., (84m:03045)
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 Jezek, Jaroslav The lattice of equational theories. I. Modular elements. (84c:08007a)
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 Meskhi, Slava Complete Boolean powers of quasiprimal algebras with lattice reducts. (84g:08012)
 Padmanabhan, R. A self-dual equational basis for Boolean algebras. (84a:03077)
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- Burmeister, Peter Partial algebras—survey of a unifying approach towards a two-valued model theory for partial algebras. (84g:03040)
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 Lair, C. See Guitart, René, (84m:18002)
 Lolli, Gabriel Some applications of compactness. (Italian. English summary) (84i:03115)

03C10 Quantifier elimination and related topics

- Arnon, Dennis S. (with McCallum, Scott) Cylindrical algebraic decomposition by quantifier elimination. 84m:03044
 Berline, Chantal (with Cherlin, Gregory) QE rings in characteristic p . 84a:03032
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 (with Cherlin, Gregory) QE rings in characteristic p^n . 84f:03027
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 Cherlin, Gregory See Berline, Chantal, 84a:03032; 84a:03033 and 84f:03027
 van den Dries, Lou See Macintyre, Angus; et al., 84f:03028
 Macintyre, Angus (with McKenna, Kenneth; van den Dries, Lou) Elimination of quantifiers in algebraic structures. 84f:03028
 McCallum, Scott See Arnon, Dennis S., 84m:03044
 McKenna, Kenneth See Macintyre, Angus; et al., 84f:03028
 Point, Françoise Sur l'élimination linéaire. (English summary) [Linear elimination] 84a:03034
 Rothmaler, Philipp Q_0 is eliminable in every complete theory of modules. 84h:03078

secondary classifications:

- Cherlin, Gregory (with Felgner, Ulrich) Quantifier eliminable groups. (84d:20007)
 Felgner, Ulrich See Cherlin, Gregory, (84d:20007)
 Millar, Terrence Counterexamples via model completions. (84b:03052)
 Molzan, Burkhard The theory of superatomic Boolean algebras in the logic with the binary Ramsey quantifier. (84d:03045)
 Weese, Martin Decidability with respect to Härtig quantifier and Rescher quantifier. (84i:03075)

03C13 Finite models

- Lynch, James F. Complexity classes and theories of finite models. 84c:03042
 Shabanov-Kushnarenko, Yu. P. Modeling of finite mathematical structures. (Russian) 84c:03043

secondary classifications:

- Call, Richard L. Systems with parity quantifiers. (84c:03070)
 Compton, Kevin J. Some useful preservation theorems. (84j:03068)
 Reiterman, Jan The Birkhoff theorem for finite algebras. (84c:08008)

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- Lascar, Daniel La conjecture de Vaught. [Vaught's conjecture] 84c:03044
 Miller, Arnold W. On the Borel classification of the isomorphism class of a countable model. 84c:03055
 Pillay, Anand A note on finitely generated models. 84d:03036

secondary classifications:

- Apps, A. B. On the structure of \aleph_0 -categorical groups. (84h:03079)
 Bouscaren, Elisabeth Countable models of multidimensional \aleph_0 -stable theories. (84c:03097)
 Luo, Li Bo On the number of countable homogeneous models. (84i:03070)
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 Steinhorn, Charles A new omitting types theorem. (84j:03071)
 Wagner, C. M. On Martin's conjecture. (84h:03083)

03C20 Ultraproducts and related constructions

- Bankston, Paul On productive classes of function rings. 84c:03056

secondary classifications:

- Hauschild, Kurt Model-theoretic properties of cause-and-effect structures. (84c:03023)
 Heinrich, Stefan (with Henson, C. Ward; Moore, L. C., Jr.) Elementary equivalence of L_1 -preduals. (84j:46021)
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 Magajna, Bojan Infinitesimals. (Slovenian. English summary) (84i:03116)
 Moore, L. C., Jr. See Heinrich, Stefan; et al., (84j:46021)
 Moscatelli, Vincenzo Bruno Ultraproducts and superreflexivity in the theory of Banach spaces. (Italian) (84d:46013)
 Roitman, Judy Nonisomorphic hyper-real fields from nonisomorphic ultrapowers. (84a:54030)
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03C25 Model-theoretic forcing

- Blass, Andreas (with Šcedrov, Andrej) Classifying topoi and finite forcing. 84g:03035
 Grušić, Mil'án A comment on forcing. (Serbo-Croatian. English summary) 84c:03057
 Palyutin, E. A. Number of models in complete varieties. 84g:03036
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03C30 Other model constructions

- Rodriguez Artalejo, Mario A method of constructing structures based on the distributive normal form. (Spanish) 84c:03067

secondary classifications:

- Baudisch, Andreas Formulas of $L(aa)$ where aa is not in the scope of " \neg ". (84c:03072)
 Buys, A. (with Heidema, J.) Radicals and subdirect products in models. (84c:03094)
 Heidema, J. See Buys, A., (84c:03094)
 Herzberger, Hans G. The algebra of supervaluations. (84h:03025)

03C35 Categoricity and completeness of theories

- Apps, A. B. On the structure of \aleph_0 -categorical groups. 84h:03079
 Baldwin, John T. (with Givant, Steven) Model complete universal Horn classes. 84m:03045
 Givant, Steven See Baldwin, John T., 84m:03045
 Marongiu, Gabriele Some results on \aleph_0 -categoricity for structures with a finite number of equivalence relations. (Italian. English summary) 84c:03058
 Millar, Terrence Counterexamples via model completions. 84b:03052
 Schmerl, James H. Decidability and \aleph_0 -categoricity of theories of partially ordered sets. 84g:03037
 Zil'ber, B. I. Solution of the problem of finite axiomatizability for theories that are categorical in all infinite powers. (Russian) 84c:03095
 Some problems concerning categoricity theories. (Russian summary) 84h:03080

secondary classifications:

- Blass, Andreas (with Šcedrov, Andrej) Boolean classifying topoi. (84c:03078)
 Lascar, Daniel La conjecture de Vaught. [Vaught's conjecture] (84c:03044)
 Manaster, Alfred B. (with Remmel, Jeffrey B.) Some recursion theoretic aspects of dense two-dimensional partial orderings. (84b:03060)
 Marcea, Annalisa Categoricity and algebra. (Italian) (See 84b:03060)
 Remmel, Jeffrey B. See Manaster, Alfred B., (84b:03060)
 Šcedrov, Andrej See Blass, Andreas, (84c:03078)
 Tuschik, Hans-Peter (with Weese, Martin) An unstable \aleph_0 -categorical theory without the strict order property. (See 84i:03008)
 Tyukavkin, L. V. On the model completeness of certain theories of modules. (Russian) (84m:03056)
 Weese, Martin See Tuschik, Hans-Peter, (See 84i:03008)
 Wilson, John S. The algebraic structure of \aleph_0 -categorical groups. (84c:20006)
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03C40 Interpolation and preservation theorems; definability

- Comer, Stephen D. Boolean combinations of monadic formulas. 84m:03046
 Compton, Kevin J. Some useful preservation theorems. 84j:03068
 Leib, Hans ★ Implizit definierte Mengensysteme. (German) [Implicitly defined systems of sets] 84f:03029
 Mundici, Daniele Complexity of Craig's interpolation. 84h:03081
 Weaver, George A note on the interpolation theorem in first order logic. 84i:03068

secondary classifications:

- van den Dries, Lou Some applications of a model theoretic fact to (semi-) algebraic geometry. (84m:14029)
 Lin, Feng Ch'ing Schanuel's conjecture implies Ritt's conjectures. (84j:10045)
 Marković, Zoran On axiomatizability and preservation in Kripke models. (84a:03014)
 Mizutani, Chiharu Definability theorem for the intuitionistic predicate logic with equality. (84b:03080)
 Motohashi, Nobuyoshi ε -theorems and elimination theorems of uniqueness conditions. (84h:03027)
 Ono, Hiroakira Model extension theorem and Craig's interpolation theorem for intermediate predicate logics. (84j:03060)
 Rantala, Veikko Infinitely deep game sentences and interpolation. (84h:03090)

03C45 Stability and related concepts

- Baizhanov, B. S.** Remarks on the paper: "Some properties of totally transcendental theories" [*Theory of models and its applications* (Russian), 14–24, Kazakh. Gos. Univ., Alma-Ata, 1980; MR 82e:03031]. (Russian) **84i:03096**
- Baudisch, Andreas** (with Rothmaler, Philipp) ★Vorlesungen zur Einführung in die Theorie des Shelah'schen "forking". (German) [Introductory lectures on the theory of Shelah's "forking"] **84i:03030**
- Bekenov, M. I.** On the spectrum of quasitranscendental theories. (Russian) **84i:03069**
- Bouscaren, Elisabeth** Countable models of multidimensional N_0 -stable theories. **84i:03097**
- Knight, Julia F.** See Woodrow, Robert E., **84m:03050**
- Lascar, Daniel** Ordre de Rudin-Keisler et poids dans les théories stables. [Rudin-Keisler ordering and weight in stable theories] **84d:03037**
- Meirembekov, K. A.** Spectra of superstable abelian groups. (Russian) **84i:03098**
- Mustafin, T. G.** On the number of countable models of a countable complete theory. (Russian) **84m:03047**
- (with Nurmamagambetov, T. A.) Separable types and rank functions in stable theories. (Russian) **84i:03099**
- Nurmamagambetov, T. A.** See Mustafin, T. G., **84i:03099**
- Omarov, A. I.** A sufficient condition for instability of theories. (Russian) **84i:03100**
- Omarov, B.** Properties of ranks and Deg of complete countable stable theories. (Russian) **84i:03101**
- Pillay, Anand** Finitely generated models of ω -stable theories. **84i:03035**
- Weakly homogeneous models. **84i:03059**
- (with Prest, Mike) Forking and pushouts in modules. **84m:03048**
- Poizat, Bruno** Propriétés "modèle-théoriques" d'une théorie du premier ordre. ["Model-theoretic" properties of a first-order theory] (See **84i:03008**)
- Travaux publiés par les membres du groupe "théories stables". [Published works by the members of the "stable theories" group] **84j:03069**
- Postscript: "Unstable theories" [*J. Symbolic Logic* **46** (1981), no. 3, 513–522; MR 83c:03045]. (French) **84g:03038**
- Paires de structures stables. [Pairs of stable structures] **84h:03082**
- Prest, Mike** See Pillay, Anand, **84m:03048**
- Rothmaler, Philipp** Another treatment of the foundations of forking theory. (See **84i:03008**)
- See also Baudisch, Andreas, **84i:03030**
- Shelah, Saharon** The spectrum problem. I. N_1 -saturated models, the main gap. **84j:03070a**
- The spectrum problem. II. Totally transcendental and infinite depth. **84j:03070b**
- Steinhorn, Charles** A new omitting types theorem. **84j:03071**
- Tuschik, Hans-Peter** (with Weese, Martin) An unstable N_0 -categorical theory without the strict order property. (See **84i:03008**)
- Vikent'ev, A. A.** Models of restrictions of theories. (Russian) **84i:03102**
- Classes of theories with Lachlan dimension. (Russian) **84m:03049**
- Weese, Martin** See Tuschik, Hans-Peter, (See **84i:03008**)
- Woodrow, Robert E.** (with Knight, Julia F.) A complete theory with arbitrarily large minimality ranks. **84m:03050**

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- Baudisch, Andreas** Decidability and stability of free nilpotent Lie algebras and free nilpotent p -groups of finite exponent. (**84e:03019**)
- Cooper, Glen R.** On complexity of complete first-order theories. (**84e:03047**)
- Kierstead, Henry A.** (with Remmel, Jeffrey B.) Indiscernibles and decidable models. (**84i:03103**)
- Palyutin, E. A.** Number of models in complete varieties. (**84g:03036**)
- Pillay, Anand** A note on finitely generated models. (**84d:03036**)
- (Poizat, Bruno) See Study group: Stable theories (Bruno Poizat), (**84i:03009**)
- Remmel, Jeffrey B.** See Kierstead, Henry A., (**84i:03103**)
- Rothmaler, Philipp** Some model theory of modules. I. On total transcendence of modules. (**84j:03075**)
- (Taitlin, M. A.) See Investigations in theoretical programming, (**84j:03008**)
- Toffalori, Carlo** Questions in the theory of models for pairs of fields. (Italian. English summary) (**84i:12023**)
- Tulipani, Sauro** On the congruence lattice of stable algebras with definability of compact congruences. (**84e:03046**)
- Wagner, C. M.** On Martin's conjecture. (**84h:03083**)
- Investigations in theoretical programming** ★Исследования по теоретическому программированию. (Russian) [Investigations in theoretical programming] (**84j:03008**)
- Study group:**
- Stable theories (Bruno Poizat) ★Groupe d'étude de théories stables. (Bruno Poizat), 3: 1980/1982. (French) [Study group on stable theories (Bruno Poizat). 3: 1980/1982] (**84i:03009**)

03C50 Models with special properties (saturated, rigid, etc.)

- Kierstead, Henry A.** (with Remmel, Jeffrey B.) Indiscernibles and decidable models. **84i:03103**
- Knight, Julia F.** Theories whose resplendent models are homogeneous. **84g:03039**
- Lao, Li Bo** The union and product of models, and homogeneous models. (Chinese. English summary) **84i:03104**
- On the number of countable homogeneous models. **84i:03070**
- Remmel, Jeffrey B.** See Kierstead, Henry A., **84i:03103**

secondary classifications:

- Chiri, Emanuela** Saturated models of particular theories of ordered abelian groups. (Italian. English summary) (**84e:03061**)

- Lu, Jing Bo** (with Shen, Cheng Min) Saturated models in lattice-valued model theory. (Chinese. English summary) (**84d:03047**)
- Lü, Qi Ci** Concurrent relations and nonstandard models. (Chinese. English summary) (**84b:03086**)
- Millar, Terrence** Persistently finite theories with hyperarithmetic models. (**84m:03053**)
- Parigot, Michel** Théories d'arbres. [Theories of trees] (**84g:03047**)
- Pillay, Anand** Finitely generated models of ω -stable theories. (**84i:03035**)
- Weakly homogeneous models. (**84i:03059**)
- Poizat, Bruno** Deux ou trois choses que je sais de $L_{\omega\omega}$. [Two or three things I know about $L_{\omega\omega}$] (**84b:03055**)
- Shen, Cheng Min** See Lu, Jing Bo, (**84d:03047**)
- Steinhorn, Charles** A new omitting types theorem. (**84j:03071**)
- Wang, Shi Qiang** Lattice-valued atomic models and countable saturated models. (Chinese) (**84i:03077**)

03C52 Properties of classes of models

- Aragane, Kenichi** Characterization of elementary classes of structures whose every substructure is a congruence class. (See **84a:20003**)
- Charretton, Ch.** (with Pouzet, Maurice) Comparaison des structures engendrées par des chaînes. (English summary) [Comparison of structures generated by chains] (See **84i:03008**)
- Ershov, Yu. L.** Regularly γ -closed fields. (Russian) **84c:03060**
- Mundici, Daniele** A group-theoretical invariant for elementary equivalence and its role in representations of elementary classes. **84i:03045**
- Pinus, A. G.** Full imbeddings of categories of algebraic systems and determinability of a model by the semigroup of its endomorphisms. (Russian) **84i:03036**
- Pouzet, Maurice** See Charretton, Ch., (See **84i:03008**)
- Wagner, C. M.** On Martin's conjecture. **84h:03083**

secondary classifications:

- Bankston, Paul** Obstacles to duality between classes of relational structures. (**84j:18005**)
- Jambu-Giraudet, M.** Bi-interpretable groups and lattices. (**84g:06028**)
- Lair, C.** Catégories modélables et catégories esquissables. [Modelizable categories and sketchable categories] (**84j:18004**)
- Oikkonen, Juha** Finite and infinite versions of the operations PC and RPC in infinitary languages. (**84h:03089**)
- Palyutin, E. A.** Number of models in complete varieties. (**84g:03036**)
- Väänänen, Jouko** Δ -extension and Hanf-numbers. (**84j:03080**)

03C55 Set-theoretic model theory

- Adamson, Alan** A note on two-cardinal models. **84m:03051**
- Foreman, Matthew** Large cardinals and strong model theoretic transfer properties. **84d:03038**

secondary classifications:

- Andréka, Hajnal** See Henkin, Leon; et al., (**84a:03078**)
- Henkin, Leon** (with Monk, J. Donald; Tarski, Alfred; Andréka, Hajnal; Németi, István) ★Cylindric set algebras. (**84a:03078**)
- Marek, Wiktor** (with Rasmussen, K.) Spectrum of L . (**84j:03098**)
- Monk, J. Donald** See Henkin, Leon; et al., (**84a:03078**)
- Németi, István** See Henkin, Leon; et al., (**84a:03078**)
- Rasmussen, K.** See Marek, Wiktor, (**84j:03098**)
- Shelah, Saharon** On the number of nonisomorphic models in $L_{\kappa,\omega}$ when κ is weakly compact. (**84h:03093**)
- Tarski, Alfred** See Henkin, Leon; et al., (**84a:03078**)

03C57 Recursion-theoretic model theory [See also 03D45.]

- Eisenberg, Edward F.** (with Remmel, Jeffrey B.) Effective isomorphisms of algebraic structures. **84m:03052**
- Millar, Terrence** Persistently finite theories with hyperarithmetic models. **84m:03053**
- Remmel, Jeffrey B.** See Eisenberg, Edward F., **84m:03052**

secondary classifications:

- Bertoni, Alberto** (with Mauri, Giancarlo; Miglioli, Pierangelo) On the power of model theory in specifying abstract data types and in capturing their recursiveness. (**84i:68014**)
- Cegielski, Patrick** (with McAloon, Kenneth; Wilmers, George) Modèles récursivement saturés de l'addition et de la multiplication des entiers naturels. (English summary) [Recursively saturated models of addition and of multiplication of natural numbers] (**84i:03072**)
- Kierstead, Henry A.** (with Remmel, Jeffrey B.) Indiscernibles and decidable models. (**84i:03103**)
- Kossak, Roman** A certain class of models of Peano arithmetic. (**84j:03076**)
- Madison, E. W.** The existence of countable totally nonconstructive extensions of the countable atomless Boolean algebra. (**84g:03066**)
- Manaster, Alfred B.** (with Remmel, Jeffrey B.) Some recursion theoretic aspects of dense two-dimensional partial orderings. (**84b:03060**)
- Mauri, Giancarlo** See Bertoni, Alberto; et al., (**84i:68014**)
- McAloon, Kenneth** See Cegielski, Patrick; et al., (**84i:03072**)
- Miglioli, Pierangelo** See Bertoni, Alberto; et al., (**84i:68014**)
- Millar, Terrence** Counterexamples via model completions. (**84h:03052**)
- Moses, Michael** Recursive properties of isomorphism types. (**84g:03067**)
- Murawski, Roman** A simple remark on satisfaction classes, indiscernibles and recursive saturation. (**84f:03059**)
- Remmel, Jeffrey B.** See Manaster, Alfred B., (**84b:03060**) and Kierstead, Henry A., (**84i:03103**)

- Smoryński, C. Addendum: "Recursively saturated nonstandard models of arithmetic" [J. Symbolic Logic 46 (1981), no. 2, 259–286; MR 82i:03045]. (84b:03054)
 Urzyczyn, Paweł The unwind property in certain algebras. (84c:08005)
 Wilmers, George See Cegielski, Patrick; et al., (84i:03072)

03C60 Model-theoretic algebra [See also 08C10.]

- Baur, Walter On the elementary theory of pairs of real closed fields. II. (84j:03072)
 Burmeister, Peter Partial algebras—survey of a unifying approach towards a two-valued model theory for partial algebras. (84g:03040)
 Chiti, Emanuela Saturated models of particular theories of ordered abelian groups. (Italian. English summary) (84c:03061)
 Cowles, John R. (with LaGrange, Robert) Generalized Archimedean fields. (84m:03054)
 Dahn, Bernd I. (with Gehne, Jürgen) A theory of ordered exponential fields which has no model completion. (See 84i:03008)
 van den Dries, L. P. D. (with Glass, A. M. W.; Macintyre, Angus; Mekler, Alan H.; Poland, John) Elementary equivalence and the commutator subgroup. (84g:03041)
 Gehne, Jürgen See Dahn, Bernd I., (See 84i:03008)
 Glass, A. M. W. See van den Dries, L. P. D.; et al., (84g:03041)
 Krapež, A. Some nonaxiomatizable classes of semigroups. (84j:03073)
 LaGrange, Robert See Cowles, John R., (84m:03054)
 Macintyre, Angus See van den Dries, L. P. D.; et al., (84g:03041)
 Mangione, Corrado Stages of the relation between algebra and logic. (Italian) (See 84c:03006)
 Mansfield, Richard How many slopes in a polygon? (84j:03074)
 Marcja, Annalisa Categoricity and algebra. (Italian) (See 84c:03006)
 Mekler, Alan H. See van den Dries, L. P. D.; et al., (84g:03041)
 Mijajlović, Zarko Completions of models and Galois theory. (84c:03062)
 Myasnikov, A. G. (with Remeslennikov, V. N.) Definability of the set of Mal'tsev bases and elementary theories of finite-dimensional algebras. I. (Russian) (84d:03039)
 Oger, Francis Equivalence élémentaire entre groupes finis-par-abéliens de type fini. [Elementary equivalence between finite-by-abelian groups of finite type] (84g:03042)
 Poland, John See van den Dries, L. P. D.; et al., (84g:03041)
 Prest, Mike Existentially complete prime rings. (84m:03055)
 Pühringer, Christine Ein Vollständigkeitsbeweis für die Theorie der atomlosen \cap -partiellen Booleschen Algebren. [A completeness proof for the theory of the atomless \cap -partial Boolean algebras] (84c:03063)
 Reineke, Joachim On algebraically closed models of theories of commutative rings. (84c:03064)
 Remeslennikov, V. N. See Myasnikov, A. G., (84d:03039)
 Rose, Bruce I. Preservation of elementary equivalence under scalar extension. (84c:03065)
 Rothmaler, Philipp Some model theory of modules. I. On total transcendence of modules. (84j:03075)
 Schmitt, Peter H. The elementary theory of torsion-free abelian groups with a predicate specifying a subgroup. (84b:03053)
 Toffalori, Carlo Model theory for a class of differential rings. (Italian) (See 84c:03006)
 Tulipani, Sauro On the congruence lattice of stable algebras with definability of compact congruences. (84c:03046)
 Tyukavkin, L. V. On the model completeness of certain theories of modules. (Russian) (84m:03056)
 Wolter, Helmut On the "problem of the last root" for exponential terms. (See 84i:03008)

secondary classifications:

- Anellis, Irving H. Boolean groups. (84g:03102)
 Apps, A. B. On the structure of \aleph_0 -categorical groups. (84h:03079)
 Belyaev, V. Ya. On algebraic closure and amalgamation of semigroups. (84d:20059)
 Berline, Chantal (with Cherlin, Gregory) QE rings in characteristic p . (84a:03032)
 (with Cherlin, Gregory) QE nilrings of prime characteristic. (84a:03033)
 (with Cherlin, Gregory) QE rings in characteristic p^n . (84f:03027)
 Boffa, Maurice Elimination des quantificateurs en algèbre. [Elimination of quantifiers in algebra] (84c:03041)
 Bunge, Marta On the transfer of an abstract nullstellensatz. (84c:03074)
 Cherlin, Gregory (with Felgner, Ulrich) Quantifier eliminable groups. (84d:20007)
 See also Berline, Chantal, (84a:03032); (84a:03033); and (84f:03027)
 Crvenković, Siniša See Milić, Svetozar Dj., (84b:20073)
 Denef, Jan (with Jarden, Moshe; Lewis, D. J.) On A_x -fields which are C_x . (84j:12028)
 van den Dries, Lou See Macintyre, Angus; et al., (84f:03028)
 Ershov, Yu. L. Regularly r -closed fields. (Russian) (84c:03060)
 Felgner, Ulrich See Cherlin, Gregory, (84d:20007)
 Gondard, Danielle Théorie des modèles et fonctions définies positives sur les variétés algébriques réelles. (English summary) [Model theory and positive definite functions in real algebraic varieties] (84a:12026)
 Haran, Dan (with Jarden, Moshe) Bounded statements in the theory of algebraically closed fields with distinguished automorphisms. (84m:03015)
 Jarden, Moshe The elementary theory of large e -fold ordered fields. (84c:12029)
 See also Denef, Jan; et al., (84j:12028); and Haran, Dan, (84m:03015)
 Jensen, Christian U. Applications logiques en théorie des anneaux et des modules. [Applications of logic in the theory of rings and modules] (84b:16017)
 L'indécidabilité d'une classe de corps des fonctions méromorphes. [Undecidability of a class of fields of meromorphic functions] (84g:03062)
 Jurie, Pierre-François Décidabilité de la théorie élémentaire des anneaux booléens à opérateurs dans un groupe fini. (English summary) [Decidability of the elementary theory of Boolean rings with operators in a finite group] (84a:03016)
 Kostyrko, V. F. On elementary \exists -theory of semigroups. (84c:20029)
 Lawrence, John W. The theory of $\forall\exists$ elementary conditions on rings. (84c:16019)
 Lewis, D. J. See Denef, Jan; et al., (84j:12028)
 Lin, Feng Ch'ing Schanuel's conjecture implies Ritt's conjectures. (84j:10045)
 Lomecky, Z. Algorithms for the computation of free lattices. (84a:06001)

- Macintyre, Angus (with McKenna, Kenneth; van den Dries, Lou) Elimination of quantifiers in algebraic structures. (84f:03028)
 Macpherson, H. D. The action of an infinite permutation group on unordered subsets of a set. (84m:20006)
 McKenna, Kenneth See Macintyre, Angus; et al., (84f:03028)
 Meirembekov, K. A. Spectra of superstable abelian groups. (Russian) (84c:03096)
 Mez, Hans-Christian Existentially closed linear groups. (84a:20050)
 Milić, Svetozar Dj. (with Crvenković, Siniša) Proper subsemigroups of a semigroup. (84b:20073)
 Molzan, Burkhard On the number of different theories of Boolean algebras in several logics. (84c:03092)
 The theory of superatomic Boolean algebras in the logic with the binary Ramsey quantifier. (84d:03045)
 Noskov, G. A. The elementary theory of a finitely generated commutative ring. (Russian) (84g:03063)
 Ono, Hiroakira Equational theories and universal theories of fields. (84g:03046)
 Pillay, Anand (with Prest, Mike) Forking and pushouts in modules. (84m:03048)
 Point, Françoise Sur l'élimination linéaire. (English summary) [Linear elimination] (84c:03034)
 Prest, Mike See Pillay, Anand, (84m:03048)
 Prestel, Alexander Pseudo real closed fields. (84b:12032)
 Rolland, Raymond Étude des coupures dans les groupes et corps ordonnés. [Study of cuts in ordered groups and fields] (84c:06023)
 Rothmaler, Philipp Q_0 is eliminable in every complete theory of modules. (84b:03078)
 Rozenblat, B. V. Positive theories of some varieties of semigroups. (Russian) (84c:20032)
 See also Vazhenin, Yu. M., (84j:03028)
 Saracino, D. Amalgamation bases for nil-2 groups. (84i:20035)
 Shelah, Saharon On the number of nonconjugate subgroups. (84i:20005)
 Szendrei, Ágnes On the idempotent reducts of modules. I. II. (84j:08010)
 Taha, Faleh Algèbres simples centrales sur les corps ultra-produits de corps p -adiques. [Central simple algebras over fields which are ultraproducts of p -adic fields] (84a:16035)
 Tamagawa, Tsuneo On regularly closed fields. (84m:14024)
 Toffalori, Carlo Nilreal rings. (Italian. English summary) (84c:13022)
 Sheaves of pairs of algebraically closed fields. (Italian. English summary) (84c:12030)
 Model theory for some classes of local rings. (Italian. English summary) (84i:12025)
 Questions in the theory of models for pairs of fields. (Italian. English summary) (84i:12023)
 Vazhenin, Yu. M. (with Rozenblat, B. V.) Positive theories of free algebraic systems. (Russian) (84j:03028)
 Semigroups with one defining relation whose elementary theories are decidable. (Russian) (84i:20060)
 Velinov, Y. P. Polycategories and strict monoidal categories. I. (Russian and Bulgarian summaries) (84f:18014)
 Wald, Burkhard Martinaxiom und die Beschreibung gewisser Homomorphismen in der Theorie der \aleph_1 -freien abelschen Gruppen. (English summary) [Martin's axiom and the description of certain homomorphisms in the theory of \aleph_1 -free abelian groups] (84g:20095)
 Weissauer, Rainer Der Hilbertsche Irreduzibilitätssatz. [Hilbert's irreducibility theorem] (84c:12020)
 Wilson, John S. The algebraic structure of \aleph_0 -categorical groups. (84c:20006)

03C62 Models of arithmetic and set theory [See also 03Hxx.]

- Acezel, Peter Two notes on the Paris independence result. (84i:03071)
 Cegielski, Patrick (with McAloon, Kenneth; Wilmers, George) Modèles récursivement saturés de l'addition et de la multiplication des entiers naturels. (English summary) [Recursively saturated models of addition and of multiplication of natural numbers] (84i:03072)
 David, René A very absolute Π_1^1 real singleton. (84m:03057)
 Dimitracopoulos, Constantine See Paris, Jeff B., (84d:03041)
 Kirby, L. A. S. La méthode des indicatrices et le théorème d'incomplétude. [The method of indicators and the incompleteness theorem] (84d:03040)
 Kossak, Roman A certain class of models of Peano arithmetic. (84j:03076)
 Kotlarski, Henryk (with Krajewski, Stanisław; Lachlan, A. H.) Construction of satisfaction classes for nonstandard models. (84c:03066a)
 On elementary cuts in models of arithmetic. (84f:03031)
 Krajewski, Stanisław See Kotlarski, Henryk; et al., (84c:03066a)
 Lachlan, A. H. Full satisfaction classes and recursive saturation. (84c:03066b)
 See also Kotlarski, Henryk; et al., (84c:03066a)
 Lynch, James F. On sets of relations definable by addition. (84i:03073)
 Magidor, Menachem (with Shelah, Saharon; Stavi, Jonathan) On the standard part of nonstandard models of set theory. (84m:03058)
 McAloon, Kenneth (with Ressayre, Jean-Pierre) Les méthodes de Kirby-Paris et la théorie des ensembles. [The Kirby-Paris methods and set theory] (84c:03067)
 On the complexity of models of arithmetic. (84b:03084)
 See also Cegielski, Patrick; et al., (84i:03072)
 Paris, Jeff B. (with Dimitracopoulos, Constantine) Truth definitions for Δ_0 formulae. (84d:03041)
 Pillay, Anand Cuts in models of arithmetic. (84b:03085)
 Ressayre, Jean-Paul Modèles isomorphes à leurs propres segments initiaux en théorie des ensembles. (English summary) [Models isomorphic to their proper initial segments in set theory] (84g:03043)
 Ressayre, Jean-Pierre See McAloon, Kenneth, (84c:03067)
 Shelah, Saharon See Magidor, Menachem; et al., (84m:03058)
 Smoryński, C. Addendum: "Recursively saturated nonstandard models of arithmetic" [J. Symbolic Logic 46 (1981), no. 2, 259–286; MR 82i:03045]. (84b:03054)
 Stavi, Jonathan See Magidor, Menachem; et al., (84m:03058)

Sun, Wen Zhi A property of the upper bounding ordinal of a model of ZFC. (Chinese. English summary) **84d:03042**

Wilms, George See Cegielski, Patrick; et al. **84i:03072**

Zarach, Andrzej Unions of ZF-models which are themselves ZF-models. **84h:03086**

secondary classifications:

Barbanel, Julius B. Supercompact cardinals, elementary embeddings and fixed points. **(84g:03083)**

Beller, A. (with Jensen, Ronald Björn; Welch, P. H.) ★ Coding the universe. **(84h:03002)**

Boffa, Maurice Algèbres de Boole atomiques et modèles de la théorie des types. [Atomic Boolean algebras and models of type theory] **(84g:03085)**

Brunner, Norbert Geordnete Luchli Kontinuen. [Ordered Luchli continua] **(84i:03122)**

Budinas, B. L. The existence of a complete A_2 -ordering of the continuum does not follow from the selection principle for analytic equivalence relations. **(84i:03042)**

Cantini, Andrea Σ -models of subtheories of KPI. (Italian) (See **84i:03006**)

Clote, Peter Weak partition relation, finite games, and independence results in Peano arithmetic. **(84h:03144)**

Dimitracopoulos, Constantine See Paris, Jeff B. **(84i:03151)**

Dodd, A. J. ★ The core model. **(84c:03062)**

Core models. **(84g:03081)**

Erdős, Paul (with Mills, George) Some bounds for the Ramsey-Paris-Harrington numbers. **(84c:03099)**

Ershov, Yu. L. Undecidability of regularly closed fields. (Russian) **(84c:03052)**

Hinnin, Roland Extensional quotients of structures and applications to the study of the axiom of extensionality. **(84c:03089)**

Hrbáček, Karel Axiomatic foundations for nonstandard analysis. **(84h:03084)**

Jansana, Ramón Boolean-valued models for the KM theory of classes. (Catalan) (See **84c:03083**)

Jensen, Ronald Björn See Beller, A.; et al. **(84h:03002)**

Ketonen, Jussi (with Solovay, Robert) Rapidly growing Ramsey functions. **(84c:03100)**

Kirby, L. A. S. (with McAloon, Kenneth; Murawski, Roman) Indicators, recursive saturation and expandability. **(84i:03117)**

Flipping properties in arithmetic. **(84c:03084)**

Kolata, Gina Does Gödel's theorem matter to mathematics? **(84m:03089)**

Kranakis, Evangelos Definable ultrafilters and end extension of constructible sets. **(84g:03082)**

Marek, Wiktor (with Rasmussen, K.) Spectrum of L . **(84j:03098)**

McAloon, Kenneth See Kirby, L. A. S.; et al. **(84i:03117)**

Mijajlović, Zarko Submodels and definable points in models of Peano arithmetic. **(84c:03150)**

Miller, Arnold W. Mapping a set of reals onto the reals. **(84c:03125)**

Mills, George A tree analysis of unprovable combinatorial statements. **(84c:03101)**
See also Erdős, Paul. **(84c:03099)**

Monro, G. P. On generic extensions without the axiom of choice. **(84d:03061)**

Montagna, Franco ZFC-models as Kripke-models. **(84j:03043)**

Morgenstern, Carl On generalized quantifiers in arithmetic. **(84g:03051)**

Murawski, Roman A simple remark on satisfaction classes, indiscernibles and recursive saturation. **(84f:03059)**

Incompleteness of Σ_1^1 definable theories via indicators. **(84g:03109)**

See also Kirby, L. A. S.; et al. **(84i:03117)**

Paris, Jeff B. A hierarchy of cuts in models of arithmetic. **(84c:03085)**
(with Dimitracopoulos, Constantine) A note on the undefinability of cuts. **(84c:03151)**

Pétry, André Une caractérisation algébrique des structures satisfaisant les mêmes sentences stratifiées. [An algebraic characterization of structures satisfying the same stratified sentences] **(84c:03063)**

Rasmussen, K. See Marek, Wiktor. **(84j:03098)**

von Rimscha, Michael Hierarchies for nonfounded models of set theory. **(84j:03097)**

Semenov, A. L. On the definability of arithmetic in its fragments. (Russian) **(84a:03074)**

Shelah, Saharon (with Stanley, L.) S -forcing. I. A "black-box" theorem for morasses, with applications to super-Souslin trees. **(84h:03119)**

Solovay, Robert See Ketonen, Jussi. **(84c:03100)**

Stanley, L. See Shelah, Saharon. **(84h:03119)**

Steel, John R. Determinacy in the Mitchell models. **(84c:03059)**

von der Twer, T. On the strength of several versions of Dirichlet's ("pigeon-hole") principle in the sense of first-order logic. **(84c:03072)**

Väänänen, Jouko Generalized quantifiers in models of set theory. **(84h:03094)**

Generalized quantifiers in models of set theory. **(84h:03096)**

Welch, P. H. See Beller, A.; et al. **(84h:03002)**

Wilkie, A. J. On core structures for Peano arithmetic. **(84j:03142)**

Zadrożny, Włodzimierz Transfinite descending sequences of models HOD^α . **(84a:03063)**

Zbierski, Paweł Nonstandard interpretations of higher order theories. **(84d:03073)**

Zhang, Jin Wen A nonstandard model of arithmetic constructed by means of a forcing method. (Chinese. English summary) **(84g:0310a)**

A nonstandard model of arithmetic constructed by means of a forcing method. **(84g:0310b)**

A family of models of lattice-valued sets. (Chinese. English summary) **(84k:03128)**
Between fuzzy set theory and Boolean valued set theory. **(84k:03136)**

03C65 Models of other specific theories

Gurevich, Yuri Crumbly spaces. **84g:03044**

Lipparini, Paolo Existentially complete closure algebras. (Italian summary) **84h:03087**

Nakano, Yoshihiro On the theories with countably many unary predicate symbols. **84g:03045**

Ono, Hiroakira Equational theories and universal theories of fields. **84g:03046**

Parigot, Michel Théories d'arbres. [Theories of trees] **84g:03047**

Tulipani, Sauro Invariants of elementary equivalence for an axiomatic class of general measure spaces. (Italian. English summary) **84a:03037**

secondary classifications:

Baudisch, Andreas Decidability and stability of free nilpotent Lie algebras and free nilpotent p -groups of finite exponent. **(84c:03019)**

(Bednarczyk, Jerzy) See Szmielew, Wanda. **(84i:51002)**

Blass, Andreas (with Exoo, Geoffrey; Harary, Frank) Paley graphs satisfy all first-order adjacency axioms. **(84i:05107)**

Cowles, John R. The Henkin quantifier and real closed fields. **(84g:03048)**

Dahn, Bernd L. (with Gehne, Jürgen) A theory of ordered exponential fields which has no model completion. (See **84i:03008**)

Exoo, Geoffrey See Blass, Andreas; et al. **(84i:05107)**

Gehne, Jürgen See Dahn, Bernd L. (See **84i:03008**)

(Gupta, Haragauri N.) See Szmielew, Wanda. **(84i:51002)**

Harary, Frank See Blass, Andreas; et al. **(84i:05107)**

Jensen, Christian U. Applications logiques en théorie des anneaux et des modules.

[Applications of logic in the theory of rings and modules] **(84h:16017)**

Jurie, Pierre-François Décidabilité de la théorie élémentaire des anneaux booléens à opérateurs dans un group fini. (English summary) [Decidability of the elementary theory of Boolean rings with operators in a finite group] **(84a:03016)**

Koppelberg, Sabine On Boolean algebras with distinguished subalgebras. **(84a:03017a)**

On Boolean algebras with distinguished subalgebras. **(84a:03017b)**

Lomecky, Z. Algorithms for the computation of free lattices. **(84a:06001)**

Manaster, Alfred B. (with Remmel, Jeffrey B.) Some recursion theoretic aspects of dense two-dimensional partial orderings. **(84h:03060)**

Marongiu, Gabriele Some results on N_1 -categoricity for structures with a finite number of equivalence relations. (Italian. English summary) **(84c:03058)**

McKee, T. A. Validity up to complementation in graph theory. **(84m:05079)**

Molzan, Burkhard The theory of superatomic Boolean algebras in the logic with the binary Ramsey quantifier. **(84d:03045)**

(Moszyńska, Maria) See Szmielew, Wanda. **(84i:51002)**

Pühringer, Christine Ein Vollständigkeitsbeweis für die Theorie der atomlosen

\cap -partiellen Booleschen Algebren. [A completeness proof for the theory of the atomless \cap -partial Boolean algebras] **(84c:03063)**

Remmel, Jeffrey B. See Manaster, Alfred B. **(84h:03060)**

Rosenstein, Joseph G. ★ Linear orderings. **(84m:06001)**

Schmitt, Peter H. The elementary theory of torsion-free abelian groups with a predicate specifying a subgroup. **(84h:03053)**

Szmielew, Wanda On n -ary equivalence relations and their application to geometry. **(84i:51002)**

Wolter, Helmut On the "problem of the last root" for exponential terms. (See **84i:03008**)

03C68 Other classical first-order model theory

Cooper, Glen R. On complexity of complete first-order theories. **84c:03047**

Mycielski, Jan An essay about old model theory. **84f:03032**

Poizat, Bruno Deux ou trois choses que je sais de L_{ω_1} . [Two or three things I know about L_{ω_1}] **84b:03055**

Prešić, Marica D. Some results on the extending of models. **84j:08006a**

(with Prešić, Slaviša B.) Some embedding theorems. **84j:03077**

Prešić, Slaviša B. See Prešić, Marica D. **84j:03077**

secondary classifications:

Ash, C. J. Model-theoretic forms of the axiom of choice. **(84m:03068)**

Dankó, Wiktor Interpretability of algorithmic theories. **(84h:68022)**

Kfoury, A. J. Definability by programs in first-order structures. **(84c:68010)**

Markovski, S. On quasivarieties of generalized subalgebras. **(84j:08006b)**

03C70 Logic on admissible sets

Cantini, Andrea Σ -models of subtheories of KPI. (Italian) (See **84i:03006**)

Magidor, Menachem The simplest counterexample to compactness in the constructible universe. **84a:03038**

secondary classifications:

Friedman, Sy D. Natural α -re degrees. **(84a:03050)**

03C75 Other infinitary logic

Bergstra, Jan A. (with Tiuryn, Jerzy) Implicit definability of algebraic structures by means of program properties. **84c:03069**

Caicedo Ferrer, Xavier Independent sets of axioms in L_{ω_1} . **84d:03043**

Erimbetov, M. M. A fragment of a logic with infinite formulas. (Russian) **84m:03059**

Ferro, Ruggero ω -satisfiability, ω -consistency property, and the downward

Löwenheim-Skolem theorem for L_{ω_1} . (Italian summary) **84i:03074**

Karttunen, Maaret Model theoretic results for infinitely deep languages. **84h:03088**

Meißner, Wilfried A Löwenheim-Skolem theorem for inner product spaces. **84j:03078**

Oikkonen, Juha Finite and infinite versions of the operations PC and RPC in infinitary languages. **84h:03089**

Rantala, Veikko Infinitely deep game sentences and interpolation. **84h:03090**

Tiuryn, Jerzy Logic of effective definitions. **84c:03068**

See also Bergstra, Jan A. **84c:03069**

secondary classifications:

Gurevich, R. Löwenheim-Skolem problem for functions. **(84g:08027)**

Kaufmann, Matt Filter logics: filters on ω_1 . **(84d:03044)**

McAloon, Kenneth (with Ressayre, Jean-Pierre) Les méthodes de Kirby-Paris et la théorie des ensembles. [The Kirby-Paris methods and set theory] **(84c:03067)**

Miller, Arnold W. On the Borel classification of the isomorphism class of a countable model. (84c:03055)

Ressayre, Jean-Pierre See McAloon, Kenneth. (84c:03067)

Shelah, Saharon On the number of nonisomorphic models in $L_{\kappa,\omega}$ when κ is weakly compact. (84h:03093)

03C80 Logic with extra quantifiers and operators [See also 03B45.]

Baudisch, Andreas Formulas of $L(aa)$ where aa is not in the scope of " \neg ". (84c:03072)

Call, Richard L. Systems with parity quantifiers. (84c:03070)

Carlson, Lauri Plural quantifiers and informational independence. (84h:03091)

Combès, Joël On the existence of finitely determinate models for some theories in stationary logic. (See 84c:03006)

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Georgescu, George A generalized quantifier for the hereditary σ -rings. (84g:03049)

Guzicki, Wojciech The equivalence of definable quantifiers in second order arithmetic. (84g:03050)

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Kaufmann, Matt Filter logics: filters on ω_1 . (84d:03044)

Molzan, Burkhard On the number of different theories of Boolean algebras in several logics. (84h:03092)

The theory of superatomic Boolean algebras in the logic with the binary Ramsey quantifier. (84d:03045)

Morgenstern, Carl On generalized quantifiers in arithmetic. (84g:03051)

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(with Weese, Martin) $L(aa)$ -elementary types of well-orderings. (84c:03073)

Shelah, Saharon On the number of nonisomorphic models in $L_{\kappa,\omega}$ when κ is weakly compact. (84h:03093)

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Δ -extension and Hanf-numbers. (84j:03080)

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secondary classifications:

Andréka, Hajnal (with Németi, István; Sain, Ildikó) A complete logic for reasoning about programs via nonstandard model theory. I. (84d:68007a)

(with Németi, István; Sain, Ildikó) A complete logic for reasoning about

programs via nonstandard model theory. II. (84d:68007b)

Bergstra, Jan A. (with Tiuryn, Jerzy) Implicit definability of algebraic structures by means of program properties. (84c:03069)

Leib, Hans ★ Implizit definierte Mengensysteme. (German) [Implicitly defined systems of sets] (84f:03029)

Mundici, Daniele Compactness, interpolation and Friedman's third problem. (84a:03040)

Németi, István See Andréka, Hajnal; et al. (84d:68007a) and (84d:68007b)

Nishimura, Hirokazu The semantical characterization of de dicto in continuous modal

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Rothmaler, Philipp Q_0 is eliminable in every complete theory of modules. (84h:03078)

Sain, Ildikó See Andréka, Hajnal; et al. (84d:68007a) and (84d:68007b)

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Gurevich, Yuri (with Magidor, Menachem; Shelah, Saharon) The monadic theory of ω_2 . (84i:03076)

Magidor, Menachem See Gurevich, Yuri; et al. (84i:03076)

Shelah, Saharon See Gurevich, Yuri; et al. (84i:03076)

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Simpson, Stephen G. Σ_1^1 and Π_1^1 transfinite induction. (84h:03078a)

Set theoretic aspects of ATR_β . (84h:03078b)

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Bunge, Marta On the transfer of an abstract nullstellensatz. (84c:03074)

Gordon, E. I. See Lyubetskii, V. A., (84f:03034)

Horiguchi, Hiroshi Limits in the category of Boolean-valued models. (84d:03046a)

Strict Boolean-valued models. (84d:03046b)

Lavendhomme, R. (with Lucas, Thierry Eugène) A note on intuitionistic models of ZF. (84f:03033)

Lai, Jing Bo A note on infinite-lattice-valued model theory. (Chinese. English summary) (84c:03105)

(with Shen, Cheng Min) Saturated models in lattice-valued model theory.

(Chinese. English summary) (84d:03047)

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Lyubetskii, V. A. (with Gordon, E. I.) Imbedding of sheaves in a Heyting-valued universe. (Russian) (84f:03034)

Protasov, I. V. The local method and the compactness theorem for topological algebraic systems. (Russian) (84c:03106)

Shen, Cheng Min See Lai, Jing Bo, (84d:03047)

Wang, Shi Qiang A proof of the compactness theorem in lattice-valued model theory. (Chinese. English summary) (84c:03107)

Lattice-valued atomic models and countable saturated models. (Chinese)

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secondary classifications:

Dahn, Bernd I. Partial isomorphisms and intuitionistic logic. (84m:03012)

Gordon, E. I. K -spaces in Boolean-valued models of the theory of sets. (Russian) (84c:03091)

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Koppelberg, Sabine On Boolean algebras with distinguished subalgebras. (84a:03017a)

On Boolean algebras with distinguished subalgebras. (84a:03017b)

Moerdijk, Ieke See Grayson, Robin J., (84m:03093)

Ono, Hiroakira Model extension theorem and Craig's interpolation theorem for intermediate predicate logics. (84j:03060)

Růžička, Milan Formalized models of ontological systems. (84g:00027)

Shum, A. A. Finite axiomatization of the logic of infinite problems in an extended language. (Russian) (84a:03027)

Takeuti, Gaisi von Neumann algebras and Boolean valued analysis. (84d:46094)

Wang, Shi Qiang (with Weng, Jia Feng) Normal forms in lattice-valued predicate calculi. (Chinese. English summary) (84j:03056)

Weng, Jia Feng See Wang, Shi Qiang, (84j:03056)

03C95 Abstract model theory

Herre, H. Miscellaneous results and problems in extended model theory. (84h:03095)

Jankowski, Andrzej W. An alternative characterization of elementary logic. (Russian summary) (84c:03039)

Krynicky, Michal (with Väänänen, Jouko) On orderings of the family of all logics. (84g:03053)

Mahr, Bernd (with Makowsky, J. A.) An axiomatic approach to semantics of specification languages. (See 84h:68003)

Makowsky, J. A. See Mahr, Bernd, (See 84h:68003)

Mundici, Daniele Compactness, interpolation and Friedman's third problem. (84a:03040)

Interpolation, compactness and JEP in soft model theory. (84c:03075)

Duality between logics and equivalence relations. (84g:03054)

Inverse topological systems and compactness in abstract model theory. (See 84i:03008)

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Meyer, Albert R. (with Parikh, Rohit) Definability in dynamic logic. (84h:68011)

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Väänänen, Jouko Abstract logic and set theory. II. Large cardinals. (84g:03052)

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secondary classifications:

Andréka, Hajnal (with Németi, István) Some universal algebraic and model theoretic results in computer science. (84g:08018)

Gerla, Giangiacomo Model theory and modal logic. (Italian) (See 84c:03006)

Heinrich, Stefan (with Mankiewicz, P.) Applications of ultrapowers to the uniform and Lipschitz classification of Banach spaces. (84h:46026)

Katz, Michael L. Real-valued models with metric equality and uniformly continuous predicates. (84c:03048)

Mankiewicz, P. See Heinrich, Stefan, (84h:46026)

Marković, Zoran On axiomatizability and preservation in Kripke models. (84c:03014)

Mizutani, Chiharu Definability theorem for the intuitionistic predicate logic with equality. (84h:03080)

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Nepeivoda, N. N. Logical and algorithmic formalisms for the problem of correct program design. (84g:68006)

03Dxx Recursion theory

Ershov, A. P. Computability in arbitrary domains and bases. (Russian) (84h:03097)

secondary classifications:

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Cutland, Nigel ★ Вычислимость. (Russian) [Computability] (84f:03001)

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(Maslov, S. Yu.) See Cutland, Nigel, (84f:03001)

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Simon, Imre See Lucchesi, Claudio L.; et al., (84g:68001)

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03D03 Thue and Post systems, etc.

Book, Ronald V. Confluent and other types of Thue systems. 84c:03076

(with Jantzen, Matthias; Wrathall, Celia) Monadic Thue systems. 84d:03048

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Karhumäki, Juhani On cube-free ω -words generated by binary morphisms. 84j:03081

Kur'eros, Yu. N. Equiprobable canonical calculi. (Russian) 84m:03060

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(Choffrut, Christian) See Lothaire, M., (84g:05002)

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Cummings, Larry J. Overlapping substrings and Thue's problem. (84b:68096)

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Lothaire, M. ★Combinatorics on words. (84g:05002)

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(Perrin, Dominique) See Lothaire, M., (84g:05002)

(Pin, Jean-Eric) See Lothaire, M., (84g:05002)

(Pirillo, Giuseppe) See Lothaire, M., (84g:05002)

(Reutenauer, Christophe) See Lothaire, M., (84g:05002)

(Sakarovitch, Jacques) See Lothaire, M., (84g:05002)

(Schützenberger, Marcel-Paul) See Lothaire, M., (84g:05002)

(Simon, Imre) See Lothaire, M., (84g:05002)

03D05 Automata and formal grammars in connection with logical questions [See also 18B20, 68Dxx, 68F10.]

Anisimov, A. V. Church-Rosser transformers and decidable properties of tree processing. 84c:03077

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Maida, A. A reexamination of classical logic in terms of generative grammar. (Italian. English summary) 84i:03080

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Albert, Jürgen A note on the undecidability of contextfreeness. (French summary) (84a:68071)

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Classifications of context-free languages by complexity of derivation. (Russian) (84j:68048)

Ehrenfeucht, Andrzej (with Karhumäki, Juhani; Rozenberg, Grzegorz) The (generalized) Post correspondence problem with lists consisting of two words is decidable. (84c:68035)

Fang, Zhi Xi The closure property of certain classes of languages under bi-language forms. (Chinese. English summary) (84c:68096)

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Gurari, Eitan M. (with Ibarra, Oscar H.) Two-way counter machines and Diophantine equations. (See 84a:68004)

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Hodgson, Bernard R. Décidabilité par automate fini. [Decidability by finite automata] (84m:03016)

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Ibarra, Oscar H. (with Rosier, Louis E.) On the decidability of equivalence for deterministic pushdown transducers. (84j:68052)

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Ito, Takayasu (with Nishitani, Y.) On universality of concurrent expressions with synchronization primitives. (84a:68081)

Jantzen, Matthias (with Kudlek, Manfred) Homomorphic images of sentential form languages defined by semi-Thue systems. (84b:68098)

Karhumäki, Juhani (with Linna, Matti) A note on morphic characterization of languages. (84b:68099)

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Karpinski, Marek Decidability of "Skolem matrix emptiness problem" entails constructibility of exact regular expression. (84c:03039)

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Locker, Alfred Meta-theoretische Voraussetzungen der formalen und empirischen Linguistik. [Meta-theoretic prerequisites of formal and empirical linguistics] (84d:03035)

Meinel, Christoph About the by codings of environments induced posets $[I]_{\leq, \leq}$ and $[I]_{\leq, \leq}$. (84b:68035)

Meinhardt, Dietrich (with Wagner, Klaus Werner) Eine Bemerkung zu einer Arbeit von Monien über Kopfhierarchien für Zweiweg-Automaten. (English and Russian summaries) [A remark on Monien's work on hierarchies with respect to the number of heads for two-way automata] (84c:68050)

Moriya, Tetsuo Pebble machines and tree walking machines. (84b:68064)

Nakamura, Akira (with Ono, Hiroakira) Pictures of functions and their acceptability by automata. (84c:68081)

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Nasyrov, I. R. Representability of languages in deterministic and nondeterministic automata with a countable number of states. (Russian) (84d:68092)

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Senizergues, Gérard The equivalence problem for N.T.S. languages is decidable. (See 84b:68003)

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Stearns, Richard E. (with Hunt, Harry B., III) On the equivalence and containment problems for unambiguous regular expressions, grammars, and automata. (See 84a:68004)

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Thomas, Wolfgang A combinatorial approach to the theory of ω -automata. (84d:68054)

A hierarchy of sets of infinite trees. (See 84b:68003)

Trofimov, V. I. Growth functions of some classes of languages. (84d:68088)

Turakainen, Paavo Rational stochastic automata in formal language theory. (84j:68053)

A homomorphic characterization of principal semiAFLs without using intersection with regular sets. (84b:68104)

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Welsh, D. J. A. Randomised algorithms. (84c:68046)

Wrathall, Celia See Book, Ronald V., (See 84b:94002)

Zhu, Shang Yong Error-correcting fuzzy tree grammar. I. (Chinese. English summary) (84m:68074)

03D10 Turing machines and related notions [See also 68C40.]

Brady, Allen H. The determination of the value of Rado's noncomputable function $\Sigma(k)$ for four-state Turing machines. 84d:03049

Lewis, F. D. Stateless Turing machines and fixed points. 84a:03042

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Über die Identitäten der Turing-Algebra. II. (English and Russian summaries) [On the identities of the Turing algebra. II] 84k:03108b

Šebek, Jan Horn clause programs and recursive functions defined by systems of equations. 84c:03078

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Bowie, G. Lee Lucas' number is finally up. (84c:03006)

Brandstädt, Andreas (with Vogel, Jörg) Kompliziertheitsbeschränkte

Checking-Stack-Bänder und Raum-Zeit-Probleme. (English and Russian summaries) [Complexity-restricted checking stack tapes and space-time problems] (84f:68032)

Ehrenfeucht, Andrzej (with Rozenberg, Grzegorz; Ruohonen, Keijo) A morphic representation of complements of recursively enumerable sets. (84g:68034)

(Embarck, Djitali) See Yablonskii, S. V., (84k:94001)

Fang, Zhi Xi The closure property of certain classes of languages under bi-language forms. (Chinese. English summary) (84c:68096)

- Guy, Richard K. Conway's prime producing machine. (84j:10008)
- Ibarra, Oscar H. (with Moran, Shlomo) Some time-space tradeoff results concerning single-tape and offline TMs. (84f:68039)
- Karp, Richard M. (with Lipton, Richard J.) Turing machines that take advice. (84c:68036b)
- (with Lipton, Richard J.) Turing machines that take advice. (84c:68036a)
- Krylov, S. M. Models of universal discrete-analog computers on the basis of Turing machines. (Russian. English summary) (84a:68044)
- Lewis, Harry R. (with Papadimitriou, Christos H.) Symmetric space-bounded computation. (84c:68034)
- Lipton, Richard J. See Karp, Richard M., (84c:68036a) and (84c:68036b)
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- Monien, Burkhard (with Sudborough, Ivan Hal) On eliminating nondeterminism from Turing machines which use less than logarithm worktape space. (84c:68029)
- Moran, Shlomo See Ibarra, Oscar H., (84f:68039)
- Mundici, Daniele Natural limitations of algorithmic procedures in logic. (Italian summary) (84c:03007)
- Papadimitriou, Christos H. See Lewis, Harry R., (84c:68034)
- Paul, Wolfgang J. On heads versus tapes. (See 84a:68004)
- Podnieks, K. M. Prediction of the next value of a function. (Russian) (84d:68051)
- Röding, Walburga Different approaches to the aggregation of preferences. (84i:90011)
- Rogozhin, Yu. V. Seven universal Turing machines. (Russian) (84c:68078)
- Rozenberg, Grzegorz See Ehrenfeucht, Andrzej; et al., (84g:68034)
- Ruohonen, Keijo See Ehrenfeucht, Andrzej; et al., (84g:68034)
- Sudborough, Ivan Hal See Monien, Burkhard, (84c:68029)
- Vogel, Jörg See Brandstädt, Andreas, (84f:68032)
- Yablonskii, S. V. ★Introduction aux mathématiques discrètes. (French) [Introduction to discrete mathematics] (84c:94001)
- Żakowski, Wojciech On some mathematical models of computing machines. (Polish) (84m:68044)

03D15 Complexity of computation

- Banjević, Dragan On some basic properties of the Kolmogorov complexity. 84d:03050
- Barashko, A. S. Exact lower bounds for indicators of the enumeration of sets. (Russian) 84j:03082
- Book, Ronald V. (with Long, Timothy J.; Selman, Alan L.) Controlled relativizations of P and NP (abstract). (See 84b:68003)
- See also Xu, Mei Rui; et al., 84j:03083
- Burgin, M. S. Set computations and the Kolmogorov complexity for such processes. (Russian) 84c:03109
- Diaz, Josep (with Vergés, M.) A conjecture in complexity theory. (Catalan) (See 84i:03003)
- Doner, John E. See Xu, Mei Rui; et al., 84j:03083
- Hartmanis, J. A note on natural complete sets and Gödel numberings. 84h:03098
- Hodgson, Bernard R. See Kent, Clement F., 84c:03110
- Huwig, H. Ein Modell des P=NP-Problems mit einer positiven Lösung. (English summary) [A model of the P=NP-problem with a positive solution] 84f:03037
- Kanovich, M. I. Complexity of a fixed point and of a shift algorithm. (Russian) 84a:03043
- On the complexity of the problem of separation of recursively enumerable sets. (Russian) 84f:03038
- Kent, Clement F. (with Hodgson, Bernard R.) An arithmetical characterization of NP. 84c:03110
- Landweber, L. H. (with Lipton, Richard J.; Robertson, E. L.) On the structure of sets in NP and other complexity classes. (See 84b:94003)
- Lewis, Harry R. Satisfiability problems for propositional calculi. (See 84b:94002)
- Lipton, Richard J. See Landweber, L. H.; et al., (See 84b:94003)
- Lolli, Gabriel Complexity of theories. (Italian) (See 84c:03006)
- Long, Timothy J. See Book, Ronald V.; et al., (See 84b:68003)
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- Stern, Jacques Quelques aspects du problème P=NP. [Some aspects of the P=NP problem] (See 84i:68009)
- Stillwell, John C. Efficient computation in groups and simplicial complexes. 84h:03099
- Vergés, M. See Diaz, Josep, (See 84i:03003)
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- Adachi, A. (with Kasai, Takumi) A problem which requires $O(n^4)$ time. (84a:68031)
- Apolloni, B. (with Di Gregorio, S.) A probabilistic analysis of a new satisfiability algorithm. (French summary) (84a:68032)
- Austin, A. Keith An elementary approach to NP-completeness. (84m:68031)
- Avenhaus, J. (with Madlener, K.) An algorithm for the word problem in HNN extensions and the dependence of its complexity on the group representation. (French summary) (84g:20061)
- Balcasar, J. L. (with Diaz, Josep) A note on a theorem by Ladner. (84d:68035)
- Baur, Walter (with Rabin, Michael O.) Linear disjointness and algebraic complexity. (84a:68035a)
- (with Rabin, Michael O.) Linear disjointness and algebraic complexity. (84a:68035b)
- Book, Ronald V. (with Wrathall, Celia) A note on complete sets and transitive closure. (84i:68061)
- Confluent and other types of Thue systems. (84c:03076)
- (with Wilson, Christopher B.; Xu, Mei Rui) Relativizing time, space, and time-space. (84c:68028)
- When is a monoid a group? The Church-Rosser case is tractable. (84b:20067)
- Borodin, Allan B. Structured vs. general models in computational complexity. (84d:68036a)
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- Brady, Allen H. The determination of the value of Rado's noncomputable function $\Sigma(k)$ for four-state Turing machines. (84d:03049)
- Brandstädt, Andreas (with Vogel, Jörg) Kompliziertheitsbeschränkte Checking-Stack-Bänder und Raum-Zeit-Probleme. (English and Russian summaries) [Complexity-restricted checking stack tapes and space-time problems] (84f:68032)
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- Di Gregorio, S. See Apolloni, B., (84a:68032)
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- Goetze, Bernhard (with Nehrlich, Werner) The number of loops necessary and sufficient for computing simple functions. (German and Russian summaries) (84c:03048)
- Goldberg, Allen (with Purdom, Paul; Brown, Cynthia) Average time analyses of simplified Davis-Putnam procedures. (84d:68038a)
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- Gordon, Dan (with Shamir, Eliahu) Computation of recursive functionals using minimal initial segments. (84h:03106)
- Greenberg, Albert C. (with Ladner, Richard E.; Paterson, Michael S.; Galil, Zvi) Efficient parallel algorithms for linear recurrence computation. (84i:68045)
- Hay, Louise On the recursion-theoretic complexity of relative succinctness of representations of languages. (84m:03061)
- Hunt, Harry B., III See Stearns, Richard E., (See 84a:68004)
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- Lewis, F. D. Stateless Turing machines and fixed points. (84a:03042)
- Lewis, Harry R. (with Papadimitriou, Christos H.) Symmetric space-bounded computation. (84b:68034)
- Lieberherr, Karl J. (with Vavasis, Stephen A.) Analysis of polynomial approximation algorithms for constraint expressions. (See 84b:68003)
- Lifschitz, Vladimir (with Pittel, B. G.) The worst and the most probable performance of a class of set-covering algorithms. (84c:90070)
- Lipton, Richard J. See Landweber, L. H.; et al., (84g:68028)
- Lynch, James F. Complexity classes and theories of finite models. (84c:03042)
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- Maffioli, Francesco See Camerini, P. M.; et al., (See 84b:94003)
- Mahaney, Stephen R. On the number of P-isomorphism classes of NP-complete sets. (See 84a:68004)
- Sparse complete sets for NP: solution of a conjecture of Berman and Hartmanis. (84d:68042)
- Maurer, Hermann A. (with Sudborough, J. H.; Welzl, E.) On the complexity of the general coloring problem. (84i:68073)
- Mayr, Ernst W. (with Meyer, Albert R.) The complexity of the word problems for commutative semigroups and polynomial ideals. (84g:20099)
- Meyer, Albert R. See Mayr, Ernst W., (84g:20099)
- Monien, Burkhard (with Sudborough, Ivan Hal) On eliminating nondeterminism from Turing machines which use less than logarithm worktape space. (84c:68029)

- Mundici, Daniele** Natural limitations of algorithmic procedures in logic. (Italian summary) (84c:03007)
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- Nehrich, Werner** See Goetze, Bernhard. (84c:03048)
- Papadimitriou, Christos H.** (with Zachos, Stathis K.) Two remarks on the power of counting. (See 84b:68003)
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- Paris, Jeff B.** (with Dimitracopoulos, Constantine) Truth definitions for Δ_0 formulae. (84d:03041)
- Paterson, Michael S.** See Greenberg, Albert C.; et al. (84i:68045)
- Paull, Marvin** See Franco, John. (84c:68038)
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- Rystsov, I. K.** Polynomial complete problems in automata theory. (84g:68031)
- Sapozhenko, A. A.** (with Karakhanyan, L. M.) Negative effects associated with elimination of inessential variables. (84c:94026)
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- Saxe, James B.** Embeddability of weighted graphs in k -space is strongly NP-hard (extended summary). (See 84b:94003)
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- Skym, Sven** (with Valiant, L. G.) A complexity theory based on Boolean algebra. (See 84c:68004)
- Stearns, Richard E.** (with Hunt, Harry B., III) On the equivalence and containment problems for unambiguous regular expressions, grammars, and automata. (See 84c:68004)
- Stockmeyer, Larry J.** Difficult computational problems. (84f:68038)
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- Sudborough, Ivan Hal** See Monien, Burkhard. (84c:68029)
- Sudborough, J. H.** See Maurer, Hermann A.; et al. (84i:68073)
- Swamy, Sowmitri** (with Savage, John E.) Space-time tradeoffs for linear recursion. (84b:68051)
- Valiant, L. G.** See Skym, Sven. (See 84c:68004)
- Vavasis, Stephen A.** See Lieberherr, Karl J. (See 84b:68003)
- Vazirani, Vijay V.** See Stockmeyer, Larry J. (84b:68049)
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- Welzl, E.** See Maurer, Hermann A.; et al. (84i:68073)
- Wilson, Christopher B.** See Book, Ronald V.; et al. (84c:68028)
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- Chen, Keh Jiann** Tradeoffs in the inductive inference of nearly minimal size programs. 84g:03057
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- Goetze, Bernhard** (with Nehrich, Werner) The number of loops necessary and sufficient for computing simple functions. (German and Russian summaries) 84c:03048
- Jantke, Klaus-P.** (with Beick, Hans-Rainer) Combining postulates of naturalness in inductive inference. (German and Russian summaries) 84c:03049
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- Maier, W.** (with Menzel, W.; Sperschneider, V.) Embedding properties of total recursive functions. 84c:03079
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- Nehrich, Werner** See Goetze, Bernhard. 84c:03048
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- Savel'ev, A. A.** A family of subsystems of algebras for preserving an ideal. (Russian) 84c:03111
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- Shen, Bai Ying** Studies on pairing functions. (Chinese) 84m:03063
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- Solov'ev, V. D.** The structure of closed classes of computable functions and predicates. (Russian) 84f:03040
- Sperschneider, V.** See Maier, W.; et al. 84c:03079
- Statman, Richard** Number theoretic functions computable by polymorphic programs (extended abstract). (See 84c:68004)
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secondary classifications:

- Avenhaus, J.** (with Madlener, K.) An algorithm for the word problem in HNN extensions and the dependence of its complexity on the group representation. (French summary) (84g:20061)
- Bärzdips, J.** Some rules of inductive inference and their application. (Russian) (84g:68010)
- Cichon, E. A.** A short proof of two recently discovered independence results using recursion theoretic methods. (84f:03049)
- Davis, Martin** Why Gödel didn't have Church's thesis. (84j:03001)
- Erdős, Paul** (with Mills, George) Some bounds for the Ramsey-Paris-Harrington numbers. (84c:03099)
- Horowitz, Bruce M.** Elementary formal systems as a framework for relative recursion theory. (84g:03059)
- Jones, James P.** (with Matiyasevich, Yu. V.) A new representation for the symmetric binomial coefficient and its applications. (French summary) (84g:03060a)
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- Ketonen, Jussi** (with Solovay, Robert) Rapidly growing Ramsey functions. (84c:03100)
- Madlener, K.** See Avenhaus, J. (84g:20061)
- Matiyasevich, Yu. V.** See Jones, James P. (84g:03060a) and (84g:03060b)
- Menzel, W.** (with Sperschneider, V.) Universal automata with uniform bounds on simulation time. (84b:68040)
- Mills, George** See Erdős, Paul. (84c:03099)
- Podnieks, K. M.** Prediction of the next value of a function. (Russian) (84d:68051)
- Sebelik, Jan** Horn clause programs and recursive functions defined by systems of equations. (84c:03078)
- Solovay, Robert** See Ketonen, Jussi. (84c:03100)
- Sperschneider, V.** See Menzel, W. (84b:68040)
- Stahl, Gérolde** Character and acceptability of Church's thesis. (84d:03013)

03D25 Recursively enumerable sets and degrees

- Byerly, Robert E.** Definability of r.e. sets in a class of recursion theoretic structures. 84j:02085
- Fejer, Peter A.** Branching degrees above low degrees. 84a:03044
- Herrmann, Eberhard** ★Die Verbandseigenschaften der rekursiv aufzählbaren Mengen. (German) [The lattice properties of the recursively enumerable sets] 84b:03057
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- Horowitz, Bruce M.** Elementary formal systems as a framework for relative recursion theory. 84g:03059
- Jockusch, Carl G., Jr.** (with Shore, Richard A.) Pseudajump operators. I. The r.e. case. 84c:03081
- Jones, James P.** (with Matiyasevich, Yu. V.) A new representation for the symmetric binomial coefficient and its applications. (French summary) 84g:03060a
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- Kanovich, M. I.** Implicativity of the lattice of truth-table degrees of algorithmic problems. (Russian) 84m:03064
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- Li, Xiang** The effective immune sets and the program index sets—a generalization and application of the recursion theorem. (Chinese. English summary) 84i:03082
- Maass, Wolfgang** (with Shore, Richard A.; Stob, Michael) Splitting properties and jump classes. 84i:03083
- Recursively enumerable generic sets. 84c:03051
- Mahaney, Stephen R.** On the number of P-isomorphism classes of NP-complete sets. (See 84c:68004)
- Matiyasevich, Yu. V.** See Jones, James P. 84g:03060a and 84g:03060b
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- Selivanov, V. L.** Effective analogues of A-, B- and C- sets and their application to index sets. (Russian) (See 84i:00006)
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- Stefani, Stefano Recursive functions with measurable oracles: the semilattice of the effectively splitting distributions. (Italian summary) **84m:03065**
 Stob, Michael See Maass, Wolfgang; et al. **84i:03083**
 Thuring, M. B. Representation of one-one degrees by decision problems for system functions. **84a:03045**

secondary classifications:

- Barashko, A. S. Exact lower bounds for indicators of the enumeration of sets. (Russian) **(84j:03082)**
 Cooper, S. B. Partial degrees and the density problem. **(84b:03058)**
 Jones, James P. Universal Diophantine equation. **(84e:10070)**
 Kalantari, Iraj (with Leggett, Anne) Maximality in effective topology. **(84k:03112)**
 Kalorkoti, K. A. Decision problems in group theory. **(84f:20036)**
 Kanovich, M. I. On the complexity of the problem of separation of recursively enumerable sets. (Russian) **(84f:03038)**
 Leggett, Anne See Kalantari, Iraj. **(84k:03112)**
 Nogina, E. Yu. The relation between separability and traceability of sets. (Russian) **(84e:03054)**
 Rosenberg, Richard Recursively enumerable images of arithmetic sets. **(84e:03074)**
 Sorbi, Andrea Positive numerations, recursively enumerable classes and formulas. (Italian. English summary) **(84c:03085)**
 Vučković, Vladeta Relativized cylindricity. **(84c:03080)**

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- Cooper, S. B. Partial degrees and the density problem. **84b:03058**
 Degtev, A. N. Small degrees in ordinary recursion theory. **84d:03055**
 Dekhtyar', M. I. Structure of T-reducibilities with bounded complexity. (Russian) **84h:03102**
 Dymet, E. Z. Existence of a degree of extendability of a partial recursive function that is not a degree of separability. (Russian) **84j:03089**
 Odifreddi, Piergiorgio On the first order theory of the arithmetical degrees. **84d:03056**
 Posner, David B. The upper semilattice of degrees $\leq \theta'$ is complemented. **84i:03084**
 Shore, Richard A. The Turing and truth-table degrees are not elementarily equivalent. **84c:03082**
 On homogeneity and definability in the first-order theory of the Turing degrees. **84a:03046**
 Steel, John R. A classification of jump operators. **84i:03085**

secondary classifications:

- Fejer, Peter A. Branching degrees above low degrees. **(84a:03044)**
 Hay, Louise (with Miller, Douglas E.) The Addition game played backwards: index sets in topology. **(84d:03060)**
 Hodes, Harold T. Upper bounds on locally countable admissible initial segments of a Turing degree hierarchy. **(84a:03049)**
 Jockusch, Carl G., Jr. (with Shore, Richard A.) Pseudajump operators. I. The r.e. case. **(84c:03081)**
 Kanovich, M. I. Implicativity of the lattice of truth-table degrees of algorithmic problems. (Russian) **(84m:03064)**
 Mahaney, Stephen R. Sparse complete sets for NP: solution of a conjecture of Berman and Hartmanis. **(84d:68042)**
 Miller, Douglas E. See Hay, Louise. **(84d:03060)**
 Misereque, Didier Probleme des mariages et récursivité. [The marriage problem and recursiveness] **(84h:03108)**
 Shore, Richard A. Finitely generated codings and the degrees r.e. in a degree d. **(84g:03061)**

See also Jockusch, Carl G., Jr. **(84c:03081)**

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- Daniko, Wiktor A criterion of undecidability of algorithmic theories. **84j:03090**
 Ebbinghaus, H.-D. Undecidability of some domino connectivity problems. **84c:03083**
 Ershov, Yu. L. Undecidability of regularly closed fields. (Russian) **84c:03052**
 Gurevich, Yuri Existential interpretation. II. **84b:03059**
 Decision problem for separated distributive lattices. **84f:03041**
 Jensen, Christian U. L'indécidabilité d'une classe de corps des fonctions méromorphes. [Undecidability of a class of fields of meromorphic functions] **84g:03062**
 Matiyasevich, Yu. V. What should we do having proved a decision problem to be unsolvable? **84j:03091**
 Morozov, A. S. Decidability of theories of Boolean algebras with a distinguished ideal. (Russian) **84i:03086**
 Noskov, G. A. The elementary theory of a finitely generated commutative ring. (Russian) **84g:03063**
 Popov, S. V. An undecidable intermediate calculus. (Russian) **84h:03103**
 Richard, Denis La théorie sans égalité du successeur et de la coprimarité des entiers naturels est indécidable. Le prédicat de primarité est définissable dans le langage de cette théorie. (English summary) [The theory without identity of the successor function and the coprimeness predicate of natural numbers is undecidable. The predicate of being a prime is definable in the language of this theory] **84c:03084**
 Tulipani, Sauro A use of the method of interpretations for decidability or undecidability of measure spaces. **84i:03087**
 Vardi, Moshe V. The decision problem for database dependencies. **84a:03047**

secondary classifications:

- Albert, Jürgen (with Culik, Karel, II) Tree correspondence problems. **(84d:68049)**
 A note on the undecidability of contextfreeness. (French summary) **(84a:68071)**

- Albin, Peter S. The metalogic of economic predictions, calculation and propositions. **(84c:90003)**
 Call, Richard L. Systems with parity quantifiers. **(84c:03070)**
 Culik, Karel, II See Albert, Jürgen. **(84d:68049)**
 Fridman, G. Sh. Effective unsolvability of a discrete extremal problem. (Russian) **(84f:90102)**
 Hauschild, Kurt Model-theoretic properties of cause-and-effect structures. **(84c:03023)**
 Herrmann, Christian On the word problem for the modular lattice with four free generators. **(84m:06014)**
 Herrmann, Eberhard Definable Boolean pairs in the lattice of recursively enumerable sets. (See **84i:03006**)
 Huber-Dyson, Verena Symmetric groups and the open sentence problem. **(84j:20032)**
 Decision problems in group theory. **(84d:20032)**
 Hunt, Harry B., III See Stearns, Richard E. (See **84a:68004**)
 Jones, James P. Some undecidable determined games. **(84b:90107)**
 Kukin, G. P. The word problem and free products of Lie algebras and associative algebras. (Russian) **(84m:17012)**
 Megibben, Charles Crawley's problem on the unique ω -elongation of p -groups is undecidable. **(84m:20058)**
 Ödünlaing, Cölm Undecidable questions related to Church-Rosser Thue systems. **(84m:68024)**
 Ratsa, M. F. Unsolvability of the problem of functional expressibility in the modal logic S4. (Russian) **(84g:03025)**
 Rödding, Walburga Different approaches to the aggregation of preferences. **(84i:90011)**
 Rozenblat, B. V. See Vazhenin, Yu. M. **(84j:03028)**
 Schmerl, James H. Decidability and N_0 -categoricity of theories of partially ordered sets. **(84g:03037)**
 Seese, Detlef (with Tuschik, Hans-Peter; Weese, Martin) Undecidable theories in stationary logic. **(84c:03071)**
 Stearns, Richard E. (with Hunt, Harry B., III) On the equivalence and containment problems for unambiguous regular expressions, grammars, and automata. (See **84a:68004**)
 Street, Robert S. Global process logic is undecidable. **(84c:03042)**
 Tuschik, Hans-Peter See Seese, Detlef; et al. **(84c:03071)**
 Vardi, Moshe Y. Global decision problems for relational databases. (See **84a:68004**)
 Vazhenin, Yu. M. (with Rozenblat, B. V.) Positive theories of free algebraic systems. (Russian) **(84j:03028)**
 Weese, Martin See Seese, Detlef; et al. **(84c:03071)**

03D40 Word problems, etc. [See also 06B25, 08A50, 20F10.]

secondary classifications:

- Albert, Jürgen (with Culik, Karel, II) Tree correspondence problems. **(84d:68049)**
 Avenhaus, J. (with Madlener, K.) An algorithm for the word problem in HNN extensions and the dependence of its complexity on the group representation. (French summary) **(84g:20061)**
 (Berstel, Jean) See Lothaire, M. **(84g:05002)**
 Bezverkhnii, V. N. Solvability of the inclusion problem in a class of HNN-groups. (Russian) **(84h:20020)**
 Bezverkhnii, I. S. Conjugacy of finite sets of subgroups in a free product of groups. (Russian) **(84c:20032)**
 Book, Ronald V. Confluent and other types of Thue systems. **(84c:03076)**
 (Choffrut, Christian) See Lothaire, M. **(84g:05002)**
 (Cori, Robert) See Lothaire, M. **(84g:05002)**
 Culik, Karel, II See Albert, Jürgen. **(84d:68049)**
 (Foata, Dominique) See Lothaire, M. **(84g:05002)**
 Gupta, Chander Kanta On the conjugacy problem for F/R' . **(84c:20044)**
 Herrmann, Christian On the word problem for the modular lattice with four free generators. **(84m:06014)**
 Huber-Dyson, Verena Finiteness conditions and the word problem. **(84i:20032)**
 Decision problems in group theory. **(84d:20032)**
 Kalorkoti, K. A. Decision problems in group theory. **(84f:20036)**
 Kleiman, Yu. G. On identities in groups. (Russian) **(84e:20040)**
 Kopytov, V. M. Nilpotent lattice-ordered groups. (Russian) **(84b:06016)**
 Kukin, G. P. The word problem and free products of Lie algebras and associative algebras. (Russian) **(84m:17012)**
 Lothaire, M. ★ Combinatorics on words. **(84g:05002)**
 (Lyndon, Roger C.) See Lothaire, M. **(84g:05002)**
 Madlener, K. See Avenhaus, J. **(84g:20061)**
 Mann, Avinoam A note on recursively presented and co-recursively presented groups. **(84d:20033)**
 Mayr, Ernst W. (with Meyer, Albert R.) The complexity of the word problems for commutative semigroups and polynomial ideals. **(84g:20099)**
 Meyer, Albert R. See Mayr, Ernst W. **(84g:20099)**
 Ozgibov, Yu. I. Equations with two unknowns in a free group. (Russian) **(84j:20033)**
 (Perrin, Dominique) See Lothaire, M. **(84g:05002)**
 (Pin, Jean-Eric) See Lothaire, M. **(84g:05002)**
 (Pirillo, Giuseppe) See Lothaire, M. **(84g:05002)**
 (Reutenauer, Christophe) See Lothaire, M. **(84g:05002)**
 (Sakarovitch, Jacques) See Lothaire, M. **(84g:05002)**
 (Schützenberger, Marcel-Paul) See Lothaire, M. **(84g:05002)**
 Shatrova, N. P. Upper bound of the degree of complexity of an algorithm for solving the conjugacy problem for a class of groups. (Russian) **(84b:20039)**
 Silberger, Donald Morison Are primitive words universal for infinite symmetric groups? **(84c:20011)**
 (Simon, Imre) See Lothaire, M. **(84g:05002)**
 Stillwell, John C. Efficient computation in groups and simplicial complexes. **(84h:03099)**

03D45 Theory of numerations, effectively presented structures [See also 03C57.]

- Kalantari, Iraj Major subsets in effective topology. **84g:03064**
(with Leggett, Anne) Maximality in effective topology. **84h:03112**
Kierstead, Henry A. An effective version of Hall's theorem. **84g:03065**
Leggett, Anne See Kalantari, Iraj. **84h:03112**
Lerman, Manuel (with Rosenstein, Joseph G.) Recursive linear orderings. **84j:03092**
Madison, E. W. A hierarchy of regular open sets of the Cantor space. **84d:03057**
The existence of countable totally nonconstructive extensions of the countable atomless Boolean algebra. **84g:03066**
Mal'tsev, An. A. Upper semilattices of numerations. (Russian) **84c:03053**
Manaster, Alfred B. (with Remmel, Jeffrey B.) Some recursion theoretic aspects of dense two-dimensional partial orderings. **84h:03060**
Moses, Michael Recursive properties of isomorphism types. **84g:03067**
Nogina, E. Yu. The relation between separability and traceability of sets. (Russian) **84c:03054**
Remmel, Jeffrey B. See Manaster, Alfred B. **84h:03060**
Rosenstein, Joseph G. See Lerman, Manuel. **84j:03092**
Skandalis, Kostas Programmability in the set of real numbers and second-order recursion. **84k:03113**
Sorbi, Andrea Positive numerations, recursively enumerable classes and formulas. (Italian. English summary) **84c:03085**
Zakharov, S. D. The algebra of enumeration operators. (Russian. English summary) **84g:03068**

secondary classifications:

- Beick, Hans-Rainer Zur Konvergenzgeschwindigkeit von Strategien der induktiven Inferenz. (English and Russian summaries) [On the speed of convergence in strategies of inductive inference] **(84h:03107)**
Bergstra, Jan A. (with Klop, J. W.) ★ Initial algebra specifications for parametrized data types. **(84j:68011)**
Dekker, J. C. E. Twilight graphs. **(84h:03105)**
Dichev, Angel V. Computability in the sense of Moschovakis and its connection with partial recursiveness via numerations. (Russian) **(84c:03055)**
Eisenberg, Edward F. (with Remmel, Jeffrey B.) Effective isomorphisms of algebraic structures. **(84m:03052)**
Ellentuck, Erik Galois theorems for isolated fields. **(84a:03048)**
Gerla, Giangiacomo Sharpness relation and decidable fuzzy sets. **(84g:03091)**
Kierstead, Henry A. Recursive colorings of highly recursive graphs. **(84h:05045)**
(with Trotter, William T., Jr.) An extremal problem in recursive combinatorics. **(84d:06003)**
Klop, J. W. See Bergstra, Jan A. **(84j:68011)**
Lerman, Manuel (with Remmel, Jeffrey B.) The universal splitting property. I. **(84d:03054)**
Maier, W. (with Menzel, W.; Sperschneider, V.) Embedding properties of total recursive functions. **(84c:03079)**
Menzel, W. See Maier, W.; et al. **(84c:03079)**
Montagna, Franco Relatively precomplete numerations and arithmetic. **(84f:03052)**
Mulry, Philip S. Generalized Banach-Mazur functionals in the topos of recursive sets. **(84c:03079)**
Remmel, Jeffrey B. See Lerman, Manuel. **(84d:03054)** and Eisenberg, Edward F. **(84m:03052)**
Schmerl, James H. The effective version of Brooks' theorem. **(84j:05058)**
Sperschneider, V. See Maier, W.; et al. **(84c:03079)**
Trotter, William T., Jr. See Kierstead, Henry A. **(84d:06003)**

03D50 Recursive equivalence types of sets and structures, isols

- Applebaum, C. H. An introduction to ω -extensions of ω -groups. **84h:03104**
Barback, Joseph On tame regressive isols. **84h:03061**
Dekker, J. C. E. Twilight graphs. **84h:03105**
Recursive equivalence types and octahedra. **84h:03062**
Ellentuck, Erik Galois theorems for isolated fields. **84a:03048**
Incompatible extensions of combinatorial functions. **84j:03093**
Silverstein, Anna A generalization of combinatorial operators. **84d:03058**

03D55 Hierarchies

- Hodes, Harold T. Upper bounds on locally countable admissible initial segments of a Turing degree hierarchy. **84a:03049**
Weikamp, Galen Iterating the superjump along definable prewellorderings. **84g:03069**

secondary classifications:

- Book, Ronald V. See Xu, Mei Rui; et al. **(84j:03083)**
Caporaso, Salvatore (with Pani, Giovanni) Undecidability vs. transfinite induction for the consistency of hyperarithmetical sets. **(84j:03109)**
Clote, Peter Weak partition relation, finite games, and independence results in Peano arithmetic. **(84h:03144)**
Doner, John E. See Xu, Mei Rui; et al. **(84j:03083)**
Furst, Merrick (with Saxe, James B.; Sipser, Michael) Parity, circuits, and the polynomial-time hierarchy. (See **84a:68004**)
Pani, Giovanni See Caporaso, Salvatore. **(84j:03109)**
Saxe, James B. See Furst, Merrick; et al. (See **84a:68004**)
Sipser, Michael See Furst, Merrick; et al. (See **84a:68004**)
Steel, John R. Closure properties of pointclasses. **(84h:03066)**
Thomas, Wolfgang A hierarchy of sets of infinite trees. (See **84h:68003**)
Xu, Mei Rui (with Doner, John E.; Book, Ronald V.) Refining nondeterminism in relativizations of complexity classes. **(84j:03083)**

03D60 Recursion theory on ordinals, admissible sets, etc.

- Chong, Chi Tat Degree theory: from ω to singular cardinals. **84d:03059**
(with Friedman, Sy D.) Degree theory on N_α . **84k:03114**
Friedman, Sy D. Natural α -re degrees. **84a:03050**
The Turing degrees and the metadegrees have isomorphic cones. **84g:03070**
See also Chong, Chi Tat. **84k:03114**
Homer, Steven Intermediate β -r.e. degrees and the half-jump. **84m:03066**
(with Sacks, G. E.) Inverting the half-jump. **84k:03115**
Sacks, G. E. See Homer, Steven. **84k:03115**

secondary classifications:

- Fitting, Melvin ★ Fundamentals of generalized recursion theory. **(84c:03086)**
Girard, Jean-Yves A survey of Π_1^1 -logic. **(84c:03073)**
Simpson, Stephen G. Four test problems in generalized recursion theory. **(84m:03067)**

03D65 Higher-type and set recursion theory

- Gordon, Dan (with Shamir, Eliahu) Computation of recursive functionals using minimal initial segments. **84h:03106**
Hartley, John P. The countably based functionals. **84k:03116**
Kierstead, David P. Syntax and semantics in higher-type recursion theory. **84k:03117**
Kleene, Stephen C. Recursive functionals and quantifiers of finite types revisited. III. **84g:03071**
Longo, Giuseppe Recursiveness and continuity: an introduction. (Italian) (See **84k:03006**)
Moschovakis, Yiannis N. On the Grilliot-Harrington-MacQueen theorem. **84h:03063**
Normann, Dag Degrees of functionals. **84g:03072**
Shamir, Eliahu See Gordon, Dan. **84h:03106**

secondary classifications:

- Dezani-Ciancaglini, Mariangiola (with Ermine, Françoise) Maximal monoids of normal form. **(84h:03028)**
Ermine, Françoise See Dezani-Ciancaglini, Mariangiola. **(84h:03028)**
Indermark, K. Complexity of infinite trees. **(84m:68037)**
Kleene, Stephen C. Algorithms in various contexts. **(84d:03051)**
Mulry, Philip S. Generalized Banach-Mazur functionals in the topos of recursive sets. **(84c:03079)**
Statman, Richard Completeness, invariance and λ -definability. **(84c:03020)**

03D70 Inductive definability

- Beick, Hans-Rainer Zur Konvergenzgeschwindigkeit von Strategien der induktiven Inferenz. (English and Russian summaries) [On the speed of convergence in strategies of inductive inference] **84h:03107**
Kranakis, Evangelos Invisible ordinals and inductive definitions. **84h:03064**

secondary classifications:

- Feferman, Solomon Iterated inductive fixed-point theories: application to Hancock's conjecture. **(84f:03050)**
Girard, Jean-Yves Proof-theoretic investigations of inductive definitions. I. **(84h:03075)**
A survey of Π_1^1 -logic. **(84c:03073)**
Hirose, Ken (with Nakayasu, Fujio) A representation for Spector second order classes in computation theories on two types. **(84a:03051)**
Nakayasu, Fujio See Hirose, Ken. **(84a:03051)**
Pohlers, Wolfram Cut elimination for impredicative infinitary systems. I. Ordinal analysis for ID_1 . **(84a:03070a)**
Cut elimination for impredicative infinitary systems. II. Ordinal analysis for iterated inductive definitions. **(84a:03070b)**
Seibt, Heinz On isomorphic partial recursive definitions. (German and Russian summaries) **(84i:68043)**
Vlada, Marin Contributions to the mathematical theory of recursive programs. (Romanian. English summary) **(84m:68025)**

03D75 Abstract and axiomatic recursion theory

- Dichev, Angel V. Computability in the sense of Moschovakis and its connection with partial recursiveness via numerations. (Russian) **84c:03055**
Fitting, Melvin ★ Fundamentals of generalized recursion theory. **84c:03086**
Hirose, Ken (with Nakayasu, Fujio) A representation for Spector second order classes in computation theories on two types. **84a:03051**
Kreitz, Christoph (with Weihrauch, Klaus) Complexity theory on real numbers and functions. (See **84h:68003**)
Manca, Vincenzo Computational formalism: abstract combinatory viewpoint and related first order logical framework. **84c:03088**
Nakayasu, Fujio See Hirose, Ken. **84a:03051**
Simpson, Stephen G. Four test problems in generalized recursion theory. **84m:03067**
Vincenzi, Antonio Experiments as abstract machines. (Italian) (See **84k:03006**)
Weihrauch, Klaus See Kreitz, Christoph. (See **84h:68003**)

secondary classifications:

- Richman, Fred Church's thesis without tears. **(84j:03084)**
Steel, John R. Closure properties of pointclasses. **(84h:03066)**
Urzyczyn, Pawel The unwind property in certain algebras. **(84c:08005)**

03D80 Applications

- Calude, Cristian (with Chijesiu, Ion) On Per Martin-Löf random sequences. **84g:03073**
 Chijesiu, Ion See Calude, Cristian, **84g:03073**
 Madan, Dilip B. Inconsistent theories as scientific objectives. **84j:03094**
 Misereque, Didier Problème des mariages et récursivité. [The marriage problem and recursiveness] **84h:03108**
 Pour-El, Marian Boykan (with Richards, Ian) Computability and noncomputability in classical analysis. **84e:03056**
 Richards, Ian See Pour-El, Marian Boykan, **84e:03056**

secondary classifications:

- Albin, Peter S. The metalogic of economic predictions, calculation and propositions. **(84c:90003)**
 Baez, John C. Recursivity in quantum mechanics. **(84i:81010)**
 Bergstra, Jan A. (with Klop, J. W.) Initial algebra specifications for parametrized data types. **(84j:68011)**
 Boudol, Gérard (with Kott, Laurent) Recursion induction principle revisited. **(84f:68011)**
 Flon, Lawrence (with Suzuki, Norihisa) The total correctness of parallel programs. **(84c:68006)**
 Hay, Louise (with Miller, Douglas E.) The Addison game played backwards: index sets in topology. **(84d:03060)**
 Kfoury, A. J. Definability by programs in first-order structures. **(84e:68010)**
 Klop, J. W. See Bergstra, Jan A., **(84j:68011)**
 Kott, Laurent See Boudol, Gérard, **(84f:68011)**
 Miller, Douglas E. See Hay, Louise, **(84d:03060)**
 Suzuki, Norihisa See Flon, Lawrence, **(84c:68006)**
 V'yugin, V. V. Algebra of invariant properties of binary sequences. **(84d:08005)**

03D99 None of the above, but in this section

secondary classifications:

- Calude, Cristian (with Chijesiu, Ion) Random strings according to A. N. Kolmogorov and P. Martin-Löf: classical approach. **(84h:60008)**
 Chaitin, Gregory J. Gödel's theorem and information. **(84c:03007)**
 Chen, Keh Jiam Tradeoffs in the inductive inference of nearly minimal size programs. **(84g:03057)**
 Chijesiu, Ion See Calude, Cristian, **(84h:60008)**
 Joseph, Deborah (with Young, Paul) Corrigendum: "Independence results in computer science?" [J. Comput. System Sci. **23** (1981), no. 2, 205-222; MR **82m:68060**]. **(84c:68017)**
 Rubinov, A. M. Generalized recursive sets in dispersive discrete dynamical systems. (Russian) **(84f:54058)**
 Young, Paul See Joseph, Deborah, **(84c:68017)**

03Exx Set theory [See also 04-XX.]

secondary classifications:

- (Barwise, K. Jon) See Handbook: Mathematical logic, **(84g:03004a)**
 (Grishin, V. N.) See Handbook: Mathematical logic, **(84g:03004a)**
 (Kanovei, V. G.) See Handbook: Mathematical logic, **(84g:03004a)**
 Martin, Donald A. The use of set-theoretic hypotheses in the study of measure and topology. **(84h:03001)**
 Handbook:
 Mathematical logic ★Справочная книга по математической логике. Часть II. (Russian) [Handbook of mathematical logic. Part II] **(84g:03004a)**

03E05 Combinatorial set theory

- Baumgartner, James E. (with Weese, Martin) Partition algebras for almost-disjoint families. **84g:03074**
 Carr, Donna M. The minimal normal filter on $P_\kappa\lambda$. **84h:03109**
 Elekes, G. (with Erdős, Paul; Hajnal, A.) On some partition properties of families of sets. **84h:03110**
 Erdős, Paul See Elekes, G.; et al., **84h:03110**
 Hajnal, A. See Elekes, G.; et al., **84h:03110**
 Hanazawa, Masazumi Various kinds of Aronszajn tree with no subtree of a different kind. **84a:03052**
 Two properties of Aronszajn trees near to \mathbb{R} -embeddability. **84h:03118**
 On Aronszajn trees with a non-Souslin base. **84h:03111**
 Countable metacompactness and tree topologies. **84a:03053**
 Henle, J. M. (with Mathias, A. R. D.) Supercontinuity. **84h:03112**
 Komjáth, Péter A note on Hajnal-Máté graphs. **84e:03057**
 Mathias, A. R. D. See Henle, J. M., **84h:03112**
 Weese, Martin See Baumgartner, James E., **84g:03074**

secondary classifications:

- Avraham, Uri Free sets for nowhere-dense set mappings. **(84c:03090)**
 Balcar, Bohuslav (with Simon, Petr) Strong decomposability of ultrafilters. I. **(84d:04002)**
 Barbanel, Julius B. Supercompact cardinals and trees of normal ultrafilters. **(84j:03099)**
 Beck, József (with Csirmaz, L.) Variations on a game. **(84a:90092)**
 Bukovský, L. (with Coplákova, E.) Rapid ultrafilter need not be \mathcal{Q} -point. **(84a:03058)**
 Chudnovsky, Gregory V. (with Wolfsdorf, Kurt) A theorem on polarised partition relations for singular cardinals. (French summary) **(84e:04002)**
 Clote, Peter Weak partition relation, finite games, and independence results in Peano arithmetic. **(84h:03144)**

Comfort, W. Wistar (with Negreptis, Stylianos A.) ★Chain conditions in topology. **(84h:04002)**

Coplákova, E. See Bukovský, L., **(84a:03058)**
 Csirmaz, L. See Beck, József, **(84a:90092)**
 Devlin, Keith J. The combinatorial principle \diamond^{\aleph_1} . **(84d:03064)**
 Grigorieff, Serge $\aleph_1^{\aleph_1}$ et les injections élémentaires de L dans L . $[\aleph_1^{\aleph_1}$ and the elementary embeddings of L into L] **(84h:03068)**

Hart, Klaas Pieter Characterizations of \mathbb{R} -embeddable and developable ω_1 -trees. **(84h:04004)**

Jech, Thomas A maximal definable σ -ideal over ω_1 . **(84a:03059)**

Kamo, Shizuo Some statement which implies the existence of Ramsey ultrafilters on ω . **(84i:03090)**

Kranakis, Evangelos Definable ultrafilters and end extension of constructible sets. **(84g:03082)**

Kurepa, Djuro Ensembles ordonnés et ramifiés de points. [Ordered sets and pseudotrees] **(84h:04004a)**

Sur deux classes d'hypothèses concernant le continu linéaire ou temporel. [On two classes of hypotheses concerning the linear or temporal continuum] **(84h:04004b)**

Laver, Richard An $(\aleph_2, \aleph_2, \aleph_0)$ -saturated ideal on ω_1 . **(84a:03060)**

Michel, Horst Generation of operation-invariant classes of sets. (Russian summary) **(84h:04005)**

Mignone, Robert J. The axiom of determinateness implies ω_1 has precisely two countably complete, uniform, weakly normal ultrafilters. **(84m:03071)**

Miller, Arnold W. A characterization of the least cardinal for which the Baire category theorem fails. **(84h:04002)**

Mitchell, William John How weak is a closed unbounded ultrafilter? **(84f:03047)**

Negreptis, Stylianos A. See Comfort, W. Wistar, **(84h:04002)**

Price, Roderick A. On a problem of Čech. **(84d:04003)**

Simon, Petr See Balcar, Bohuslav, **(84d:04002)**

Wolfsdorf, Kurt See Chudnovsky, Gregory V., **(84e:04002)**

03E10 Ordinal and cardinal numbers

Guitart, René Théorie des bornes. I. [Theory of bounds. I.] **84i:03099a**

Théorie des bornes. II. [Theory of bounds. II.] **84i:03099b**

Rosický, Jiří Théorie des bornes. III. [Theory of bounds. III.] **84i:03099c**

secondary classifications:

- Crabbé, Marcel À propos de 2^{\aleph_1} . [About 2^{\aleph_1}] **(84e:03060)**
 Zervos, S. P. On cardinals as transitivity sets of posets with respect to their automorphism groups. **(84c:06004)**

03E15 Descriptive set theory

Budinas, B. L. On the selector principle and the analytic definability of constructible sets. (Russian) **84h:03113**

The existence of a complete A_1 -ordering of the continuum does not follow from the selection principle for analytic equivalence relations. (Russian) **84f:03042**

Dellacherie, C. Transformations analytiques. Théorèmes de capacité, de séparation et d'itération transfinie. [Analytic transformations. Theorems on capacity, separation and transfinite iteration] **84h:03119**

Di Prisco, Carlos A. (with Marek, Wiktor) On some σ -algebras containing the projective sets. I. **84c:03087**

Harrington, Leo A. (with Shelah, Saharon) Counting equivalence classes for co- \aleph -Souslin equivalence relations. **84c:03088**

(with Kechris, Alexander S.) Ordinal games and their applications. **84a:03054**

Hay, Louise (with Miller, Douglas E.) The Addison game played backwards: index sets in topology. **84d:03060**

Kanovei, V. G. On N. N. Luzin's problems on the embeddability and decomposition of projective sets. (Russian) **84g:03075**

Kechris, Alexander S. An overview of descriptive set theory. **84h:03114**

See also Harrington, Leo A., **84a:03054**

Kleinberg, Eugene M. An example in axiomatic set theory. **84h:03065**

Louveau, Alain Une nouvelle technique d'étude des relations d'équivalence coanalytiques. [A new technique for the study of coanalytic equivalence relations] **84h:03121**

Ensembles mesurables et ensembles non mesurables sur la droite réelle.

[Measurable and nonmeasurable sets on the real line] **84g:03076**

Marek, Wiktor See Di Prisco, Carlos A., **84c:03087**

Miller, Douglas E. See Hay, Louise, **84d:03060**

Moschovakis, Yiannis N. Ordinal games and playful models. **84h:03115**

Raisonnier, Jean (with Stern, Jacques) Mesurabilité et propriété de Baire. (English summary) [Measurability and the Baire property] **84g:03077**

Sami, Ramez L. Sur la conjecture de Vaught en théorie descriptive. (English summary) [On Vaught's conjecture in descriptive set theory] **84a:03055**

Shelah, Saharon See Harrington, Leo A., **84c:03088**

Steel, John R. Closure properties of pointclasses. **84h:03066**

Stern, Jacques Cardinalité des relations d'équivalence analytiques et coanalytiques. [Cardinality of analytic and coanalytic equivalence relations] **84h:03120a**

Relations d'équivalence dans les espaces polonais: application aux composantes connexes des ensembles sousliniens. [Equivalence relations in Polish spaces: application to the connected components of Suslin spaces] **84h:03120b**

See also Raisonnier, Jean, **84g:03077**

secondary classifications:

- Baez, John C. Recursivity in quantum mechanics. **(84i:81010)**
 Beck, József (with Csirmaz, L.) Variations on a game. **(84a:90092)**
 Budinas, B. L. The selector principle and analytic definability of real numbers in extensions of the constructible universe. (Russian) **(84m:03069)**
 Csirmaz, L. See Beck, József, **(84a:90092)**

- David, René A very absolute Π^1_2 real singleton. (84m:03057)
 Fremlin, D. H. (with Hansell, R. W.; Junnilla, H. J. K.) Borel functions of bounded class. (84d:04067)
 Hansell, R. W. See Fremlin, D. H.; et al., (84d:04067)
 Junnilla, H. J. K. See Fremlin, D. H.; et al., (84d:04067)
 Kechris, Alexander S. (with Woodin, W. Hugh) Equivalence of partition properties and determinacy. (84m:03070)
 Miller, Arnold W. Some properties of measure and category. (84e:03058a)
 Corrections and additions to: "Some properties of measure and category". (84e:03058b)
 Simpson, Stephen G. Four test problems in generalized recursion theory. (84m:03067)
 Steel, John R. Determinacy in the Mitchell models. (84e:03059)
 Talagrand, Michel Filtrés: mesurabilité, rapidité, propriété de Baire forte. [Filters: measurability, rate of convergence, strong Baire property] (84h:28005)
 Woodin, W. Hugh See Kechris, Alexander S., (84m:03070)

03E20 Other classical set theory

- Todorčević, Stevo Stationary sets, trees and continuums. 84g:03078

secondary classifications:

- Michel, Horst Generation of operation-invariant classes of sets. (Russian summary) (84c:04005)
 von Rimscha, Michael Universality and strong extensionality. (84j:03096a)
 Weak foundation and axioms of universality. (84j:03096b)

03E25 Axiom of choice and related propositions

- Ash, C. J. Model-theoretic forms of the axiom of choice. 84m:03068
 Banaschewski, Bernhard The power of the ultrafilter theorem. 84f:03043
 Blass, Andreas Cohomology detects failures of the axiom of choice. 84h:03116
 Brunner, Norbert Sequential continuity. 84a:03056
 Dedekind-Endlichkeit und Wohlordenbarkeit. (English summary) [Dedekind finiteness and well-orderability] 84c:03057
 Geordneté Lächli Kontinuum. [Ordered Lächli continua] 84d:03122
 Kategoriesätze und multiples Auswahlaxiom. [Category theorems and axiom of multiple choice] 84c:03123
 Johnstone, Peter T. Tychonoff's theorem without the axiom of choice. 84h:03117
 Monro, G. P. On generic extensions without the axiom of choice. 84d:03061

secondary classifications:

- Brunner, Norbert Boxprodukte und Auswahlaxiom. [Box products and axiom of choice] (84g:04003)
 Sequential compactness and the axiom of choice. (84f:04009)
 Crabbé, Marcel The axiom of choice in type theory with ambiguity axioms. (See 84c:03008)
 von Rimscha, Michael Hierarchies for nonfounded models of set theory. (84j:03097)

03E30 Axiomatics of classical set theory and its fragments

- Hinnion, Roland Extensional quotients of structures and applications to the study of the axiom of extensionality. 84c:03089
 Inoue, Yoshinobu Some remarks on self-consistent abstractions. 84g:03079
 Maddy, Penelope Proper classes. 84j:03095
 McMichael, Alan A set theory with Frege-Russell cardinal numbers. 84g:03080
 Mo, Shao Kui New axiom systems for set theory. (Chinese, English summary) 84f:03044
 Omodeo, E. G. Decidability and validity in the presence of choice operators. (Italian) (See 84c:03006)
 von Rimscha, Michael Universality and strong extensionality. 84j:03096a
 Weak foundation and axioms of universality. 84j:03096b
 Hierarchies for nonfounded models of set theory. 84j:03097

secondary classifications:

- Bunder, M. W. Predicate calculus and naive set theory in pure combinatory logic. (84f:03012)
 Jäger, Gerhard Zur Beweistheorie der Kripke-Platek-Mengenlehre über den natürlichen Zahlen. [The proof theory of Kripke-Platek set theory over the natural numbers] (84j:03110)
 Schmidt, Garfield C. Nonreflexive, well founded sets and natural numbers. (84b:03025)
 Servi, Mario Categories and sets. (Italian) (See 84k:03006)

03E35 Consistency and independence results

- Avraham, Uri Free sets for nowhere-dense set mappings. 84c:03090
 Bukovský, L. (with Coplákova, E.) Rapid ultrafilter need not be Q -point. 84a:03058
 Coplákova, E. See Bukovský, L., 84a:03058
 Eklof, Paul C. The structure of ω_1 -separable groups. 84k:03124
 Fleissner, William G. If all normal Moore spaces are metrizable, then there is an inner model with a measurable cardinal. 84h:03118
 Friedman, Harvey M. On the necessary use of abstract set theory. 84d:03062
 Jech, Thomas A maximal definable σ -ideal over ω_1 . 84a:03059
 Kamo, Shizuo Some statement which implies the existence of Ramsey ultrafilters on ω . 84i:03090
 Kleinberg, Eugene M. An absoluteness theorem. 84b:03067
 Laver, Richard An $(\aleph_1, \aleph_2, \aleph_3)$ -saturated ideal on ω_1 . 84a:03060
 Miller, Arnold W. Some properties of measure and category. 84e:03058a
 Corrections and additions to: "Some properties of measure and category". 84e:03058b

- Pek, Andrzej Semiregular invariant measures on abelian groups. 84a:03061
 Sakarovitch, Joel Une application du forcing itéré à un problème sur les homomorphismes d'algèbres de Banach. [An application of iterated forcing to a problem on the homomorphisms of Banach algebras] 84d:03063
 Shelah, Saharon (with Stanley, L.) S -forcing. I. A "black-box" theorem for morasses, with applications to super-Souslin trees. 84h:03119
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- Solitto, U. See Valentini, Silvio, (84c:03043)
- Tucker, J. V. See Bergstra, Jan A., (84c:68021)
- Valentini, Silvio (with Solitto, U.) The modal logic of consistency assertions of Peano arithmetic. (84c:03043)
- Visser, Albert On the completeness principle: a study of provability in Heyting's arithmetic and extensions. (84b:03130)
- Yasugi, Mariko Construction principle and transfinite induction up to ϵ_0 . (84a:03073)

03F35 Second- and higher-order arithmetic and fragments [See also 03E30, 03E70.]

- Buchholz, Wilfried (with Schütte, Kurt) Syntaktische Abgrenzungen von formalen Systemen der Π_1^1 -Analysis und Δ_2^1 -Analysis. [Syntactic characterizations of formal systems of Π_1^1 -analysis and Δ_2^1 -analysis] 84g:03096
- (with Feferman, Solomon; Pohlers, Wolfram; Sieg, Wilfried) ★ Iterated inductive definitions and subsystems of analysis: recent proof-theoretical studies. 84d:03074
- Feferman, Solomon (with Jäger, Gerhard) Choice principles, the bar rule and autonomously iterated comprehension schemes in analysis. 84g:03097
- See also Buchholz, Wilfried; et al., 84d:03074
- Girard, Jean-Yves A survey of Π_1^1 -logic. 84c:03073
- Jäger, Gerhard See Feferman, Solomon, 84g:03097
- Leivant, Daniel Unprovability of theorems of complexity theory in weak number theories. 84g:03098
- López-Escobar, E. G. K. Further applications of ultra-conservative ω -rules. 84c:03139
- Pohlers, Wolfram Admissibility in proof theory: a survey. 84b:03129
- See also Buchholz, Wilfried; et al., 84d:03074
- Schütte, Kurt See Buchholz, Wilfried, 84g:03096
- Sieg, Wilfried See Buchholz, Wilfried; et al., 84d:03074
- Simpson, Stephen G. Σ_1^1 and Π_1^1 transfinite induction. 84b:03078a
- Set theoretic aspects of ATR_0 . 84b:03078b
- Smoryński, C. The varieties of arboreal experience. 84i:03110

secondary classifications:

- Boffa, Maurice Arithmetic and theory of types. (See 84c:03008)
- Feferman, Solomon Iterated inductive fixed-point theories: application to Hancock's conjecture. (84f:03050)
- Friedman, Harvey M. (with McAloon, Kenneth; Simpson, Stephen G.) A finite combinatorial principle which is equivalent to the Π_1 -consistency of predicative analysis. (84c:03138)
- Guzicki, Wojciech The equivalence of definable quantifiers in second order arithmetic. (84g:03050)
- Kirby, L. A. S. (with McAloon, Kenneth; Murawski, Roman) Indicators, recursive saturation and expandability. (84c:03117)
- Kortum, M. R. A system of intuitionistic analysis that is equivalent to classical analysis. (Russian. English summary) (84m:03091)
- McAloon, Kenneth See Kirby, L. A. S.; et al., (84i:03117) and Friedman, Harvey M.; et al., (84c:03138)
- Murawski, Roman See Kirby, L. A. S.; et al., (84i:03117)
- Schwichtenberg, Helmut On Martin-Löf's theory of types. (See 84c:03006)
- Simpson, Stephen G. See Friedman, Harvey M.; et al., (84c:03138)
- Tomás, Francisco A recursive, finitarily consistent formalization of a fragment of nonconstructive arithmetic, and its relation to recursive analysis. (Spanish) (84c:03071)
- Troetsch, A. S. Intuitionistic extensions of the reals. II. (84b:03140)
- Zbierski, Paweł Nonstandard interpretations of higher order theories. (84d:03073)

03F40 Gödel numberings in proof theory

- Rosenberg, Richard Recursively enumerable images of arithmetic sets. 84c:03074

secondary classifications:

- Bunder, M. W. A formal metatheory in which Gödel's first but not his second incompleteness theorem can be proved. (84j:03112)
- Paghi, Paolo Some extensions of the diagonalization lemma (the algebraization of theories which express Theor. 1). (Italian. English summary) (84c:03070)

03F50 Metamathematics of constructive systems

- Bunder, M. W. A formal metatheory in which Gödel's first but not his second incompleteness theorem can be proved. **84j:03112**
- Kovtun, M. R. A system of intuitionistic analysis that is equivalent to classical analysis. (Russian. English summary) **84m:03091**
- Schwichtenberg, Helmut On Martin-Löf's theory of types. (See **84k:03006**)
- Shanin, N. A. Role of a notion of algorithm in the arithmetic language semantics. **84j:03113**
- Troelstra, A. S. Intuitionistic extensions of the reals. II. **84k:03140**
- Visser, Albert On the completeness principle: a study of provability in Heyting's arithmetic and extensions. **84k:03130**

secondary classifications:

- Girard, Jean-Yves Proof-theoretic investigations of inductive definitions. I. (**84b:03075**)
- López-Escobar, E. G. K. Further applications of ultra-conservative ω -rules. (**84k:03139**)
- Moerdijk, Ieke Gluing topoi and higher order disjunction and existence. (**84k:03149**)
- Nishimura, Hirokazu Semantical analysis of constructive PDL. (**84k:03084**)
- Zahn, Peter ★ Ein argumentativer Weg zur Logik. (German) [An argumentative approach to logic] (**84f:03003**)

03F55 Intuitionistic mathematics

- Arzarello, Ferdinando A categorical interpretation of lawless objects. (Italian) (See **84k:03006**)
- van Dalen, Dirk Singleton reals. **84k:03131**
- Dragalin, A. G. Algebraic models of intuitionistic theories. (Russian) **84m:03092**
- Giarretta, Pierdaniele On the construction of sequences in the theory of the creative subject. (Italian) (See **84k:03006**)
- Grayson, Robin J. Concepts of general topology in constructive mathematics and in sheaves. II. **84c:03102**
- Constructive well-orderings. **84f:03053**
- Forcing in intuitionistic systems without power-set. **84k:03141**
- (with Moerdijk, Ieke) Some remarks on extending bar induction. **84m:03093**
- On closed subsets of the intuitionistic reals. **84h:03079**
- van der Hoeven, G. F. ★ Projections of lawless sequences. **84h:03132**
- Models for the theory of lawless sequences constructed from a single generator. **84g:03099**
- Krol', M. D. Differential forms of the principle of continuity. (Russian) **84m:03094**
- Luci, Fulvio A theory of potential infinity. II. (Italian. English summary) **84h:03133**
- Martino, Enrico Natural intuitionistic semantics and generalized Beth semantics. (Italian) (See **84k:03006**)
- Mizutani, Chiharu Definability theorem for the intuitionistic predicate logic with equality. **84b:03080**
- Moerdijk, Ieke See Grayson, Robin J., **84m:03093**
- Rosolini, Giuseppe A model for intuitionistic set theory. (Italian) (See **84k:03006**)
- Takeuti, Gaisi (with Titani, Satoko) Heyting-valued universes of intuitionistic set theory. **84g:03100**
- Titani, Satoko See Takeuti, Gaisi, **84g:03100**

secondary classifications:

- van Dalen, Dirk Braucht die konstruktive Mathematik Grundlagen? [Does constructive mathematics need foundations?] (**84c:03098**)
- Daputo, Carlo Interpretation in an elementary topos. (Italian summary) (**84f:03056**)
- Gordon, E. I. See Lyubetskii, V. A., (**84f:03034**)
- Grayson, Robin J. A correction to: "Concepts of general topology in constructive mathematics and in sheaves" [Ann. Math. Logic **20** (1981), no. 1, 1–41; MR **82g:03105**]. (**84d:03075**)
- Hahanyan, V. H. The consistency of some intuitionistic and constructive principles with a set theory. (**84c:03061**)
- Hayashi, Susumu On set theories in toposes. (**84b:18002**)
- Lavendhomme, R. (with Lucas, Thierry Eugène) A note on intuitionistic models of ZF. (**84f:03033**)
- Lucas, Thierry Eugène See Lavendhomme, R., (**84f:03033**)
- Lyubetskii, V. A. (with Gordon, E. I.) Imbedding of sheaves in a Heyting-valued universe. (Russian) (**84f:03034**)
- Mints, G. E. (with Ty-ugu, É. Kh.) Completeness of structural synthesis rules. (Russian) (**84m:03013**)
- Posy, Carl J. A free IPC is a natural logic: strong completeness for some intuitionistic free logics. (**84h:03058**)
- Shum, A. A. Finite axiomatization of the logic of infinite problems in an extended language. (Russian) (**84c:03027**)
- Troelstra, A. S. On a second-order propositional operator in intuitionistic logic. (**84a:03015**)
- Intuitionistic extensions of the reals. II. (**84k:03140**)
- Ty-ugu, É. Kh. See Mints, G. E., (**84m:03013**)
- Uesu, Tadahiro Intuitionistic theories and toposes. (**84f:03057**)
- Yashin, A. D. Intuitionistic predicate logic with the connective "tomorrow". (Russian. English summary) (**84d:03027**)

03F60 Recursive analysis

- Pour-El, Marian Boykan (with Richards, Ian) Noncomputability in analysis and physics: a complete determination of the class of noncomputable linear operators. **84j:03114**
- Richards, Ian See Pour-El, Marian Boykan, **84j:03114**

secondary classifications:

- van Dalen, Dirk Braucht die konstruktive Mathematik Grundlagen? [Does constructive mathematics need foundations?] (**84c:03098**)

- Pour-El, Marian Boykan (with Richards, Ian) Computability and noncomputability in classical analysis. (**84c:03056**)
- Richards, Ian See Pour-El, Marian Boykan, (**84c:03056**)

03F65 Other constructive mathematics [See also 46R05.]

- Beeson, Michael J. Problematic principles in constructive mathematics. **84h:03134**
- Bridges, Douglas S. Correction to: "On the isolation of zeroes of an analytic function" [Pacific J. Math. **96** (1981), no. 1, 13–22; MR **82k:03095**]. **84c:03103**
- Demuth, Oswald Borel types of some classes of arithmetical real numbers. (Russian) **84c:03104**
- Some classes of arithmetical real numbers. (Russian) **84g:03101**
- Goodman, Nicolas D. Reflections on Bishop's philosophy of mathematics. **84h:03135**
- Grayson, Robin J. A correction to: "Concepts of general topology in constructive mathematics and in sheaves" [Ann. Math. Logic **20** (1981), no. 1, 1–41; MR **82g:03105**]. **84d:03075**
- Julian, William (with Mines, Ray; Richman, Fred) Alexander duality. **84j:03115**
- Kosheleva, O. M. (with Kreinovich, V. Ya.) What can physics contribute to constructive mathematics? (Russian) **84j:03116**
- Kreinovich, V. Ya. See Kosheleva, O. M., **84j:03116**
- Kushner, B. A. Behavior of the general term of a Specker series. (Russian) **84i:03111**
- Lifschitz, Vladimir Constructive assertions in an extension of classical mathematics. **84a:03075**
- Mines, Ray (with Richman, Fred) Separability and factoring polynomials. **84c:03075**
- See also Julian, William; et al., **84j:03115**
- Nepeivoda, N. N. Some possibilities for the application of constructive analysis to classical analysis. (Russian) **84d:03076**
- Richman, Fred See Mines, Ray, **84c:03075** and Julian, William; et al., **84j:03115**
- Yasugi, Mariko The Hahn-Banach theorem and a restricted inductive definition. **84m:03095**
- Zassenhaus, Hans J. Über die konstruktive Behandlung mathematischer Probleme. [On the constructive treatment of mathematical problems] **84d:03077**

secondary classifications:

- Apéry, Roger Mathématique constructive. [Constructive mathematics] (**84a:03002**)
- Bridges, Douglas S. A constructive look at positive linear functionals on $\mathcal{E}(H)$. (**84f:47056**)
- Drago, A. Dimensional theory and constructive mathematics. (**84k:03011**)
- Leblanc, H. See Morgan, C. G., (**84c:03027**)
- Mandelkern, Mark Constructive continuity. (**84j:26007**)
- Mines, Ray (with Richman, Fred) Dedekind domains. (**84g:13038**)
- Morgan, C. G. (with Leblanc, H.) Probabilistic semantics for intuitionistic logic. (**84c:03027**)
- Pfender, M. (with Reiter, Reimund; Sartorius, M.) Constructive arithmetics. (**84d:18003**)
- Reiter, Reimund See Pfender, M.; et al., (**84d:18003**)
- Richman, Fred Seidenberg's condition P . (**84k:12017**)
- Finite-dimensional algebras over discrete fields. (**84k:16025**)
- Church's thesis without tears. (**84j:03084**)
- See also Mines, Ray, (**84g:13038**)
- Sartorius, M. See Pfender, M.; et al., (**84d:18003**)
- Shanin, N. A. Role of a notion of algorithm in the arithmetic language semantics. (**84j:03113**)
- Shurygin, V. A. Construction of eigenvectors of completely continuous selfadjoint linear operators in constructive analysis for an eigenvalue of given multiplicity. (Russian) (**84j:47033**)
- Smoryński, C. The varieties of arboreal experience. (**84i:03110**)

03F99 None of the above, but in this section

secondary classifications:

- Constable, Robert L. Programs as proofs: a synopsis. (**84c:68009**)
- Katz, Michael L. Real-valued models with metric equality and uniformly continuous predicates. (**84c:03048**)
- Resl, M. (with Sochor, A.) Provability in the alternative set theory. (**84h:03123**)
- Rezus, Adrian On a theorem of Tarski. (**84h:03019**)
- Sochor, A. See Resl, M., (**84h:03123**)

03Gxx Algebraic logic

- Magari, Roberto Notes on the algebra of logic. (Italian) (See **84k:03006**)
- Rodriguez Salas, A. J. On the algebraic significance of the importation-exportation law. (Catalan) (See **84i:03003**)
- Sales, Francisco de A. Vallés The algebras of logic. (Catalan) (See **84i:03003**)

secondary classifications:

- (Embarck, Djilali) See Yablonskii, S. V., (**84k:94001**)
- Mangione, Corrado Stages of the relation between algebra and logic. (Italian) (See **84k:03006**)
- Verdú Solans, Ventura Algebras characterized by means of rules of inference. (Catalan) (See **84i:03003**)
- Yablonskii, S. V. ★ Introduction aux mathématiques discrètes. (French) [Introduction to discrete mathematics] (**84k:94001**)

03G05 Boolean algebras [See also 06Exx.]

- Anellis, Irving H. Boolean groups. **84g:03102**
- Chukhrov, I. P. Estimates of the number of minimal disjunctive normal forms for a zonal function. I. (Russian) **84h:03136**

- Han, Yǒng Ro A study of monotonic logic functions. (Korean. English summary) 84a:03076
- Hanf, William P. (with Myers, Dale) Boolean sentence algebras: isomorphism constructions. 84m:03096
- Lozhkin, S. A. The relation between depth and complexity of equivalent formulas and the depth of monotone functions of the algebra of logic. (Russian) 84h:03137
- Mijajlović, Žarko Two remarks on Boolean algebras. 84j:03132
- Myers, Dale See Hanf, William P., 84m:03096
- Padmanabhan, R. A self-dual equational basis for Boolean algebras. 84a:03077
- Pásztor-Varga, Katalin (with Petroszjan, A. V.) Some problems of a problem-oriented expansion of Boolean functions. (Hungarian. English summary) 84j:03117
- Petroszjan, A. V. See Pásztor-Varga, Katalin, 84j:03117
- Smoryński, C. Corrigendum to: "Fixed point algebras" [Bull. Amer. Math. Soc. (N.S.) 6 (1982), no. 3, 317-356; MR 83f:03066]. 84b:03081
- Vojtaš, Peter Simultaneous strategies and Boolean games of uncountable length. 84f:03054

secondary classifications:

- Aslanyan, L. A. On the question of minimization of systems of poorly defined Boolean functions. (Russian) (84d:94026)
- Balcar, Bohuslav (with Simon, Petr) Cardinal invariants in Boolean spaces. (84f:06024)
- Banković, Dragić Some remarks on Boolean equations. (84c:06017)
- Solving systems of arbitrary equations. (84m:06023)
- Bibilo, P. N. Probability of nonessentialness of subsets of arguments of Boolean functions. (84i:06013)
- Breitbart, Yuri A family of Boolean functions with nonlinear formula size. (See 84b:94002)
- Burris, Stanley The first order theory of Boolean algebras with a distinguished group of automorphisms. (84f:03008)
- Faust, Don H. The Boolean algebra of formulas of first-order logic. (84f:03007)
- Gashkov, S. B. Realization of Boolean functions by circuits and formulas in bases whose elements realize continuous functions. (Russian) (84a:94034)
- Hyon Jong Rak A graph-theoretic method in the algebra of logic. I. (Korean. English summary) (84g:94031)
- de Jonge, Ep A representation theorem for weakly σ -distributive Boolean σ -algebras. (Russian summary) (84d:06020)
- Khotomski, P. Some characteristics of tables of Boolean functions, and the construction of expressions in Sheffer operators. (Russian) (84b:94036)
- Kuznetsov, S. E. Complexity of realization of a sequence of Boolean functions by formulas of depth 3 in the basis $\{\vee, \&, -\}$. (Russian) (See 84i:00006)
- Lausmaa, T. Informational evaluation of Boolean functions. (Russian. English and Estonian summaries) (84a:94008)
- (Lindenbaum, Adolf) See Surma, Stanisław J., (84g:01045)
- McKenzie, Ralph N. (with Monk, J. Donald) Chains in Boolean algebras. (84b:06014)
- Melter, Robert A. (with Rudeanu, Sergiu) Characterizations of Boolean functions. (84c:06018)
- Molzan, Burkhard On the number of different theories of Boolean algebras in several logics. (84b:03092)
- Monk, J. Donald See McKenzie, Ralph N., (84b:06014)
- Perić, Veselin Solution of a system of set-theoretic equations. (Serbo-Croatian. German summary) (84d:04005)
- Pühringer, Christine Ein Vollständigkeitsbeweis für die Theorie der atomlosen \cap - \cup -partiellen Booleschen Algebren. [A completeness proof for the theory of the atomless \cap - \cup -partial Boolean algebras] (84c:03063)
- Rudeanu, Sergiu Linear Boolean equations and generalized minterms. (84c:06019)
- Isotony detectors of Boolean functions. (84i:06014)
- See also Melter, Robert A., (84c:06018)
- Simon, Petr See Balcar, Bohuslav, (84f:06024)
- Stiefel, Berndt Über Iterierte einer Booleschen Funktion. [On the iterates of a Boolean function] (84c:94028)
- Strazdins, I. On fundamental transformation groups in the algebra of logic. (84g:03105)
- Surma, Stanisław J. On the origin and subsequent applications of the concept of the Lindenbaum algebra. (84g:01045)
- Tchuente, Maurice Computation of Boolean functions on networks of binary automata. (84i:68088)
- Tembrowski, Bronisław On some class of Boolean algebras with an additional binary operation. (84c:06017)
- Tulipani, Sauro Invariants of elementary equivalence for an axiomatic class of general measure spaces. (Italian. English summary) (84a:03037)
- Vashchenko, V. P. Investigation of simple decomposition of a Boolean function. (Russian) (84h:94028)
- Zakrevskii, A. D. ★Логический синтез каскадных схем. (Russian) [Logical synthesis of cascade circuits] (84c:94023)
- Zhang, Hong Yu A simplification for ternary functions. (Chinese. English summary) (84b:03051)
- Bibliography:
Lindenbaum, Adolf See Surma, Stanisław J., (84g:01045)
- Biography:
Lindenbaum, Adolf See Surma, Stanisław J., (84g:01045)

03G10 Lattices and related structures [See also 06Bxx.]

- Bagyinszki, János See Demetrovics, János, 84g:03103
- Demetrovics, János (with Bagyinszki, János) The lattice of linear classes in prime-valued logics. 84g:03103
- secondary classifications:
- Andres, Zdeněk (with Zelinka, Bohdan) Logics of bipartite graphs and complete multipartite graphs. (Czech summary) (84d:05144)

- Dunn, J. Michael A relational representation of quasi-Boolean algebras. (84a:06009)
- van Fraassen, Basiliaan C. Quantification as an act of mind. (84g:03034)
- Hoo, C. S. Pseudocomplemented and implicative semilattices. (84d:06007)
- Zelinka, Bohdan See Andres, Zdeněk, (84d:05144)

03G12 Quantum logic [See also 81B10.]

- Abbati, M. C. (with Manià, A.) The quantum logical and the operational description for physical systems. 84j:03118
- Bell, John L. (with Hallett, Michael) Logic, quantum logic and empiricism. 84b:03062
- Bernini, Sergio Quantum logic as an extension of classical logic. 84j:03119
- Bub, Jeffrey Quantum logic, conditional probability, and interference. 84b:03138
- Bugajski, Sławomir The inner language of operational quantum mechanics. 84j:03120
- Cattaneo, Gianpiero Canonical embedding of an abstract quantum logic into the partial Baer*-ring of complex fuzzy events. 84c:03076
- Czelakowski, Janusz Partial referential matrices for quantum logics. 84j:03121
- Partial Boolean algebras in a broader sense as a semantics for quantum logic. 84i:03112
- Dalla Chiara Scabia, Maria Luisa Some metalogical pathologies of quantum logic. 84j:03122
- Dorling, Jon How to rewrite a stochastic dynamical theory so as to generate a measurement paradox. (See 84i:03005)
- Finkelstein, David Quantum sets, assemblies and plexi. 84j:03123
- Foulis, D. J. (with Randall, C. H.) What are quantum logics and what ought they to be? 84i:03142
- van Fraassen, Basiliaan C. Assumptions and interpretations of quantum logic. 84j:03124
- A modal interpretation of quantum mechanics. 84j:03125
- Frazer, Patricia J. See Hardegree, Gary M., 84c:03144
- Greechie, Richard J. A nonstandard quantum logic with a strong set of states. 84b:03143
- Gudder, Stanley P. Measure and integration in quantum set theory. 84j:03126
- Hallett, Michael See Bell, John L., 84b:03062
- Hardegree, Gary M. Some problems and methods in formal quantum logic. 84j:03127
- (with Frazer, Patricia J.) Charting the labyrinth of quantum logics: a progress report. 84c:03144
- Hughes, R. I. G. Realism and quantum logic. 84j:03128
- Kalmbach, Gudrun Omologues as a Hilbert type calculus. 84j:03129
- Kron, Aleksander (with Marić, Zvonko; Vujosević, Slobodan) Entailment and quantum logic. 84j:03130
- Mączyński, Maciej Commutativity and generalized transition probability in quantum logic. 84j:03131
- Manià, A. See Abbati, M. C., 84j:03118
- Marić, Zvonko See Kron, Aleksander; et al., 84j:03130
- Mittelstaedt, Peter Classification of different areas of work afferent to quantum logic. 84j:03133
- The dialogic approach to modalities in the language of quantum physics. 84j:03134
- Relativistic quantum logic. 84b:03139
- Pitowsky, Itamar Substitution and truth in quantum logic. 84b:03140
- Randall, C. H. See Foulis, D. J., 84i:03142
- Rehder, Wulf Conditions for probabilities of conditionals to be conditional probabilities. 84i:03113
- Stachow, Ernst-Walter Sequential quantum logic. 84j:03135
- Stairs, Allen Discussion: quantum logic and the Lüders rule. 84i:03114
- Takeuti, Gaisi Quantum set theory. 84j:03136
- Vujosević, Slobodan See Kron, Aleksander; et al., 84j:03130
- Zecca, Antonio Products of logics. 84b:03145

secondary classifications:

- Aerts, Dirk Description of many separated physical entities without the paradoxes encountered in quantum mechanics. (84b:81006)
- Banal, Miklós Propositional systems in field theories and lattice-valued quantum logic. (84m:81032)
- A new approach to quantum field theory and a spacetime quantization. (84b:81092a)
- Errata-corrige: "A new approach to quantum field theory and a spacetime quantization". (84b:81092b)
- Beltrametti, Enrico G. (with Cassinelli, G.) On the nonunique decomposability of quantum mixtures. (See 84i:03005)
- See also Current issues in quantum logic, (84i:03005)
- Brabec, Jiří (with Pták, Pavel) On compatibility in quantum logics. (84b:81009)
- Brown, James Robert The miracle of science. (84i:03013)
- Bub, Jeffrey What does quantum logic explain? (84j:81014)
- Cassinelli, G. See Beltrametti, Enrico G., (See 84i:03005)
- Cegła, Wojciech Causal logic of Minkowski space. (84j:83007)
- Cooke, Roger M. (with Hilgevoord, J.) A new approach to equivalence in quantum logic. (84j:81015)
- Dalla Chiara Scabia, Maria Luisa What have logicians and physicists learned from the "logics of empirical sciences"? (Italian) (84b:03055)
- Drechsel, Paul ★Traditional logic and quantum logic. (84g:03032)
- Eberhard, Philippe H. Constraints of determinism and of Bell's inequalities are not equivalent. (84m:81028c)
- Fine, Arthur Comments on the significance of Bell's theorem. (84m:81028d)
- van Fraassen, Basiliaan C. The Charybdis of realism: epistemological implications of Bell's inequality. (84c:81006)
- See also Current issues in quantum logic, (84i:03005)
- (Gibbins, Peter) See Jammer, Max, (84f:81008)
- Gudder, Stanley P. Representations of Baer *-semigroups and quantum logics in Hilbert space. (84b:81017)

- Havrdá, Jan** Gram-Schmidt's orthogonalization based on the concept of generalized orthogonality. (Czech summary) (84d:06011)
- Hellman, Geoffrey** Einstein and Bell: strengthening the case for microphysical randomness. (84d:81012a)
- Stochastic Einstein-locality and the Bell theories. (84d:81012b)
- Hilgevoord, J.** See **Cooke, Roger M.**, (84j:81015)
- Jammer, Max** A note on Peter Gibbins': "A note on quantum logic and the uncertainty principle" [Philos. Sci. 48 (1981), no. 1, 122-126; MR 83b:81018]. (84f:81008)
- Kalmbach, Gudrun** The Hilbert space model of orthomodular lattices. (See 84j:06001)
- Orthomodulare Verbände. [Orthomodular lattices] (84f:06001)
- Länger, Helmut** A groupoid-theoretic approach to axiomatic quantum mechanics. (84d:81018)
- Marlow, A. R.** Space-time structure from quantum logic. (See 84i:03005)
- Merrin, N. D.** Pair distributions and conditional independence: some hints about the structure of strange quantum correlations. (84m:81025)
- Mielnik, Bogdan** Motion and form. (See 84i:03005)
- Moldauer, P. A.** Comment on: "Bell's theorem as a nonlocality property of quantum theory" [Phys. Rev. Lett. 49 (1982), no. 20, 1470-1474] by H. P. Stapp. (84m:81028b)
- Moroz, B. Z.** Reflections on quantum logic. (84i:81009)
- Mukherjee, M. K.** A note on the characterization of orthogonality and compatibility of elements of a quantum logic. (84b:81009)
- Navara, Mirko** (with Pták, Pavel) Two-valued measures on σ -classes. (Russian and Czech summaries) (84m:28006)
- Neubrunn, Tibor** Compatibility in logics and product measurability. (See 84m:58002)
- Orlov, Yu. F.** A quantum model of doubt. (84d:03024)
- Pták, Pavel** (with Rogalewicz, Vladimir) Measures on orthomodular partially ordered sets. (84f:06015)
- Logics with given centers and state spaces. (84f:06016)
- See also **Brabec, Jiří**, (84d:81009) and **Navara, Mirko**, (84m:28006)
- Pulmannová, Sylvia** Individual ergodic theorem on a logic. (Russian summary) (84f:81010)
- Coupling of quantum logics. (84d:81020)
- Pykacz, J.** Affine Maczyński logics on compact convex sets of states. (84m:81034)
- Riečan, Beloslav** Two notes on the individual ergodic theorem. (See 84m:58002)
- Rogalewicz, Vladimir** See **Pták, Pavel**, (84f:06015)
- Stapp, Henry P.** Bell's theorem as a nonlocality property of quantum theory. (84m:81028a)
- See also **Moldauer, P. A.**, (84m:81028b)
- Sutherland, Roderick I.** On Kochen and Specker's impossibility proof. (Italian and Russian summaries) (84c:81007)
- Teller, Paul** Quantum physics, the identity of indiscernibles, and some unanswered questions. (84m:81029)
- The projection postulate as a fortuitous approximation. (84m:81030)
- (Turchin, Valentin F.) See **Orlov, Yu. F.**, (84d:03024)
- Yanase, M. M.** Comment on Machida-Namiki-Araki theory. (84i:81008)
- Current issues in quantum logic** ★ Current issues in quantum logic. (84i:03005)
- Erice** ★ Current issues in quantum logic. (84i:03005)
- Workshop:**
- Quantum logic ★ Current issues in quantum logic. (84i:03005)

03G15 Cylindric and polyadic algebras; relation algebras

- Andréka, Hajnal** See **Henkin, Leon**, et al., 84a:03078
- Comer, Stephen D.** A new foundation for the theory of relations. 84g:03104
- Frenczi, M.** Measures on cylindric algebras. 84m:03097
- Measures on cylindric algebras. 84d:03146
- Georgescu, George** A representation theorem for polyadic Heyting algebras. 84d:03147
- Henkin, Leon** (with Monk, J. Donald; Tarski, Alfred; Andréka, Hajnal; Németi, István) ★ Cylindric set algebras. 84a:03078
- Larson, Jean A.** The number of one-generated diagonal-free cylindric set algebras of finite dimension greater than two. 84d:03148
- Maddux, Roger** Some varieties containing relation algebras. 84a:03079
- Monk, J. Donald** See **Henkin, Leon**, et al., 84a:03078
- Németi, István** See **Henkin, Leon**, et al., 84a:03078
- Tarski, Alfred** See **Henkin, Leon**, et al., 84a:03078

secondary classifications:

- Berghammer, R.** (with Schmidt, Gunther) Discrete ordering relations. (84c:06002)
- Comer, Stephen D.** Boolean combinations of monadic formulas. (84m:03046)
- Feldman, Norman** Axiomatization of polynomial substitution algebras. (84b:08001)
- Jönsson, Bjarni** Varieties of relation algebras. (84g:08023)
- Schmidt, Gunther** See **Berghammer, R.**, (84c:06002)
- Schönfeld, Wolfgang** ★ Gleichungen in der Algebra der binären Relationen. (German) [Equations in the algebra of binary relations] (84c:08037)

03G20 Łukasiewicz and Post algebras

- Bairamov, R. A.** Some new results in the theory of function algebras of finite-valued logics. 84c:03105
- Hendry, Herbert E.** Minimally incomplete sets of Łukasiewiczian truth functions. 84d:03083
- Strazdiņš, I.** On fundamental transformation groups in the algebra of logic. 84g:03105

secondary classifications:

- Cardoso, Jayme Machado** (with Katsumi Miyaoka, Florinda) ★ Álgebras de Post em 3-ânios unitários. (Portuguese) [Post algebras in unitary 3-rings] (84m:06017)
- Chakraborty, B. C.** Algebraic representations of n -valued logics, n being prime. (84j:03054)

- Cignoli, Roberto** (with de Gallego, Marta S.) Dualities for some De Morgan algebras with operators and Łukasiewicz algebras. (84f:06020)
- de Gallego, Marta S.** See **Cignoli, Roberto**, (84f:06020)
- Iturrioz, Luisa** Symmetrical Heyting algebras with operators. (84m:06018)
- Katsumi Miyaoka, Florinda** See **Cardoso, Jayme Machado**, (84m:06017)
- Loureiro, Isabel** Prime spectrum of a tetravalent modal algebra. (84m:06019)
- Skordev, D. G.** Imbedding of iterative Post algebras in semigroups. (Russian) (84i:06012)
- Yaqub, Fawzi M.** Representation of Post L -algebras by rings of sets. (84h:06014)

03G25 Other algebras related to logic

- Bellissima, Fabio** Atoms in modal algebras. (Italian) (See 84d:03006)
- Grigoliya, R. Sh.** Projective algebras with conjugate closures. Projective Skolem algebras. (Russian) 84m:03098
- Free S_4 -algebras with a finite number of generators. (Russian) 84m:03099
- Kabziński, Jacek K.** Basic properties of the equivalence. 84h:03141
- Malatesta, Michele** On the meaning of the principles of identity, noncontradiction, and excluded middle. (Italian) (See 84d:03006)
- Montagna, Franco** The well-founded algebras. 84f:03055
- Rybakov, V. V.** Bases of quasi-identities of finite modal algebras. (Russian) 84j:03137
- Sallantin, Jean** An approach of an observation theory. (See 84h:92002)
- Simi, Giulia** Premodal algebra. I. A class of algebras linked to the introduction of a probability operator. (Italian. English summary) 84a:03080a
- Premodal algebra. II. The variety of premodal algebras. (Italian. English summary) 84d:03080b
- Tošić, Ratko** Types of bases for a modification of the algebra of logic. (Russian. Serbo-Croatian summary) 84c:03077
- Urquhart, Alasdair** Distributive lattices with a dual homomorphic operation. II. 84j:03138

secondary classifications:

- Abashidze, M. A.** Some properties of Magari algebras. (Russian) (84j:06017)
- Ahmad, Bashir** A note on prime dual ideals in Tanaka algebras. (84g:06017)
- Dual ideals in BCK-algebras. I. (84g:06018)
- Blyth, T. S.** (with Varlet, Jules) On a common abstraction of De Morgan algebras and Stone algebras. (84j:06013)
- Brabec, Jiří** On some mappings generating vector L -measures. (Czech summary) (84c:28012)
- Cornish, William H.** A minimal equational base for commutative BCK-algebras. (84f:06021)
- Dyrda, Kazimiera** Some remarks on WMV-algebras. (84d:06013)
- Dižbiak, Wiesław** On finite approximability of ψ -intermediate logics. (84d:03079)
- Eda, Katsuya** Completions and coproducts of Heyting algebras. (84h:06013)
- van Emde Boas, Peter** See **Janssen, Theo M. V.**, (84j:03064)
- Esteva, Francesc** On the representation of De Morgan algebras by fuzzy sets. (Catalan. English summary) (See 84i:03003)
- Feldman, Norman** Axiomatization of polynomial substitution algebras. (84b:08001)
- Idziak, Paweł M.** A minimal equational base for certain varieties of BCK-algebras. (84c:06015)
- On varieties of BCK-algebras. (84c:06016)
- Isbell, John R.** Generating the algebraic theory of $C(X)$. (84c:08004)
- Iséki, Kiyoshi** Some remarks on BCK-algebras with condition (S). (84m:06020)
- Janssen, Theo M. V.** (with van Emde Boas, Peter) Some observations on compositional semantics. (84j:03064)
- Komori, Yuichi** The variety generated by BCC-algebras is finitely based. (84g:06019)
- Krzysiek, Piotr S.** Commutative BCK-algebras do not enjoy the interpolation property. (84d:06014)
- Lugowski, Herbert** Über die Identitäten der Turing-Algebra. I. (English and Russian summaries) [On the identities of the Turing algebra. I] (84d:03108a)
- Über die Identitäten der Turing-Algebra. II. (English and Russian summaries) [On the identities of the Turing algebra. II] (84d:03108b)
- Maddux, Roger** Some varieties containing relation algebras. (84a:03079)
- Meskh, V. Yu.** A variety of Heyting algebras with regular involution. (Russian) (84j:06012)
- Monteiro, Luiz** M -álgebras de Kleene. [Kleene M -algebras] (84j:06014)
- Palasinski, Marek** On a space of prime ideals of a BCK-algebra. (84g:06020)
- Decomposition of ideals in certain BCK-algebras. (84g:06021)
- Representation theorem for commutative BCK-algebras. (84j:06016)
- On a problem on BCI-algebras. (84d:06015)
- Pratt, Vaughan R.** Dynamic logic. (84c:68014)
- Rautenberg, Wolfgang** 2-element matrices. (84m:03035)
- Sokolov, N. A.** Optimal determination of monotone functions of the algebra of logic. (Russian) (84j:94041)
- Varlet, Jules** Relative De Morgan lattices. (84j:06015)
- See also **Blyth, T. S.**, (84j:06013)
- Vrancken-Mawet, L.** Le lattis des sous-algèbres d'une algèbre de Heyting finie. (English summary) [The sublattice of a finite Heyting algebra] (84c:06014)
- Wroński, Andrzej** BCK-algebras do not form a variety. (84c:06015)
- Reflections and distensions of BCK-algebras. (84c:06016)
- Zarębski, W.** A dual space characterization of P_1 - and P_2 -lattices of order ω^+ . (84d:06012)

03G30 Categorical logic, topoi [See also 18B25.]

- Berta, Claudio** (with Meloni, Giancarlo) Regular elementary-existential doctrines. (Italian) (See 84d:03006)
- Blass, Andreas** (with Ščedrov, Andrej) Boolean classifying topoi. 84c:03078
- (Bochvar, D. A.) See **Goldblatt, R.**, 84m:03100
- Daputo, Carlo** Interpretation in an elementary topos. (Italian summary) 84f:03056
- Goldblatt, R.** ★ Topoi. (Russian) [Topoi] 84m:03100

- (Grishin, V. N.) See Goldblatt, R., 84m:03100
 Hyland, J. M. E. The effective topos. 84m:03101
 Meloni, Giancarlo See Berta, Claudio, (See 84c:03006)
 Möbus, Axel Syntactical theory of functors. 84a:03081
 Moerdijk, Ieke Gluing topoi and higher order disjunction and existence. 84c:03149
 Equational classes of toposes. 84g:03106
 Mulry, Philip S. Generalized Banach-Mazur functionals in the topos of recursive sets. 84c:03079
 Negoita, Constantin Virgil Fuzzy sets in topoi. 84c:03080
 Pitts, A. M. Fuzzy sets do not form a topos. 84c:03081
 Ponasse, D. Some remarks on the category $\text{Fuz}(H)$ of M. Eytan. 84c:03082
 Ščedrov, Andrej See Blass, Andreas, 84c:03078
 Servi, Mario Categories and sets. (Italian) (See 84c:03006)
 (Shokurov, V. V.) See Goldblatt, R., 84m:03100
 Uesu, Tadashi Intuitionistic theories and toposes. 84f:03057

secondary classifications:

- Acuña-Ortega, Osvaldo Tertium non datur in a topos of finite sets. (Spanish. English summary) (84a:18005a)
 On a characterization of toposes of finite cardinals. (Spanish. English summary) (84a:18005b)
 A characterization of k -finite decidable objects. (Spanish. English summary) (84f:18007)
 Internally projective objects and equivalence relations. (Spanish. English summary) (84f:18008)
 Adelman, M. (with Johnstone, Peter T.) Serre classes for toposes. (84a:18018)
 Bell, John L. Category theory and the foundations of mathematics. (84c:00012)
 Blass, Andreas (with Ščedrov, Andrej) Classifying topoi and finite forcing. (84g:03035)
 Cohomology detects failures of the axiom of choice. (84h:03116)
 Bucur, Ionel ★Capitole speciale de algebră. (Romanian) [Special chapters of algebra] (84c:14001)
 Bunge, Marta On the transfer of an abstract nullstellensatz. (84c:03074)
 Buszkowski, Wojciech Some decision problems in the theory of syntactic categories. (84m:03014)
 Cerruti, Umberto Graphs and fuzzy graphs. (84f:05078)
 (Galburá, Gh.) See Bucur, Ionel, (84c:14001)
 Grayson, Robin J. Concepts of general topology in constructive mathematics and in sheaves. II. (84c:03102)
 A correction to: "Concepts of general topology in constructive mathematics and in sheaves" [Ann. Math. Logic 20 (1981), no. 1, 1-41; MR 82g:03105]. (84d:03075)
 Guitart, René (with Lair, C.) Calcul syntaxique des modèles et calcul des formules internes. [Syntactic calculus of models and calculus of internal formulas] (84h:18012)
 From where do figurative algebras come? (84f:18011)
 Hayashi, Susumu On set theories in toposes. (84h:18002)
 Huwig, H. Ein Modell des $P=NP$ -Problems mit einer positiven Lösung. (English summary) [A model of the $P=NP$ -problem with a positive solution] (84f:03037)
 Isbell, John R. Generating the algebraic theory of $C(X)$. (84c:08004)
 Johnstone, Peter T. Tychonoff's theorem without the axiom of choice. (84h:03117)
 Quotients of decidable objects in a topos. (84h:18006)
 See also Adelman, M., (84a:18018)
 Kennison, John F. Separable algebraic closure in a topos. (84h:18007)
 Kurata, Reijiro Foundations of topoi. I. Topoi in logic. (Japanese) (84m:18006)
 Lair, C. See Guitart, René, (84h:18012)
 Lambek, J. (with Scott, P. J.) Algebraic aspects of topos theory. (84c:18005)
 Lavendhomme, R. (with Lucas, Thierry Eugène) A note on intuitionistic models of ZF. (84f:03033)
 Lucas, Thierry Eugène See Lavendhomme, R., (84f:03033)
 (Onicescu, Octav) See Bucur, Ionel, (84c:14001)
 Penon, J. Théories de catégories. [Category theories] (84g:18021)
 Pfender, M. (with Reiter, Reimund; Sartorius, M.) Constructive arithmetics. (84d:18003)
 Radu, Alexandru Gh. ★Teoria toposurilor. Vol. II. (Romanian) [Theory of topos. Vol. II] (84g:18014)
 Reiter, Reimund See Pfender, M.; et al., (84d:18003)
 Rosenthal, Kimmo I. Quotient systems in Grothendieck topoi. (84m:18007)
 Rosolini, Giuseppe Iterations of Boolean extensions. (Italian) (See 84c:03006)
 Sartorius, M. See Pfender, M.; et al., (84d:18003)
 Ščedrov, Andrej See Blass, Andreas, (84g:03035)
 Scott, P. J. See Lambek, J., (84c:18005)
 Skala, Heinz J. Modelling vagueness. (84m:03072)
 Velinov, Y. P. Polycategories and strict monoidal categories. I. (Russian and Bulgarian summaries) (84f:18014)

03G99 None of the above, but in this section

- Negru, I. S. Algebraic properties of the lattice of Post classes and their many-valued generalizations. (Russian) 84m:03102
 Torrents Torrell, Antoni The general deduction principle. (Catalan. English summary) (See 84c:03003)

03Hxx Nonstandard models [See also 03C62.]

- Hrbáček, Karel Axiomatic foundations for nonstandard analysis. 84b:03064

secondary classifications:

- (Hurd, Albert Emerson) See Nonstandard analysis—recent developments, (84c:03005)
 Nonstandard analysis—recent developments ★Nonstandard analysis—recent developments. (84c:03005)

Symposium:

- Victoria, Nonstandard Analysis ★Nonstandard analysis—recent developments. (84c:03005)
 Victoria, B.C. ★Nonstandard analysis—recent developments. (84c:03005)

03H05 Infinitesimal analysis in pure mathematics [See also 26E35, 30G10, 46Q05, 54J05.]

- Cutland, Nigel Infinitesimal methods in measure theory, probability theory and stochastic analysis. 84j:03139e
 Fisher, Dawn Extending functions to infinitesimals of finite order. 84f:03058
 Hatcher, William S. Clone embeddings and the hyperreals. 84m:03103
 Hoskins, Roy Frank Infinitesimals, nonstandard analysis and generalised functions. 84j:03139d
 Ingleton, A. W. An introduction to nonstandard analysis. 84j:03139a
 Kawai, Toru Axiom systems of nonstandard set theory. 84j:03140
 Lolli, Gabriel Some applications of compactness. (Italian. English summary) 84i:03115
 Magajna, Bojan Infinitesimals. (Slovenian. English summary) 84i:03116
 Maravall Casesnoves, Dario Attempt at a theory of the infinitely large and the infinitely small, certain and random, and the laws of large numbers. (Spanish. English summary) 84h:03142
 Reeb, Georges La mathématique non standard vieille de soixante ans? [Nonstandard mathematics sixty years old?] 84h:03085
 Richter, Michael M. ★Ideale Punkte, Monaden und Nichtstandard-Methoden. (German) [Ideal points, monads and nonstandard methods] 84g:03107
 Rogers, Leo Infinitesimals, continuity and meaning. 84j:03139b
 Tall, David Elementary axioms and pictures for infinitesimal calculus. 84j:03139c
 Wang, Shu Tang A generalized number system and its applications. I. (Chinese. English summary) 84j:03141

secondary classifications:

- Barth, E. M. Finite debates about "the infinite". (84c:03008)
 Benoit, Eric Les canards de \mathbb{R} . (English summary) [The "canards" of \mathbb{R}] (84c:58047)
 Cartier, Pierre Perturbations singulières des équations différentielles ordinaires et analyse non-standard. [Singular perturbations of ordinary differential equations and nonstandard analysis] (84i:34072)
 Chen, Mu Fa (with Cheng, Han Sheng) Applications of ωB -equations in problems of Q -processes with a single instantaneous state. (Chinese. English summary) (84c:60094)
 Cheng, Han Sheng See Chen, Mu Fa, (84c:60094)
 Coyle, D. G. (with Szabo, M. E.) Monadic properties of uniformities. (84h:54047)
 Čuda, Karel An elimination of the predicate "to be a standard member" in nonstandard models of arithmetic. (84g:03106)
 Cutland, Nigel Internal controls and relaxed controls. (84i:49019)
 Damjanov, Bl. P. See Khristov, Khristo Ya., (84c:46038)
 Diener, Marc (with Poston, Tim) On the perfect delay convention or the revolt of the slaved variables. (See 84b:00033)
 Goze, Michel Perturbations sur une variété algébrique; application à l'étude locale de la variété des lois d'algèbres de Lie sur \mathbb{C}^n . (English summary) [Perturbations on an algebraic variety; application to the variety of Lie algebra structures] (84h:14002)
 Helms, L. L. Hyperfiniteness spin models. (84h:60171)
 Henson, C. Ward (with Moore, L. C., Jr.) The Banach spaces $\ell_p(n)$ for large p and n . (84g:46026)
 Ivanov, V. K. Multiplication of distributions that have point singularities. (Russian) (84h:46040)
 Kamae, Tetsuro A simple proof of the ergodic theorem using nonstandard analysis. (84i:28019)
 Katznelson, Yitzhak (with Weiss, Benjamin) A simple proof of some ergodic theorems. (84i:28020)
 Khristov, Khristo Ya. (with Damjanov, Bl. P.) Changing of the independent variable in the theory of asymptotic functions. (84c:46038)
 Kusraev, A. G. General formulas of disintegration. (Russian) (84j:47106)
 Laugwitz, Detlef Die Nichtstandard-Analyse: eine Wiederaufnahme der Ideen und Methoden von Leibniz und Euler. [Nonstandard analysis: a revival of the ideas and methods of Leibniz and Euler] (See 84m:01021)
 Ω -calculus as a generalization of field extension—an alternative approach to nonstandard analysis. (84h:26024)
 Li, Ya Qing The products of generalized functions x_+^λ and x_-^λ . (Chinese. English summary) (84a:46091a)
 Products of singular generalized functions. (Chinese) (84a:46091b)
 Products of x_+^λ and x_-^λ . (84a:46091c)
 Lutz, Robert (with Sari, Tewfik) Applications of nonstandard analysis to boundary value problems in singular perturbation theory. (84a:34057)
 Moškoř, Jiří The completion of valued fields and nonstandard models. (84d:12024)
 Moore, L. C., Jr. See Henson, C. Ward, (84g:46026)
 Pasini, Leonardo Real closure of generalized Hardy fields. (Italian. English summary) (84c:26020)
 Pecora, Louis M. A nonstandard infinite-dimensional vector space approach to Gaussian functional measures. (84i:60054)
 Poston, Tim See Diener, Marc, (See 84b:00033)
 Potthoff, Klaus ★Einführung in die Modelltheorie und ihre Anwendungen. (German) [Introduction to model theory and its applications] (84c:03001)
 Rašković, Miodrag Measure and integration in the alternative set theory. (84h:03126)
 Reeb, Georges Analyse non standard et théorie du moiré. [Nonstandard analysis and the theory of moiré] (84a:58063)
 Richter, Michael M. Variationen des Endlichkeitsbegriffes und Perspektiven für mögliche Anwendungen. [Variations on the concept of finiteness and perspectives for potential applications] (See 84j:90005)
 Sari, Tewfik See Lutz, Robert, (84a:34057)
 Sloan, Alan D. The strong convergence of Schrödinger propagators. (84c:47045)

- Stroyan, K. D. Infinitesimal analysis of ℓ^∞ in its Mackey topology. (84m:46013)
 Szabo, M. E. See Coyle, D. G., (84h:54047)
 Tacon, D. G. Generalized semi-Fredholm transformations. (84d:47015)
 Todorov, T. D. Quasi-extended asymptotic functions. (Russian summary) (84a:46085)
 Wang, Jin Ru A mathematical interpretation of the Dirac δ function. (84c:46041)
 Weiss, Benjamin See Katznelson, Yitzhak, (84c:28020)
 Weissauer, Rainer Der Hilbertsche Irreduzibilitätssatz. [Hilbert's irreducibility theorem] (84c:12020)
 Živaljević, Rade A Loeb measure approach to the Riesz representation theorem. (84h:28020)

03H10 Other applications of infinitesimal analysis

- Woźniak, Czesław Nonstandard analysis in Newtonian mechanics of a particle. (Polish. English and Russian summaries) (84c:03083)
 On the nonstandard analysis and the interrelation between mechanics of mass-point systems and continuum mechanics. (Russian and Polish summaries) (84h:03143)

secondary classifications:

- Albeverio, Sergio (with Blanchard, Philippe; Høegh-Krohn, Raphael) Some applications of functional integration. (See 84j:81006)
 Blanchard, Philippe See Albeverio, Sergio; et al., (See 84j:81006)
 Høegh-Krohn, Raphael See Albeverio, Sergio; et al., (See 84j:81006)
 Hurd, Albert Emerson Nonstandard analysis and lattice statistical mechanics: a variational principle. (84c:82033)
 Lindström, Tom L. Stochastic integration in hyperfinite-dimensional linear spaces. (84m:60069)
 Moore, Steven M. Nonstandard analysis applied to path integrals and generalized functions. (Italian and Russian summaries) (84a:81011)
 Richter, Michael M. (with Szabo, M. E.) Towards a nonstandard analysis of programs. (84c:68015)
 Szabo, M. E. See Richter, Michael M., (84c:68015)

03H15 Nonstandard models of arithmetic [See also 10N15, 12L15, 13L05.]

- Clote, Peter Weak partition relation, finite games, and independence results in Peano arithmetic. (84h:03144)
 Čuda, Karel An elimination of the predicate "to be a standard member" in nonstandard models of arithmetic. (84g:03108)
 Dimitracopoulos, Constantine See Paris, Jeff B., (84c:03151)
 Kirby, L. A. S. (with McAloon, Kenneth; Murawski, Roman) Indicators, recursive saturation and expandability. (84c:03117)
 Flipping properties in arithmetic. (84c:03084)
 Lü, Qi Ci Concurrent relations and nonstandard models. (Chinese. English summary) (84h:03086)
 McAloon, Kenneth See Kirby, L. A. S.; et al., (84c:03117)
 Mijajlović, Žarko Submodels and definable points in models of Peano arithmetic. (84c:03150)
 Murawski, Roman A simple remark on satisfaction classes, indiscernibles and recursive saturation. (84f:03059)
 Incompleteness of Σ_1^0 definable theories via indicators. (84g:03109)
 See also Kirby, L. A. S.; et al., (84c:03117)
 Paris, Jeff B. A hierarchy of cuts in models of arithmetic. (84c:03085)
 (with Dimitracopoulos, Constantine) A note on the undefinability of cuts. (84c:03151)
 Wilkie, A. J. On core structures for Peano arithmetic. (84j:03142)
 Zhang, Jin Wen A nonstandard model of arithmetic constructed by means of a forcing method. (Chinese. English summary) (84g:03110a)
 A nonstandard model of arithmetic constructed by means of a forcing method. (84g:03110b)

secondary classifications:

- Conway, John Horton ★Über Zahlen und Spiele. (German) [On numbers and games] (84m:03086)
 Dimitracopoulos, Constantine See Paris, Jeff B., (84d:03041)
 Kirby, L. A. S. La méthode des indicatrices et le théorème d'incomplétude. [The method of indicators and the incompleteness theorem] (84d:03040)
 Kolata, Gina Does Gödel's theorem matter to mathematics? (84m:03089)
 Kotlarski, Henryk (with Krajewski, Stanisław; Lachlan, A. H.) Construction of satisfaction classes for nonstandard models. (84c:03066a)
 On elementary cuts in models of arithmetic. (84f:03031)
 Krajewski, Stanisław See Kotlarski, Henryk; et al., (84c:03066a)
 (Kunisch, Brigitte) See Conway, John Horton, (84m:03086)
 Lachlan, A. H. Full satisfaction classes and recursive saturation. (84c:03066b)
 See also Kotlarski, Henryk; et al., (84c:03066a)
 McAloon, Kenneth On the complexity of models of arithmetic. (84h:03084)
 Paris, Jeff B. (with Dimitracopoulos, Constantine) Truth definitions for Δ_0 formulae. (84d:03041)
 Richter, Michael M. (with Szabo, M. E.) Towards a nonstandard analysis of programs. (84c:68015)
 Smoryński, C. Addendum: "Recursively saturated nonstandard models of arithmetic" [J. Symbolic Logic 46 (1981), no. 2, 259–286; MR 82i:03045]. (84h:03054)
 Sochor, A. (with Vencovská, A.) Indiscernibles in the alternative set theory. (84h:03125)
 Szabo, M. E. See Richter, Michael M., (84c:68015)
 von der Twer, T. On the strength of several versions of Dirichlet's ("pigeon-hole") principle in the sense of first-order logic. (84c:03072)
 Vencovská, A. See Sochor, A., (84h:03125)

- Xu, Li Zhi (with Zhu, Wu Jia; Yuan, Xiang Wan; Zheng, Yu Xin) Antinomies and the foundational problem of mathematics. I. (Chinese. English summary) (84g:03016a)
 Yuan, Xiang Wan See Xu, Li Zhi; et al., (84g:03016a)
 Zheng, Yu Xin See Xu, Li Zhi; et al., (84g:03016a)
 Zhu, Wu Jia See Xu, Li Zhi; et al., (84g:03016a)

03H20 Other nonstandard models [See also 54J05.]

- Kamo, Shizuo Nonstandard real number systems with regular gaps. (84f:03060)

secondary classifications:

- Lü, Qi Ci Concurrent relations and nonstandard models. (Chinese. English summary) (84h:03086)
 Roitman, Judy Nonisomorphic hyper-real fields from nonisomorphic ultrapowers. (84a:54030)
 Sochor, A. (with Vopěnka, P.) Shiftings of the horizon. (84h:03127)
 Vopěnka, P. See Sochor, A., (84h:03127)

03H99 None of the above, but in this section

secondary classifications:

- (Dragalin, A. G.) See Vopěnka, P., (84h:03126)
 Resl, M. (with Sochor, A.) Provability in the alternative set theory. (84h:03123)
 Sochor, A. (with Vopěnka, P.) Ultrafilters of sets. (84h:03124)
 (with Vencovská, A.) Indiscernibles in the alternative set theory. (84h:03125)
 See also Resl, M., (84h:03123)
 Vencovská, A. See Sochor, A., (84h:03125)
 Vopěnka, P. ★Математика в альтернативной теории множеств. (Russian) [Mathematics in the alternative set theory] (84h:03126)
 See also Sochor, A., (84h:03124)

04–XX SET THEORY

04–01 Elementary exposition, textbooks

- Artmann, Benno ★Der Zahlbegriff. (German) [The number concept] (84f:04001)
 Hamilton, A. G. ★Numbers, sets and axioms. (84d:04001)
 Milner, E. C. Hausdorff's paradox—or two for one. (84h:04001)

secondary classifications:

- Cools, M. See Kaufmann, Arnold; et al., (84c:03064b)
 (Dragalin, A. G.) See Vopěnka, P., (84h:03126)
 Dubois, T. See Kaufmann, Arnold; et al., (84c:03064b)
 Erne, Marcel ★Einführung in die Ordnungstheorie. (German) [Introduction to the theory of order] (84h:06001)
 Gardiner, A. ★Infinite processes. (84d:00003)
 (Ibarra Aispuro, Fernando) See Kaufmann, Arnold, (84c:03064a) and (84c:03064b)
 Kaufmann, Arnold ★Introducción a la teoría de los subconjuntos borrosos para el uso de ingenieros. Tomo I. (Spanish) [Introduction to the theory of fuzzy subsets for the use of engineers. Vol. I] (84c:03064a)
 (with Dubois, T.; Cools, M.) ★Ejercicios con soluciones sobre la teoría de los subconjuntos borrosos. (Spanish) [Exercises with solutions in the theory of fuzzy subsets] (84c:03064b)
 Marek, Wiktor (with Onyszkiewicz, Janusz) ★Elements of logic and foundations of mathematics in problems. (84h:03001)
 Onyszkiewicz, Janusz See Marek, Wiktor, (84h:03001)
 Schmidt, Garfield C. Nonreflexive, well founded sets and natural numbers. (84h:03025)
 (Tarantowicz-Marek, Elzbieta) See Marek, Wiktor; et al., (84h:03001)
 Vopěnka, P. ★Математика в альтернативной теории множеств. (Russian) [Mathematics in the alternative set theory] (84h:03126)
 (Zadeh, L. A.) See Kaufmann, Arnold, (84c:03064a)

04–02 Advanced exposition (research surveys, monographs, etc.)

- Comfort, W. Wistar (with Negreponitis, Stylianos A.) ★Chain conditions in topology. (84c:04002)
 Kharazishvili, A. B. ★Элементы комбинаторной теории бесконечных множеств. (Russian) [Elements of the combinatorial theory of infinite sets] (84c:04001)
 Negreponitis, Stylianos A. See Comfort, W. Wistar, (84c:04002)

04–03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (Cantor, Georg) See Schaefer, Helmut H., (84a:01029)
 Cassinet, Jean L'école italienne et les mises en évidence de l'utilisation d'un principe de choix dans les démonstrations entre 1890 et 1902. [The Italian school and the first signs of the use of a principle of choice in proofs between 1890 and 1902] (84h:01034)
 Dauben, Joseph W. Peirce's place in mathematics. (French and German summaries) (84k:01035)
 (Dedekind, Richard) See Edwards, Harold M., (84d:01028)
 Edwards, Harold M. Dedekind's invention of ideals. (84d:01028)
 Putnam, Hilary Peirce the logician. (French and German summaries) (84h:01032)
 Schaefer, Helmut H. Georg Cantor and das Unendliche in der Mathematik. [Georg Cantor and the infinite in mathematics] (84a:01029)

Schubring, Gert Ansätze zur Begründung theoretischer Terme in der Mathematik—die Theorie des Unendlichen bei Johann Schultz. (English and French summaries) [Beginnings of the foundation of theoretical terms in mathematics—the theory of the infinite of Johann Schultz] (84f:01019)

(Schultz, Johann) See Schubring, Gert. (84f:01019)

Xu, Li Zhi (with Zhu, Wu Jia; Yuan, Xiang Wan; Zheng, Yu Xin) Antinomies and the foundational problem of mathematics. II. (Chinese. English summary) (84g:03016b)

Yuan, Xiang Wan See Xu, Li Zhi; et al., (84g:03016b)

Zheng, Yu Xin See Xu, Li Zhi; et al., (84g:03016b)

Zhu, Wu Jia See Xu, Li Zhi; et al., (84g:03016b)

04–04 Explicit machine computation and programs (not the theory of computation or programming)

04–06 Proceedings, conferences, etc.

04A05 Relations, functions [See also 08A02.]

Chimev, K. N. First-order variables. (Bulgarian. English and Russian summaries) (84h:04001)

Separable sets of arguments of functions. (Bulgarian. English and Russian summaries) (84h:04002)

Goetschel, Roy, Jr. See Voxman, William. (84j:04001)

Lin, Da Zheng On nonexistence of some type of one-to-one mapping on $R \times R$ to R . (84b:04001a)

See also Yang, An Zhou. (84b:04001b)

Loper, Gérard Reconstruction d'une S-expansion. [Reconstruction of an S-expansion] (84f:04002)

Šešelja, Branimir (with Ušan, Janez) Structure of generalized equivalences contained in $(2, nA)$ -RT relations. (Serbo-Croatian summary) (84f:04005)

(with Ušan, Janez) On one representation of generalized equivalences. (84f:04004)

See also Ušan, Janez. (84f:04003)

Šik, František Schreier-Zassenhaus theorem for algebras. II. (84b:04003)

Ušan, Janez (with Šešelja, Branimir) Transitive n -ary relations and characterizations of generalized equivalences. (Serbo-Croatian summary) (84f:04003)

See also Šešelja, Branimir. (84f:04004 and 84f:04005)

Voxman, William (with Goetschel, Roy, Jr.) A note on the characterization of the max and min operators. (84j:04001)

Yang, An Zhou Comment: "On nonexistence of some type of one-to-one mapping on $R \times R$ to R " [J. Math. Res. Exposition 2 (1982), no. 1, 23–24; MR 84b:04001a] by D. Z. Lin [Da Zheng Lin]. (Chinese) (84b:04001b)

Yang, Liu Ji Some theorems on the transitive closure of a relation. (Chinese) (84m:04001)

secondary classifications:

(Bednarczyk, Jerzy) See Szmieliew, Wanda. (84i:51002)

Blass, Andreas (with Harary, Frank) Deletion versus alteration in finite structures. (84d:05087)

Both, N. (with Purdea, Ioan) On the compatibility of relations. (84c:08003)

Chao, Chong Yun (with Zhang, Mou Cheng) On the semigroup of fully indecomposable relations. (84m:20062)

Chase, Karen Maximal groups in sandwich semigroups of binary relations. (84a:20064)

Ecsedi-Tóth, P. A theory of finite functions. I. On finite trees associated to certain finite functions. (84i:05044)

Fedorov, Yu. S. Binary relations and topologies on finite sets. (Russian) (84i:54004)

Goralčik, P. (with Hedrlin, Z.; Koubek, V.; Ryšinková, J.) A game of composing binary relations. (French summary) (84i:05010)

(Gupta, Haragauri N.) See Szmieliew, Wanda. (84i:51002)

Harary, Frank See Blass, Andreas. (84d:05087)

Hashimoto, Hiroshi Šepiraj's theorem on fuzzy orderings. (84i:06004)

Hedrlin, Z. See Goralčik, P.; et al., (84i:05010)

Isaev, V. N. See Pogrebnii, V. K., (See 84b:90010)

Kierstead, Henry A. (with Trotter, William T., Jr.) An extremal problem in recursive combinatorics. (84d:06003)

Kim, Ki Hang ★ Boolean matrix theory and applications. (84a:15001)

Koubek, V. See Goralčik, P.; et al., (84i:05010)

Kuz'min, V. B. ★ Построение групповых решений в пространствах четких и нечетких бинарных отношений. (Russian) [Construction of collective decisions in spaces of fuzzy and nonfuzzy binary relations] (84f:92062)

Margush, T. Distances between trees. (84f:06006)

Miller, Gary Glenn Lexicographic products: continuity and completeness. (84j:06002)

Milner, E. C. On the decomposition of partially ordered sets into directed sets. (84c:06004)

Misereque, Didier Problème des mariages et récursivité. [The marriage problem and recursiveness] (84b:03108)

(Moszyńska, Maria) See Szmieliew, Wanda. (84i:51002)

Olivier, Jean-Pierre (with Serrato, Dany) ★ Catégories de Dedekind et correspondances dans les catégories classiques et ailleurs. (French) [Dedekind categories and correspondences in classical categories and elsewhere] (84f:18005)

Pattison, Philippa E. The analysis of semigroups of multirelational systems. (84j:08005b)

Pinus, A. G. Uniqueness of linear extensions of partial orders. (Russian) (84i:06005)

Pogrebnii, V. K. (with Isaev, V. N.) Investigation of a class of covering problems in the design of a computing device. (Russian) (See 84b:90010)

Purdea, Ioan See Both, N., (84c:08003)

(Rota, Gian-Carlo) See Kim, Ki Hang. (84a:15001)

Ryšinková, J. See Goralčik, P.; et al., (84i:05010)

Schönfeld, Wolfgang ★ Gleichungen in der Algebra der binären Relationen. (German) [Equations in the algebra of binary relations] (84c:68037)

Serrato, Dany See Olivier, Jean-Pierre. (84f:18005)

Szmieliew, Wanda On n -ary equivalence relations and their application to geometry. (84i:51002)

Trotter, William T., Jr. See Kierstead, Henry A., (84d:06003)

Warner, M. W. Tolerance nets. (84c:92017)

Żakowski, Wojciech On a concept of rough sets. (84i:03092)

Zhang, Mou Cheng See Chao, Chong Yun. (84m:20062)

04A10 Transfinite numbers

Hickman, John L. A note on Conway multiplication of ordinals. (84f:04006)

An ordinal version of the fundamental law of algebra. (84c:04002)

Kurepa, Djuro On the exponentiation and logarithms of cardinal numbers. (84j:04002)

secondary classifications:

Guitart, René Théorie des bornes. I. [Theory of bounds. I] (84i:03089a)

Théorie des bornes. II. [Theory of bounds. II] (84i:03089b)

Hickman, John L. Automorphisms of medial fields. (84c:12019)

McMichael, Alan A set theory with Frege-Russell cardinal numbers. (84g:03080)

Milner, E. C. On the decomposition of partially ordered sets into directed sets. (84c:06004)

Rosicky, Jiří Théorie des bornes. III. [Theory of bounds. III] (84i:03089c)

Zervos, S. P. On cardinals as transitivity sets of posets with respect to their automorphism groups. (84c:06004)

04A15 Descriptive set theory; Borel classifications, Suslin schemes, etc. [See also 03E15, 28A05, 54H05.]

Kanovei, V. G. A generalization of P. S. Novikov's theorem on cross sections of Borel sets. (Russian) (84h:04003)

Kurepa, Djuro Ensembles ordonnés et ramifiés de points. [Ordered sets and pseudotrees] (84b:04004a)

Sur deux classes d'hypothèses concernant le continu linéaire ou temporel. [On two classes of hypotheses concerning the linear or temporal continuum] (84b:04004b)

Miller, Arnold W. A characterization of the least cardinal for which the Baire category theorem fails. (84b:04002)

Staiger, Ludwig Measure and category in X^ω . (84j:04003)

secondary classifications:

Brown, J. B. (with Cox, G. V.) Classical theory of totally imperfect spaces. (84g:54021)

Cox, G. V. See Brown, J. B., (84g:54021)

Demuth, Oswald Borel types of some classes of arithmetical real numbers. (Russian) (84c:03104)

Le Gac, Barthélemy Some properties of Borel subgroups of real numbers. (84m:28022)

Louveau, Alain (with Simpson, Stephen G.) A separable image theorem for Ramsey mappings. (Russian summary) (84g:04002)

Mauldin, R. Daniel Measurable representations of preference orders. (84a:90008)

Simpson, Stephen G. See Louveau, Alain. (84g:04002)

04A20 Combinatorial [See also 05A05;] filters

Argyros, Spiros A. (with Kalamidas, N.) Property $k_{\alpha, \alpha}$ on spaces with strictly positive measures. (84b:04001)

Balcar, Bohuslav (with Simon, Petr) Strong decomposability of ultrafilters. I. (84d:04002)

Baumgartner, James E. (with Taylor, Alan D.; Wagon, Stanley) Structural properties of ideals. (84f:04007)

Blecher, Pavel M. On a logical problem. (84g:04001)

Butkovičová, E. Ultrafilters without immediate predecessors in Rudin-Frolik order. (84c:04001a)

Gaps in Rudin-Frolik order. (84m:04002)

Erratum: "Ultrafilters without immediate predecessors in Rudin-Frolik order". (84c:04001b)

Chudnovsky, Gregory V. (with Wolfsdorf, Kurt) A theorem on polarised partition relations for singular cardinals. (French summary) (84c:04002)

Cichoń, Jacek (with Porada, Małgorzata) Automorphisms of fields of sets. (Russian summary) (84b:04005)

Combase, Joël An introduction to naive set theory through the notion of normal filter. (See 84b:03006)

Hart, Klaas Pieter Characterizations of \mathbb{R} -embeddable and developable ω_1 -trees. (84c:04004)

Kalamidas, N. See Argyros, Spiros A., (84b:04001)

Kannan, V. A note on a set-theoretic result of Mrowka. (84f:04008)

Louveau, Alain (with Simpson, Stephen G.) A separable image theorem for Ramsey mappings. (Russian summary) (84g:04002)

Michel, Horst Generation of operation-invariant classes of sets. (Russian summary) (84c:04005)

Pelc, Andrzej Solution of a problem of Ulam on countable sequences of sets. (84b:04006)

Porada, Małgorzata See Cichoń, Jacek. (84b:04005)

Price, Roderick A. On a problem of Čech. (84d:04003)

Rosen, Ned I. Weakly Ramsey P points. (84c:04001)

Simon, Petr See Balcar, Bohuslav. (84d:04002)

Simpson, Stephen G. See Louveau, Alain. (84g:04002)

Taylor, Alan D. See Baumgartner, James E.; et al., (84f:04007)

Tuschek, Hans-Peter The Ramsey theorem for additive colourings. (See 84i:03008)

Voigt, Bernd (with Wolfsdorf, Kurt) Ein Zerlegungssatz für $[\kappa]^{<\omega}$. (English summary) [A decomposition theorem for $[\kappa]^{<\omega}$] (84c:04003)

Wagon, Stanley See Baumgartner, James E.; et al., (84f:04007)

Wolfsdorf, Kurt See Chudnovsky, Gregory V., (84c:04002 and Voigt, Bernd. (84c:04003)

Yang, Shou Lian Ultrafilters with chain bases and their applications. (Chinese) (84a:04002)

secondary classifications:

- Ajtai, M. (with Csirmaz, L.; Nagy, Zs.) On a generalization of the game Go-moku. I. (84j:90117a)
- Balcar, Bohuslav (with Simon, Petr) Cardinal invariants in Boolean spaces. (84f:06024)
- Bang, Chang (with Sharp, Henry, Jr.; Winkler, Peter M.) On families of finite sets with bounds on unions and intersections. (84c:05002)
- Bastón, Victor J. Inequalities involving maps of finite sets. (84g:05019)
- A Marica-Schönheim theorem for an infinite sequence of finite sets. (84g:05005)
- Bukovský, L. (with Coplákova, E.) Rapid ultrafilter need not be \mathcal{Q} -point. (84a:03058)
- Carr, Donna M. The minimal normal filter on P_λ . (84h:03109)
- (Chu, Jun Tsu) See Yang, An Zhou, (84j:28003)
- Comfort, W. Wistar (with Negreponis, Stylianos A.) ★Chain conditions in topology. (84k:04002)
- Coplákova, E. See Bukovský, L., (84a:03058)
- Courcelle, Bruno Fundamental properties of infinite trees. (84e:05047)
- Csirmaz, L. (with Nagy, Zs.) On a generalization of the game Go-moku. II. (84j:90117b)
- See also Ajtai, M.; et al., (84j:90117a)
- Dubins, Lester E. The Hausdorff-Banach-Tarski paradox. (Czech) (84a:28011)
- Dynkova, L. L. Conditions for the existence of a system of distinct set representatives. (Russian) (84d:05002)
- Elekes, G. (with Erdős, Paul; Hajnal, A.) On some partition properties of families of sets. (84h:03110)
- Erdős, Paul (with Sós, Vera T.) On Turán-Ramsey type theorems. II. (84j:05081)
- (with Frankl, Peter; Füredi, Zoltán) Families of finite sets in which no set is covered by the union of two others. (84c:05002)
- See also Elekes, G.; et al., (84h:03110)
- Frankl, Peter See Erdős, Paul; et al., (84c:05002)
- Füredi, Zoltán Set-systems with prescribed cardinalities for pairwise intersections. (84d:05003)
- See also Erdős, Paul; et al., (84c:05002)
- Ginsburg, John A note on the cardinality of infinite partially ordered sets. (84m:06002)
- Hajnal, A. See Elekes, G.; et al., (84h:03110)
- Hartman, Egbert Combinatorial theorems on contractive mappings in power sets. (84h:05010)
- Isbell, John R. $N(5, 4; 3) \geq 24$. (84m:05011)
- Kharazishvili, A. B. ★Элементы комбинаторной теории бесконечных множеств. (Russian) [Elements of the combinatorial theory of infinite sets] (84c:04001)
- (Koliš, Ivan) See Dubins, Lester E., (84a:28011)
- Kunen, Kenneth (with Pelletier, Donald H.) On a combinatorial property of Menas related to the partition property for measures on supercompact cardinals. (84c:03091)
- Kurepa, Djuro Ensembles ordonnés et ramifiés de points. [Ordered sets and pseudotrees] (84h:04004a)
- Measure and order. (84h:06003)
- Lifschitz, Vladimir (with Pittel, B. G.) The worst and the most probable performance of a class of set-covering algorithms. (84c:90070)
- Mauldin, R. Daniel One-to-one selections—marriage theorems. (84h:28013)
- van Mill, Jan A remark on the Rudin-Keisler order of ultrafilters. (84h:54023)
- Milner, E. C. On the decomposition of partially ordered sets into directed sets. (84c:06004)
- (with Priky, Karel) The cofinality of a partially ordered set. (84m:06004)
- Nagy, Zs. See Ajtai, M.; et al., (84j:90117a) and Csirmaz, L., (84j:90117b)
- Negreponis, Stylianos A. See Comfort, W. Wistar, (84c:04002)
- Pelletier, Donald H. See Kunen, Kenneth, (84c:03091)
- Pittel, B. G. See Lifschitz, Vladimir, (84c:90070)
- Priky, Karel See Milner, E. C., (84m:06004)
- Protasov, I. V. Charts of subsets and covering and packing problems. (Russian) (84g:05047)
- Pudlak, Pavel (with Rödl, Vojtěch) Partition theorems for systems of finite subsets of integers. (84i:05018)
- Rödl, Vojtěch Note on packing, covering and Turán numbers. (84a:05021)
- See also Pudlak, Pavel, (84i:05018)
- Sharp, Henry, Jr. See Bang, Chang; et al., (84i:05002)
- Simon, Petr See Balcar, Bohuslav, (84f:06024)
- Sós, Vera T. See Erdős, Paul, (84j:05081)
- Todorčević, Stevo Real functions on the family of all well-ordered subsets of a partially ordered set. (84g:06003)
- Vojtáš, Peter Simultaneous strategies and Boolean games of uncountable length. (84f:03054)
- Winkler, Peter M. See Bang, Chang; et al., (84i:05002)
- Yang, An Zhou Comment: "A note on minimal rings and fields" [J. Math. Res. Exposition 2 (1982), no. 3, 1-4; MR 83j:28002] by J. T. Chu. (Chinese) (84j:28003)

04A25 Axiom of choice and related propositions (Zorn's lemma, etc.) [See also 03E25.]

Brunner, Norbert Boxprodukte und Auswahlaxiom. [Box products and axiom of choice] 84g:04003

Sequential compactness and the axiom of choice. 84f:04009

Moroiu, M. On a theorem of Bourbaki. 84e:04004

Strauch, Oto A theorem equivalent to the axiom of choice. (Russian and Slovak summaries) 84b:04003

secondary classifications:

- Ash, C. J. Model-theoretic forms of the axiom of choice. (84m:03068)
- Banaschewski, Bernhard The power of the ultrafilter theorem. (84f:03043)
- Brunner, Norbert Sequential continuity. (84a:03056)
- Dedekind-Endlichkeit und Wohlordenbarkeit. (English summary) [Dedekind finiteness and well-orderability] (84a:03057)

04A30 Continuum hypothesis, generalized continuum hypothesis [See also 03E50, 54A25.]

secondary classifications:

- Kurepa, Djuro Sur deux classes d'hypothèses concernant le continu linéaire ou temporel. [On two classes of hypotheses concerning the linear or temporal continuum] (84h:04004b)
- Sebel'din, A. M. Definability of a torsion-free unreduced abelian group by its group of endomorphisms. (Russian) (84b:20063)

04A99 Miscellaneous topics

- Bereková, Helena The principle of induction in continuum and related methods. (Russian and Slovak summaries) 84d:04004
- Perić, Veselin Solution of a system of set-theoretic equations. (Serbo-Croatian. German summary) 84d:04005
- Zhu, Xu Ding Some problems concerning pansystems analysis of equivalence relations. (Chinese. English summary) 84k:04006

secondary classifications:

- (Aizerman, M. A.) See Kaufmann, Arnold, (84c:03065)
- Cools, M. See Kaufmann, Arnold; et al., (84c:03064b)
- Dubois, T. See Kaufmann, Arnold; et al., (84c:03064b)
- (Ibarra Aispuro, Fernando) See Kaufmann, Arnold, (84c:03064a) and (84c:03064b)
- Kaufmann, Arnold ★Introducción a la teoría de los subconjuntos borrosos para el uso de ingenieros. Tomo I. (Spanish) [Introduction to the theory of fuzzy subsets for the use of engineers. Vol. I] (84c:03064a)
- (with Dubois, T.; Cools, M.) ★Ejercicios con soluciones sobre la teoría de los subconjuntos borrosos. (Spanish) [Exercises with solutions in the theory of fuzzy subsets] (84c:03064b)
- ★Введение в теорию нечетких множеств. (Russian) [Introduction to the theory of fuzzy sets] (84c:03065)
- (Kuz'min, V. B.) See Kaufmann, Arnold, (84c:03065)
- Thron, Reinhard Über das Zutreffen einer Eigenschaft einer Menge auf die Elemente der Potenzmenge. [On the validity of a property of a set for the elements of its power set] (84j:20063)
- (Zadeh, L. A.) See Kaufmann, Arnold, (84c:03064a)

05-XX COMBINATORICS [For finite fields, see 12Cxx.]

secondary classifications:

- Kim, Ki Hang ★Boolean matrix theory and applications. (84a:15001)
- (Rota, Gian-Carlo) See Kim, Ki Hang, (84a:15001)

05-01 Elementary exposition, textbooks

- Barlotti, Adriano Recent developments and applications of combinatorial mathematics. (Italian) 84b:05001
- Halin, Rudolf ★Graphentheorie. II. (German) [Graph theory. II] 84h:05001
- Kopylova, A. N. See Men'shikov, M. V.; et al., 84j:05003
- Lins, Sôstenes ★Princípios de enumeração. (Portuguese) [Principles of enumeration] 84j:05001
- Lipski, Witold, Jr. ★Kombinatoryka dla programistów. (Polish) [Combinatorics for programmers] 84j:05002
- Makarov, Yu. N. See Men'shikov, M. V.; et al., 84j:05003
- Men'shikov, M. V. (with Revyakin, A. M.; Kopylova, A. N.; Makarov, Yu. N.; Stechkin, B. S.) ★Комбинаторный анализ. (Russian) [Combinatorial analysis] 84j:05003
- Revyakin, A. M. See Men'shikov, M. V.; et al., 84j:05003
- (Rybníkov, K. A.) See Men'shikov, M. V.; et al., 84j:05003
- Simon, Imre ★Configurações combinatorias. (Portuguese) [Combinatorial designs] 84j:05004
- Stechkin, B. S. See Men'shikov, M. V.; et al., 84j:05003
- Tallini, Giuseppe ★Geometrie d'incidenza e matroidi. (Italian) [Incidence geometries and matroids] 84m:05001

secondary classifications:

- Bandelow, Christoph ★Einführung in die Cubologie. (German) [Introduction to cubology] (84a:20007a)
- ★Inside Rubik's cube and beyond. (84a:20007b)
- Cvetković, Dragoš M. (with Doob, Michael; Sachs, Horst) ★Spectra of graphs. (84a:05046)
- Doob, Michael See Cvetković, Dragoš M.; et al., (84a:05046)
- Lim, Chong Keang Mathematical designs. I. Tessellations of plane. (84i:05043)
- (Moser, Lucy) See Bandelow, Christoph, (84a:20007b)
- Sachs, Horst See Cvetković, Dragoš M.; et al., (84a:05046)
- (Zehnder-Reitinger, Jeannette) See Bandelow, Christoph, (84a:20007b)

05-02 Advanced exposition (research surveys, monographs, etc.)

- Aigner, Martin ★Комбинаторная теория. (Russian) [Combinatorial theory] 84b:05002
- (Berstel, Jean) See Lothaire, M., 84g:05002
- (Chofrut, Christian) See Lothaire, M., 84g:05002
- (Cori, Robert) See Lothaire, M., 84g:05002
- (Ermakov, V. V.) See Aigner, Martin, 84b:05002
- (Foata, Dominique) See Lothaire, M., 84g:05002
- (Gavrilov, G. P.) See Aigner, Martin, 84b:05002

Goodman, Jacob Eli (with Pollack, Richard) A combinatorial perspective on some problems in geometry. 84b:05003

Goulden, I. P. (with Jackson, D. M.) ★ Combinatorial enumeration. 84m:05002

Hsu, D. Frank ★ Cyclic neofields and combinatorial designs. 84g:05001

Jackson, D. M. See Goulden, I. P., 84m:05002

Jungnickel, Dieter ★ Transversaltheorie. (German) [Transversal theory] 84j:05005

Karonski, Michal A review of random graphs. 84b:05004

Lothaire, M. ★ Combinatorics on words. 84g:05002

(Lyamin, V. N.) See Aigner, Martin, 84b:05002

(Lyndon, Roger C.) See Lothaire, M., 84g:05002

Macdonald, I. G. ★ Symmetric functions and Hall polynomials. 84g:05003

(Perrin, Dominique) See Lothaire, M., 84g:05002

(Pin, Jean-Eric) See Lothaire, M., 84g:05002

(Pirillo, Giuseppe) See Lothaire, M., 84g:05002

Pollack, Richard See Goodman, Jacob Eli, 84b:05003

(Reutenauer, Christophe) See Lothaire, M., 84g:05002

Riordan, John ★ Комбинаторные тождества. (Russian) [Combinatorial identities] 84c:05001

(Rota, Gian-Carlo) See Goulden, I. P.; et al., 84m:05002

(Sakarovitch, Jacques) See Lothaire, M., 84g:05002

(Schützenberger, Marcel-Paul) See Lothaire, M., 84g:05002

(Simon, Imre) See Lothaire, M., 84g:05002

(Zhukov, A. E.) See Riordan, John, 84c:05001

secondary classifications:

Akiyama, Jin (with Harary, Frank) A graph and its complement with specified properties. VII. A survey. (84b:05101b)

Berlekamp, Elwyn R. (with Conway, John Horton; Guy, Richard K.) ★ Winning ways for your mathematical plays. Vol. 1. (84h:90091a)

(with Conway, John Horton; Guy, Richard K.) ★ Winning ways for your mathematical plays. Vol. 2. (84h:90091b)

Boltyanskii, V. G. Combinatorial geometry. (Russian) (84a:52001)

Chinn, P. Z. (with Chvátalová, J.; Dewdney, A. K.; Gibbs, N. E.) The bandwidth problem for graphs and matrices—a survey. (84g:05100)

Chvátalová, J. See Chinn, P. Z.; et al., (84g:05100)

Conway, John Horton See Berlekamp, Elwyn R.; et al., (84h:90091a) and (84h:90091b)

Deuber, W. (with Voigt, Bernd) Der Satz von van der Waerden über arithmetische Progressionen. [The theorem of van der Waerden on arithmetic progressions] (84j:10011)

Dewdney, A. K. See Chinn, P. Z.; et al., (84g:05100)

Erdős, Paul Some of my favourite problems which recently have been solved. (84f:10003)

Gibbs, N. E. See Chinn, P. Z.; et al., (84g:05100)

Guy, Richard K. See Berlekamp, Elwyn R.; et al., (84h:90091a) and (84h:90091b)

Harary, Frank See Akiyama, Jin, (84b:05101b)

Molchanov, V. A. Semigroups of mappings on graphs. (84j:05100)

Proctor, Robert A. Solution of two difficult combinatorial problems with linear algebra. (84f:05002)

Rvachov, V. L. ★ Теория Р-функций и некоторые ее приложения. (Russian) [The theory of R-functions and some of its applications] (84f:65006)

Voigt, Bernd See Deuber, W., (84j:10011)

05-03 Historical (must also be assigned at least one classification number from Section 01)

Barnes, J. A. (with Harary, Frank) Graph theory in network analysis. 84c:05001

Harary, Frank See Barnes, J. A., 84c:05001

Spencer, Joel Ramsey theory and Ramsey theoreticians. 84i:05001

secondary classifications:

Erdős, Paul Personal reminiscences and remarks on the mathematical work of Tibor Gallai. (84c:01073)

(Gallai, Tibor) See Erdős, Paul, (84c:01073)

Harary, Frank A tribute to Frank P. Ramsey, 1903–1930. (84m:01039)

Lenz, Hanfried Aus dem mathematischen Werk von Richard Rado. [From the mathematical work of Richard Rado] (84j:01058)

Luo, Jian Jin The study of the Stirling numbers and the Euler numbers by Li Jenshuo. (Chinese. English summary) (84i:01064)

Mellor, D. H. The eponymous F. P. Ramsey. (84b:01089)

Pernyakov, P. P. P. A. MacMahon and combinatorial analysis. (Ukrainian. Russian summary) (84c:01048)

(Rado, Richard) See Lenz, Hanfried, (84j:01058)

(Ramsey, Frank P.) See Mellor, D. H., (84b:01089) and Harary, Frank, (84m:01039)

Biography: Rado, Richard See Lenz, Hanfried, (84j:01058)

05-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

Chen, Chih-Kang Eric (with Garfinkel, R. S.) The generalized diameter of a graph. (84h:05073)

Eades, Peter (with Foulds, L. R.; Giffin, J.) An efficient heuristic for identifying a maximum weight planar subgraph. (84b:68085)

Finney, D. J. Some enumerations for the 6×6 Latin squares. (84g:05033)

Foulds, L. R. See Eades, Peter; et al., (84b:68085)

Garfinkel, R. S. See Chen, Chih-Kang Eric, (84h:05073)

Giffin, J. See Eades, Peter; et al., (84b:68085)

Hambusch, Susanne E. VLSI algorithms for the connected component problem and its verification problem. (German summary) (84j:68004)

Khvorostov, P. V. See Skorobogatov, V. A., (84k:05058)

Klin, M. Kh. See Zaichenko, V. A., (84j:20036)

Lingas, Andrzej Heuristics for minimum edge length rectangular partitions of rectilinear figures. (See 84b:68003)

Skorobogatov, V. A. (with Khvorostov, P. V.) Analysis of the metric properties of graphs. (Russian) (84k:05058)

Truemper, K. On the efficiency of representability tests for matroids. (84a:68067)

Zaichenko, V. A. (with Klin, M. Kh.) Construction and investigation by computer of some block designs and strongly regular graphs that are invariant with respect to exponentiation of symmetric groups. (Russian) (84j:20036)

05-06 Proceedings, conferences, etc.

(Barlotti, Adriano) See Combinatorics, 84c:05001

(Borowiecki, M.) See Graph theory, 84m:05004

(Casse, L. R. A.) See Combinatorial mathematics, 84m:05003

(Ceccherini, Pier Vittorio) See Combinatorics, 84c:05001

(Hoffman, Frederick) See Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 84c:05002a; 84c:05002b; Proceedings: Southeastern conference on combinatorics, graph theory and computing, 84j:05006a and 84j:05006b

(Jungnickel, Dieter) See Combinatorial theory, 84b:05005

(Kennedy, John W.) See Graph theory, 84m:05004

(Kung, Joseph P. S.) See Young tableaux in combinatorics, invariant theory, and algebra, 84c:05006

(Mullin, Ronald C.) See Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 84c:05002a; 84c:05002b; Proceedings: Southeastern conference on combinatorics, graph theory and computing, 84j:05006a and 84j:05006b

(Reid, K. Brooks) See Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 84c:05002a; 84c:05002b; Proceedings: Southeastern conference on combinatorics, graph theory and computing, 84j:05006a and 84j:05006b

(Segre, Beniamino) See Combinatorics, 84c:05001

(Shashkin, Yu. A.) See Combinatorial properties of convex sets and graphs, 84g:05004

(Stanton, Ralph G.) See Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 84c:05002a; 84c:05002b; Proceedings: Southeastern conference on combinatorics, graph theory and computing, 84j:05006a and 84j:05006b

(Syslo, Maciej M.) See Graph theory, 84m:05004

(Tallini, Giuseppe) See Combinatorics, 84c:05001

(Ustinov, G. M.) See Combinatorial properties of convex sets and graphs, 84g:05004

(Vedder, Klaus) See Combinatorial theory, 84b:05005

Adelaide ★ Combinatorial mathematics, X. 84m:05003

Baton Rouge, La. ★ Proceedings of the Twelfth Southeastern Conference on

Combinatorics, Graph Theory and Computing, Vol. I. 84c:05002a

★ Proceedings of the Twelfth Southeastern Conference on Combinatorics, Graph Theory and Computing, Vol. II. 84c:05002b

Boca Raton, Fla. ★ Proceedings of the thirteenth Southeastern conference on

combinatorics, graph theory and computing. 84j:05006a

★ Proceedings of the thirteenth Southeastern conference on combinatorics, graph theory and computing. 84j:05006b

★ Proceedings of the fourteenth Southeastern conference of combinatorics, graph theory and computing. 84m:05005a

★ Proceedings of the fourteenth Southeastern conference on combinatorics, graph theory and computing. 84m:05005b

Combinatorial mathematics ★ Combinatorial mathematics, X. 84m:05003

Combinatorial properties of convex sets and graphs ★ Комбинаторные свойства выпуклых множеств и графов. (Russian) [Combinatorial properties of convex sets and graphs] 84g:05004

Combinatorial theory ★ Combinatorial theory. 84b:05005

Combinatorics ★ Combinatorics '81. 84c:05001

Conference:

Australian, combinatorial mathematics ★ Combinatorial mathematics, X. 84m:05003

Combinatorial Geometries and their Applications ★ Combinatorics '81. 84c:05001

Combinatorial Theory ★ Combinatorial theory. 84b:05005

Graph theory ★ Graph theory. 84m:05004

Southeastern, Combinatorics, Graph Theory and Computing ★ Proceedings of the Twelfth Southeastern Conference on Combinatorics, Graph Theory and Computing, Vol. I. 84c:05002a

★ Proceedings of the Twelfth Southeastern Conference on Combinatorics, Graph Theory and Computing, Vol. II. 84c:05002b

★ Proceedings of the thirteenth Southeastern conference on combinatorics, graph theory and computing. 84j:05006a

★ Proceedings of the thirteenth Southeastern conference on combinatorics, graph theory and computing. 84j:05006b

★ Proceedings of the fourteenth Southeastern conference of combinatorics, graph theory and computing. 84m:05005a

★ Proceedings of the fourteenth Southeastern conference on combinatorics, graph theory and computing. 84m:05005b

Graph theory ★ Graph theory. 84m:05004

Lagów ★ Graph theory. 84m:05004

Proceedings:

Southeastern Conference on Combinatorics, Graph Theory and Computing

★ Proceedings of the Twelfth Southeastern Conference on Combinatorics, Graph Theory and Computing, Vol. I. 84c:05002a

★ Proceedings of the Twelfth Southeastern Conference on Combinatorics, Graph Theory and Computing, Vol. II. 84c:05002b

★ Proceedings of the thirteenth Southeastern conference on combinatorics, graph theory and computing. 84j:05006a

★ Proceedings of the thirteenth Southeastern conference on combinatorics, graph theory and computing. 84j:05006b

Proceedings (continued)

- ★Proceedings of the fourteenth Southeastern conference of combinatorics, graph theory and computing. 84c:05005a
 ★Proceedings of the fourteenth Southeastern conference on combinatorics, graph theory and computing. 84c:05005b
 Rome ★Combinatorics '81. 84c:05001
 Schloss Raichholzhausen ★Combinatorial theory. 84b:05005
 Young tableaux in combinatorics, invariant theory, and algebra ★Young tableaux in combinatorics, invariant theory, and algebra. 84b:05006

secondary classifications:

- (Bachem, Achim) See Workshop: Bonn, Combinatorial Optimization. (84a:90007)
 (Belyarskaya, G. B.) See Quasigroups and Latin squares. (84c:20083)
 (Ghosh, Sakti P.) See Data base file organization. (84m:68001)
 (Grötschel, Martin) See Workshop: Bonn, Combinatorial Optimization. (84a:90007)
 (Johnson, Norman Lloyd) See Finite geometries. (84b:51003)
 (Kallaber, Michael J.) See Finite geometries. (84b:51003)
 (Kambayashi, Yuhiko) See Data base file organization. (84m:68001)
 (Korte, Bernhard) See Workshop: Bonn, Combinatorial Optimization. (84a:90007)
 (Kulikowski, J. L.) See Discrete mathematics. (84c:68002)
 (Lindner, C. C.) See Topics on Steiner systems. (84d:05039)
 (Lipski, Witold, Jr.) See Data base file organization. (84m:68001)
 (Long, Calvin T.) See Finite geometries. (84b:51003)
 (Michalewicz, M.) See Discrete mathematics. (84c:68002)
 (Mühlbacher, Jörg R.) See Proceedings: Conference on Graphtheoretic Concepts in Computer Science. (84f:68004)
 (Ostrom, Theodore G.) See Finite geometries. (84b:51003)
 (Rosa, Alexander) See Topics on Steiner systems. (84d:05039)
 (Valutse, I. I.) See Quasigroups and Latin squares. (84c:20083)
 Wilbrink, Hendrikus Adrianus ★Characterization theorems in finite geometry. (84d:51001)
 (Yablonskii, S. V.) See Discrete mathematics. (84c:68002)
 (Zhuravlev, Yu. I.) See Discrete mathematics. (84c:68002)
 Bonn ★Bonn Workshop on Combinatorial Optimization. (84a:90007)
 Conference:
 Consecutive retrieval property ★Data base file organization. (84m:68001)
 Finite Geometries ★Finite geometries. (84b:51003)
 Graphtheoretic Concepts in Computer Science ★Proceedings of the 7th Conference on Graphtheoretic Concepts in Computer Science (WG 81). (84f:68004)
 Data base file organization ★Data base file organization. (84m:68001)
 Discrete mathematics ★Discrete mathematics. (84c:68002)
 Finite geometries ★Finite geometries. (84b:51003)
 Linz ★Proceedings of the 7th Conference on Graphtheoretic Concepts in Computer Science (WG 81). (84f:68004)
 Proceedings:
 Conference on Graphtheoretic Concepts in Computer Science ★Proceedings of the 7th Conference on Graphtheoretic Concepts in Computer Science (WG 81). (84f:68004)
 Pullman, Wash. ★Finite geometries. (84b:51003)
 Quasigroups and Latin squares ★Квазигруппы и латинские квадраты. (Russian) [Quasigroups and Latin squares] (84c:20083)
 Steiner systems ★Topics on Steiner systems. (84d:05039)
 Symposium:
 Discrete Mathematics ★Discrete mathematics. (84c:68002)
 Topics on Steiner systems ★Topics on Steiner systems. (84d:05039)
 Warsaw ★Discrete mathematics. (84c:68002)
 ★Data base file organization. (84m:68001)
 Workshop:
 Bonn, Combinatorial Optimization ★Bonn Workshop on Combinatorial Optimization. (84a:90007)

05Axx Classical combinatorial problems

secondary classifications:

- Lipski, Witold, Jr. ★Kombinatoryka dla programistów. (Polish) [Combinatorics for programmers] (84j:05002)
 05A05 Combinatorial choice problems (subsets, representatives, permutations)
 Abraham, Jaromir (with Kotzig, Anton) Bases of additive permutations with the minimum number of negative elements. 84b:05002
 Alvarez Rodriguez, Miguel-Angel See Kreweras, Germain. 84c:05006
 Bang, Chang (with Sharp, Henry, Jr.; Winkler, Peter M.) On families of finite sets with bounds on unions and intersections. 84i:05002
 Bárány, Imre (with Grinberg, V. S.) On some combinatorial questions in finite-dimensional spaces. 84f:05001
 Baston, Victor J. A Marica-Schönheim theorem for an infinite sequence of finite sets. 84g:05005
 Beeler, Michael D. A new van der Waerden number. 84m:05006
 Chen, Wai Kai See Onaga, Kenji. (See 84f:93006f)
 Chen, Yi Yuan (with Wu, Wang Ming) Fuzzy permutations. I. (Chinese. English summary) 84b:05007
 Daykin, David E. (with Frankl, Peter) Sets of finite sets satisfying union conditions. 84a:05001
 Deza, Michel (with Frankl, Peter) On the vector space of 0-configurations. 84i:05003

- Duval, J.-P. Relationship between the period of a finite word and the length of its unbordered segments. 84d:05001
 Dzyukova, L. L. Conditions for the existence of a system of distinct set representatives. (Russian) 84d:05002
 Erdős, Paul (with Frankl, Peter; Füredi, Zoltán) Families of finite sets in which no set is covered by the union of two others. 84c:05002
 Frankl, Peter An extremal problem for two families of sets. 84b:05008
 On the trace of finite sets. 84g:05006
 See also Daykin, David E., 84a:05001; Erdős, Paul; et al., 84c:05002 and Deza, Michel, 84i:05003
 Füredi, Zoltán Set-systems with prescribed cardinalities for pairwise intersections. 84d:05003
 See also Erdős, Paul; et al., 84c:05002
 Grinberg, V. S. See Bárány, Imre, 84f:05001
 Gritsak, V. V. Independence systems of matroid type. (Russian. English summary) 84b:05009
 Gronau, Hans-Dietrich O. F. An extremal set problem. 84c:05003
 Harrison, K. J. (with Longstaff, W. E.) Subalgebras of incidence algebras determined by equivalence relations. 84c:05004
 Harzheim, Egbert Combinatorial theorems on contractive mappings in power sets. 84b:05010
 Hausner, Melvin Applications of a simple counting technique. 84c:05005
 Katerinokhina, N. N. Some inequalities connected with subsets of layers of an n -dimensional unit cube. (Russian) 84d:05004
 Kotzig, Anton See Abraham, Jaromir, 84b:05002
 Kratoch, Miroslav (with Pavlenko, V. A.) Sets of permutations that are generated by commutational networks. (Russian) 84c:05003
 Kreweras, Germain (with Alvarez Rodriguez, Miguel-Angel) Ponderation entière minimale de N telle que pour tout k toutes les k -parties de N aient des poids distincts. (English summary) [Minimal integer weighting of N such that for any k all the k -subsets of N have unequal weights] 84c:05006
 Une propriété des permutations de signature donnée. (English summary) [A property of the permutations with given signature] 84k:05002
 Longstaff, W. E. See Harrison, K. J., 84c:05004
 Monroe, Ted R. See Trotter, William T., Jr., 84f:05004
 Moon, Aeryung An analogue of the Erdős-Ko-Rado theorem for the Hamming schemes $H(n, q)$. 84i:05004
 Morávek, Jaroslav On an extremal characterization of partitions. (Russian and Czech summaries) 84j:05007
 Onaga, Kenji (with Chen, Wai Kai) On permutations by spaghetti Amida. (See 84f:93006f)
 Pavlenko, V. A. See Kratoch, Miroslav, 84c:05003
 Proctor, Robert A. Solution of two difficult combinatorial problems with linear algebra. 84f:05002
 Sali, A. Stronger form of an M -part Sperner theorem. 84i:05005
 Sharp, Henry, Jr. See Bang, Chang; et al., 84i:05002
 Smyth, C. J. A lattice colouring problem. 84f:05003
 Tchuente, Maurice Generation of permutations by graphical exchanges. 84b:05011
 Trotter, William T., Jr. (with Monroe, Ted R.) A combinatorial problem involving graphs and matrices. 84f:05004
 Ungar, Peter $2N$ noncollinear points determine at least $2N$ directions. 84j:05008
 Viennot, Gérard Maximal chains of subwords and up-down sequences of permutations. 84c:05004
 West, Douglas B. Gossiping without duplicate transmissions. 84b:05012
 Winkler, Peter M. See Bang, Chang; et al., 84i:05002
 Worboys, Michael A combinatorial puzzle. 84j:05009
 Wu, Wang Ming See Chen, Yi Yuan, 84b:05007

secondary classifications:

- Beck, József van der Waerden and Ramsey type games. (84a:90093)
 Berenguer, X. (with Diaz, Josep; Harper, L. H.) A solution of the Sperner-Erdős problem. (84f:68050)
 Blecher, Pavel M. On a logical problem. (84g:04001)
 Boccaro, G. Cycles comme produit de deux permutations de classes données. [Cycles as products of two permutations of given classes] (84c:20007)
 Davio, M. (with Ronse, Christian) Rotator design. (84g:94024)
 De Luca Cardillo, Dorotea (with Levi, Adriana) ★Determinazione delle partizioni di un insieme di N elementi in M sottoinsiemi. (Italian) [Determining the partitions of a set of N elements into M subsets] (84b:68052)
 Dewar, Robert B. K. (with Merritt, Susan M.; Sharir, Micha) Some modified algorithms for Dijkstra's longest upsequence problem. (84b:68028)
 Diaconis, Persi (with Graham, R. L.; Kantor, William M.) The mathematics of perfect shuffles. (84j:20040)
 Diaz, Josep See Berenguer, X.; et al., (84f:68050)
 Elekes, G. (with Erdős, Paul; Hajnal, A.) On some partition properties of families of sets. (84b:03110)
 Erdős, Paul (with Silverman, Ruth; Stein, Alan H.) Intersection properties of families containing sets of nearly the same size. (84j:05032)
 See also Elekes, G.; et al., (84b:03110)
 Fraenkel, Aviezri S. See Mor, M., (84b:68092)
 Gierz, Gerhard (with Poguntke, Werner) Minimizing setups for ordered sets: a linear algebraic approach. (84d:06002)
 Graham, R. L. See Diaconis, Persi; et al., (84j:20040)
 Gronau, Hans-Dietrich O. F. On maximal families of subsets of a finite set. (84a:05002)
 Hajnal, A. See Elekes, G.; et al., (84b:03110)
 Harper, L. H. See Berenguer, X.; et al., (84f:68050)
 Hayasaka, Takanori See Saito, Sadao, (84b:10017)
 Hoskins, W. D. (with Ponzo, P. J.; Stanton, Ralph G.) Pension algorithms as optimal sums on disjoint sets. (84b:68025)

- Jungnickel, Dieter ★ Transversaltheorie. (German) [Transversal theory] (84j:05005)
- Kantor, William M. See Diaconis, Persi; et al., (84j:20040)
- Kostyrko, Pavel On f -thin sets. (Slovak summary) (84f:10075)
- Lefebvre, Mario Une application des méthodes séquentielles aux tests de permutations. (English summary) [An application of sequential methods to permutation tests] (84f:62057)
- Levi, Adriana See De Luca Cardillo, Dorotea. (84b:68052)
- Merritt, Susan M. See Dewar, Robert B. K.; et al., (84b:68028)
- Misereque, Didier Problème des mariages et récursivité. [The marriage problem and recursiveness] (84b:03109)
- Mor, M. (with Fraenkel, Aviezri S.) Permutation generation on vector processors. (84b:68092)
- Motoki, Tatsuya A note on upper bounds for the selection problem. (84c:68049)
- O'Brien, G. L. A generalized notion of quotient for finite abelian groups. (84j:20053)
- Pogutke, Werner See Gierz, Gerhard. (84d:06002)
- Ponzo, P. J. See Hoskins, W. D.; et al., (84c:68025)
- Pounder, J. R. See Rogers, Thomas D., (84c:58060)
- Rands, B. M. I. An extension of the Erdős, Ko, Rado theorem to t -designs. (84i:05024)
- Rödl, Vojtěch Note on packing, covering and Turán numbers. (84a:05021)
- Rogers, Thomas D. (with Pounder, J. R.) Cycle structure in discrete-density models. (84c:58060)
- Ronse, Christian See Davio, M., (84g:94024)
- Root, William L. Coding for a class of nonprobabilistic channels with nonzero memory. (84a:94010)
- Saito, Sadao (with Hayasaka, Takanori) Theory of the perfect (s, n) -sequence based on $F(i, k)$. (84b:10017)
- Sebő, András Sequential search using question-sets with bounded intersections. (84m:94021)
- Semba, Ichirō Generation of permutations by using a stack or a queue. (84b:68093)
- Shafaranskii, Ya. M. An algorithm for finding the minimum of priority-generating functions on special sets of permutations. II. (Russian. English summary) (84g:90106)
- Sharir, Micha See Dewar, Robert B. K.; et al., (84b:68028)
- Shepp, Larry A. The XYZ conjecture and the FKG inequality. (84c:60019)
- Silverman, Ruth See Erdős, Paul; et al., (84j:05032)
- Stanton, Ralph G. See Hoskins, W. D.; et al., (84c:68025)
- Stein, Alan H. See Erdős, Paul; et al., (84j:05032)
- Stockhofe, Dieter Bijektive Abbildungen auf der Menge der Partitionen einer natürlichen Zahl. [Bijective mappings on the set of partitions of a natural number] (84i:10019)
- Tchuente, Maurice Des permutations de degré n compatibles avec des arbres d'ordre n . (English summary) [Permutations of degree n that are compatible with trees of order n] (84i:05046)
- Tošić, Ratko A balance scale sorting procedure. (84c:68065)
- Ukšanović, Jovan B. The generation of n -element permutations. (Serbo-Croatian. English summary) (84c:60022)
- Vareca, A. Are two given elements neighbouring? (84c:68050)
- Wolff, Karl Erich Wie organisiert man ein Skatturnier für 6 Personen? Ein Beitrag zum Mathematisieren. [How does one organize a skat tournament for six people? A contribution to mathematizing] (84c:05042)

05A10 Factorials, binomial coefficients, combinatorial functions

- Abdelnasser, M. T. (with Khidr, A. M.) A combinatorial sum. 84d:05005
- Allaway, William R. Isomorphisms from the Eulerian umbral algebra onto formal Newton series. 84c:05003
- Barnabei, Marilena (with Brini, Andrea; Rota, Gian-Carlo) Systems of section coefficients. I. (Italian. English summary) 84b:05013a
- (with Brini, Andrea; Rota, Gian-Carlo) Systems of section coefficients. II. (Italian. English summary) 84b:05013b
- Bedrosian, Samuel D. (with Pierantozzi, Donald C.) On the construction and use of tree counting polynomials. (See 84f:93006f)
- Boscarol, Mauro A property of binomial coefficients. 84g:05007
- Brini, Andrea See Barnabei, Marilena; et al., 84b:05013a and 84b:05013b
- Egécioğlu, Ömer The parity of the Catalan numbers via lattice paths. 84g:05008
- Flajolet, Philippe On congruences and continued fractions for some classical combinatorial quantities. 84f:05005
- Joni, S. A. (with Rota, Gian-Carlo; Sagan, Bruce E.) From sets to functions: three elementary examples. 84i:05006
- Khidr, A. M. See Abdelnasser, M. T., 84d:05005
- Kreid, Tadeusz Application of polynomials to investigations of Möbius algebras. 84i:05007
- Krouse, Donal (with Olive, Gloria) Binomial functions with the Stirling property. 84j:05010
- Murota, Kazuo See Sugihara, Masaaki, 84c:05005
- Olive, Gloria See Krouse, Donal, 84j:05010
- Pierantozzi, Donald C. See Bedrosian, Samuel D., (See 84f:93006f)
- Radoux, Christian Quelques conséquences d'une formule de P. Delsarte. [Some consequences of a formula of P. Delsarte] 84d:05006
- Robbins, Neville On the number of binomial coefficients which are divisible by their row number. 84f:05006
- Rota, Gian-Carlo See Barnabei, Marilena; et al., 84b:05013a; 84b:05013b and Joni, S. A.; et al., 84i:05006
- Sagan, Bruce E. See Joni, S. A.; et al., 84i:05006
- See, Michele Orthogonal polynomials, factor sequences and moments. (Italian. English summary) 84c:05004
- Sugihara, Masaaki (with Murota, Kazuo) Multidimensional Bell polynomials. 84c:05005
- Todorov, K. Über die Anzahl der Äquivalenzrelationen der endlichen Menge. [On the number of equivalence relations of a finite set] 84d:05007
- Wilmet, Jean Déterminant de Hankel-Kronecker de la suite des factorielles. (English summary) [The Hankel-Kronecker determinant of the sequence of factorials] 84b:05014

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- Ambarzumyan, R. V. The combinatorial foundations of integral geometry. (Russian. English and Armenian summaries) (84a:52013)
- Bari, Ruth A. Homomorphism polynomials of graphs. (84d:05146)
- Calude, Cristian (with Vieri, Valentin) A note on Knuth's iterated powers. (84m:03062)
- Clark, Dean S. On some abstract properties of binomial coefficients. (84a:05005)
- Datoussaid, H. (with DeConinck, J.; De Gotal, Ph.) Stirling numbers and hard-core particles. (84b:82003)
- DeConinck, J. See Datoussaid, H.; et al., (84b:82003)
- De Gotal, Ph. See Datoussaid, H.; et al., (84b:82003)
- Dragomir, A. (with Laziun, V.) Generalized combinations. (Romanian. English summary) (84b:05012)
- Erdős, Paul (with Guy, Richard K.; Selfridge, J. L.) Another property of 239 and some related questions. (84f:10023)
- Farrell, E. J. Forest decompositions of graphs with cyclomatic number 2. (84b:05040)
- Guy, Richard K. See Erdős, Paul; et al., (84f:10023)
- Horadam, A. F. (with Shannon, A. G.) Combinatorial aspects of an infinite pattern of integers. (84b:10017)
- (with Horadam, E. M.) Roots of recurrence-generated polynomials. (84i:10009)
- See also Shannon, A. G.; et al., (84i:10016)
- Horadam, E. M. See Horadam, A. F., (84i:10009)
- Imhof, J. P. Stirling numbers and records. (84j:05011)
- Klorys, C. Applications of binomial coefficients. (Russian and Lithuanian summaries) (84c:05021)
- Laziun, V. See Dragomir, A., (84b:05012)
- Loh, R. P. See Shannon, A. G.; et al., (84c:10016)
- Minura, Yoshio Congruence properties of Apéry numbers. (84b:10016)
- Phillipou, Andreas N. A note on the Fibonacci sequence of order k and the multinomial coefficients. (84g:10024)
- Picon, P. A. Un résultat d'intégrité. (English summary) [A result on integrality] (84c:10010)
- Quartieri, J. Some mathematical considerations arising in the study of a degenerate harmonic oscillator. (84b:82008)
- Selfridge, J. L. See Erdős, Paul; et al., (84f:10023)
- Shannon, A. G. (with Horadam, A. F.; Loh, R. P.) Sloane's Fermat coefficient sequences. (84c:10016)
- See also Horadam, A. F., (84i:10017)
- Takeuchi, Yu Limit of the series $\sum_{n=0}^{\infty} (-1)^n x^n / (p; p)_n^2$ as $p \rightarrow 1^-$. (Spanish) (84c:33022)
- Thaine, Francisco Polynomials that generalize binomial coefficients and their applications to Fermat's last theorem. (Portuguese) (84j:10013)
- Polynomials generalizing binomial coefficients and their application to the study of Fermat's last theorem. (84d:10023)
- Tu, Gui Zhang A formula for general solutions of homogeneous trinomial recurrences. (Chinese. English summary) (84c:39001)
- Vieri, Valentin See Calude, Cristian, (84m:03062)
- Webb, William A. The length of the four-number game. (84c:10017)

05A15 Combinatorial enumeration problems, generating functions

- Agrawal, B. M. (with Agrawal, Ved Prakash) Generating function for permutations with repetitions and inversions. 84d:05008
- Agrawal, Ved Prakash See Agrawal, B. M., 84d:05008
- Ahrens, J. H. Paving the chessboard. 84d:05009
- Arrowsmith, D. K. (with Jaeger, François) On the enumeration of chains in regular chain-groups. 84d:05010
- Bandt, Christoph (with Burosch, Gustav; Drews, Klaus-Dieter) Conditionally monotone functions and three Sperner type conditions. (German and Russian summaries) 84c:05007
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- Burosch, Gustav See Bandt, Christoph; et al., 84c:05007
- Buzitsky, P. L. An effective formula for the number of solutions of linear Boolean equations. 84b:05003
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- Chang, G. J. (with Hwang, F. K.; Lin, Shen) Group testing with two defectives. 84c:05010
- Chao, Chong Yun (with Deisher, Caroline I.) Equivalence classes of functions on finite sets. 84c:05011
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- Clausen, Michael (with Stötter, Friedrich) Pictures and skew (reverse) plane partitions. 84f:05007
- Collins, C. B. (with Goulden, I. P.; Jackson, D. M.; Nierstrasz, O. M.) A combinatorial application of matrix Riccati equations and their q -analogue. 84g:05009
- Cori, Robert See Chottin, Laurent, 84c:05006
- Deisher, Caroline I. See Chao, Chong Yun, 84c:05011
- Deza, Michel Some new generalizations of sharply t -transitive groups and sets. 84g:05010
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- Goralčik, P. (with Hedrlin, Z.; Koubek, V.; Ryslinková, J.) A game of composing binary relations. (French summary) **84i:05010**
- Goulden, I. P. (with Jackson, D. M.) Sequence enumeration. **84f:05009**
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See also Collins, C. B.; et al., **84g:05009** and Jackson, D. M., **84h:05004**
- Gronau, Hans-Dietrich O. F. On maximal families of subsets of a finite set. **84a:05002**
- Hedrlin, Z. See Goralčik, P.; et al., **84i:05010**
- Hock, J. L. (with Licato, P. E.; McQuistan, R. B.) The occupational statistics for indistinguishable trimers on a $3 \times N$ lattice space. **84d:05015**
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- Jaeger, François See Arrowsmith, D. K., **84d:05010**
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- Kemp, Rainer The expected number of nodes and leaves at level K in ordered trees. (See **84h:05003**)
- Kerber, Adalbert (with Thürlings, Karl-Josef) Counting symmetry classes of functions by weight and automorphism group. **84f:05010**
- Klarner, David A. (with Woodworth, Patricia A.) Asymptotics for coefficients of algebraic functions. **84j:05013**
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- Kleitman, Daniel J. Methods for asymptotic counting. **84k:05006**
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- Kurn, Andrew See Horton, J. D., **84d:05005**
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- Levinson, H. (with Silverman, Ruth) Topologies on finite sets. III. **84k:05007**
- Licato, P. E. See Hock, J. L.; et al., **84d:05015**
- Lifschitz, Vladimir (with Pittel, B. G.) The number of increasing subsequences of the random permutation. **84e:05012**
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- Lipator, E. P. Homogeneity classes of binary sets. (Russian) **84c:05007**
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- Lüneburg, Heinz On Dedekind numbers. **84h:05005**
- Mazzocca, Francesco ★ Le funzioni di Möbius e alcune applicazioni della formula d'inversione. (Italian) [Möbius functions and some applications of the inversion formula] **84c:05008**
- McLarnan, T. J. Mathematical tools for counting polytypes. **84k:05009**
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- McQuistan, R. B. See Hock, J. L.; et al., **84d:05015**
- Merris, Russell Polya's counting theorem via tensors. **84h:05006**
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- Moon, J. W. On level numbers of t -ary trees. **84f:05011**
- Niederhausen, Heinrich An enumeration problem and some consequences. **84f:05012**
- Nierstrasz, O. M. See Collins, C. B.; et al., **84g:05009**
- Oberschelp, Walter Asymptotic 0-1 laws in combinatorics. **84d:05016**
- Pittel, B. G. See Lifschitz, Vladimir, **84e:05012**
- Prodinger, Helmut A correspondence between ordered trees and noncrossing partitions. **84j:05014**
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- Read, Ronald C. The dimer problem for narrow rectangular arrays: a unified method of solution, and some extensions. **84g:05013**
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- Reilly, J. W. See Goulden, I. P.; et al., **84g:05011**
- Remmel, Jeffrey B. (with Whitney, Roger) A bijective proof of the hook formula for the number of column strict tableaux with bounded entries. **84h:05007**
- Robbins, D. P. (with Bolker, E. D.) The bias of three pseudorandom shuffles. **84h:05015a**
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- Roman, Steven The theory of the umbral calculus. I. **84c:05008a**
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- Sagan, Bruce E. Bijective proofs of certain vector partition identities. **84i:05012**
- Sagan, Marian The number of maximal (k, m) -cycles. **84i:05013**
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- Selivanov, B. I. A combinatorial proof of an enumeration theorem for exponentiation of groups. (Russian) **84d:05017**
- Shreshtha, R. M. A class of generating functions. **84i:05014**
- Silverman, Ruth See Levinson, H., **84k:05007**
- Stanley, Richard P. Factorization of permutations into n -cycles. **84g:05014**
- Stötzner, Friedrich See Clausen, Michael, **84f:05007**
- Sulanke, Robert A. q -counting n -dimensional lattice paths. **84c:05009**
- Thien, Tran Cong See Sato, Masako, **84c:05013**
- Thürlings, Karl-Josef See Kerber, Adalbert, **84f:05010**
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- Tremblay, Richard See Lavoie, J.-L., **84a:05003**
- Urdansky, Steven I. (with White, Dennis E.) Invariant point configurations—a combinatorial approach. **84c:05012**
- White, Dennis E. See Urdansky, Steven I., **84c:05012**
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- Wilf, Herbert S. Three problems in combinatorial asymptotics. **84i:05015**
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- Abdelnasser, M. T. (with Khidr, A. M.) A combinatorial sum. **(84d:05005)**
(with Khidr, A. M.) On the distribution of a sum of nonidentical independent binomials. (Arabic summary) **(84h:60023)**
- Ainsworth, O. R. (with Neggers, J.) A family of polynomials and powers of the secant. **(84k:33001)**
- Alexanderson, G. L. (with Wetzel, John E.) Erratum: "Arrangements of planes in space" [Discrete Math. **34** (1981), no. 3, 219–240; MR **82i:51028**]. **(84e:51018)**
- Allaway, William R. Isomorphisms from the Eulerian umbral algebra onto formal Newton series. **(84k:05003)**
- Azor, Ruth (with Gillis, J.; Victor, J. D.) Combinatorial applications of Hermite polynomials. **(84d:33012)**
- Baclawski, Kenneth Combinatorial decompositions of rings and almost Cohen-Macaulay complexes. **(84k:13021)**
- Bagchi, Biman See Mohanty, Udayan; et al., **(84b:82015)**
- Björner, Anders (with Walker, James W.) A homotopy complementation formula for partially ordered sets. **(84f:06003)**
- Brawley, J. V. Counting matrices by Drazin index. **(84i:15001)**
- Bressoud, D. M. An easy proof of the Rogers-Ramanujan identities. **(84h:10066)**
- Burge, William H. A symmetrical plane partition correspondence. **(84m:05009)**
- Cameron, Peter J. Orbits of permutation groups on unordered sets. III. Imprimitivity groups. **(84f:20007a)**
Orbits of permutation groups on unordered sets. IV. Homogeneity and transitivity. **(84f:20007b)**
- Charalambides, Ch. A. (with Chrysaphinou, O. D.) Partition polynomials in fluctuation theory. **(84g:60016)**
- Chongdar, A. K. On a class of generating relations for certain special functions from the viewpoint of one-parameter continuous transformations group. **(84f:33021)**
- Chrysaphinou, O. D. See Charalambides, Ch. A., **(84g:60016)**
- Chukhrov, I. P. Estimates of the number of minimal disjunctive normal forms for a zonal function. I. (Russian) **(84h:03136)**
- Dwivedi, B. N. See Singh Chandel, R. C., **(84d:33021)**
- Engel, Konrad About the number of pairs of elements of E_n^k whose distances have given values. **(84c:05031)**
- Engel, Peter On the enumeration of polyhedra. **(84h:52001)**
- Entringer, Roger C. See Gibbs, Richard A., **(84d:52012)**
- Érgascher, G. Structural meaning of some recursion functions of multigraphs. **(84h:05113)**
- Ewell, John A. Consequences of Watson's quintuple-product identity. **(84h:10019)**
- Flajolet, Philippe On congruences and continued fractions for some classical combinatorial quantities. **(84f:05005)**
- Gabutti, Bruno Generating functions of Laguerre and Jacobi polynomials. (Italian summary) **(84h:33014)**
- Gansner, Emden R. On the lattice of order ideals of an up-down poset. **(84h:06012)**
- Gibbs, Julian H. See Mohanty, Udayan; et al., **(84h:82015)**
- Gibbs, Richard A. (with Entringer, Roger C.) Partitions of E^d by hyperplanes. **(84d:52012)**
- Gillis, J. (with Reznick, Bruce; Zeilberger, Doron) On elementary methods in positivity theory. **(84i:42017)**
See also Azor, Ruth; et al., **(84d:33012)**
- Goulden, I. P. A combinatorial proof of a dominance result. **(84c:60016)**
(with Jackson, D. M.) ★ Combinatorial enumeration. **(84m:05002)**
- Harborth, Heiko (with Kennitz, Arnfried) Eine Anzahl für Fußballtabellen. [A number of score sequences for football tables] **(84d:05089)**
- Hering, F. (with Read, Ronald C.; Shephard, G. C.) The enumeration of stack polytopes and simplicial clusters. **(84e:52012)**
- Hoede, Cornelis The Ising model and linear codes. **(84f:82053)**
- Hurt, Jan (with Machek, Josef; Štěpán, Josef; Vorličková, Dana) The intersections of random finite sets. (Russian summary) **(84h:60025)**
- Jackson, D. M. See Goulden, I. P., **(84m:05002)**
- Kennitz, Arnfried See Harborth, Heiko, **(84d:05089)**
- Kemp, Rainer On the average depth of a prefix of a Dyck language D_1 . **(84h:68118)**
On the number of words in the language $\{w \in \Sigma^* | w = w^R\}$. **(84c:68068)**
- Khidr, A. M. See Abdelnasser, M. T., **(84d:05005)** and Abdelnasser, M. T., **(84h:60023)**
- Kirk, R. B. (with Langenhof, Carl E.) Periodic chains of beads. **(84i:68047)**
- Kirschenhofer, Peter Asymptotic results on a special kind of order preserving maps. **(84j:05051)**
- Kreidl, Tadeusz The theorem about inversion in the generalized incidence algebra. **(84d:06005)**
- Langenhof, Carl E. See Kirk, R. B., **(84i:68047)**
- Lins, Sôstenes ★ Principios de enumeração. (Portuguese) [Principles of enumeration] **(84j:05001)**
- Machek, Josef See Hurt, Jan; et al., **(84h:60025)**
- Mohanty, Udayan (with Bagchi, Biman; Gibbs, Julian H.) Bimodality and long-range order in ideal Bose systems. **(84h:82015)**
- Morikawa, Tetsuo Combinatorial construction of chemical reaction equations. **(84g:80009)**
- Mukherjee, Swapna Some identities on ${}_dP(n)$. **(84h:05010)**

- Murota, Kazuo *See* Sugihara, Masaaki, (84c:05005)
- Neggers, J. *See* Ainsworth, O. R., (84d:33001)
- Odlyzko, Andrew M. Periodic oscillations of coefficients of power series that satisfy functional equations. (84a:30042)
- Plesken, Wilhelm Counting with groups and rings. (84a:20008)
- Pranesachar, C. R. On the number of two-line and three-line Latin rectangles—an alternative approach. (84j:05025)
- Quackenbush, Robert W. Enumeration in classes of ordered structures. (84h:06001)
- Rai, P. N. (with Singh, Surya Narain) Generalization of Bell polynomials and related operational formula. (Hindi. English summary) (84c:33017)
- Read, Ronald C. *See* Hering, F.; et al., (84e:52012)
- Reiner, David L. A q -analog of the Campbell-Baker-Hausdorff formula. (84g:17026)
- Reznick, Bruce *See* Gillis, J.; et al., (84i:42017)
- (Rota, Gian-Carlo) *See* Goulden, I. P.; et al., (84m:05002)
- Sato, Masako *See* Thien, Tran Cong, (84c:60015)
- Schrijver, A. Association schemes and the Shannon capacity: Eberlein polynomials and the Erdős-Ko-Rado theorem. (84h:94031)
- Shephard, G. C. *See* Hering, F.; et al., (84e:52012)
- Singh, L. S. *See* Srivastava, A. N., (84d:33015)
- Singh, Surya Narain *See* Rai, P. N., (84c:33017)
- Singh Chandel, R. C. (with Dwivedi, B. N.) On some associated polynomials. (84d:33021)
- Srinivasan, Bhama Characters of finite groups: some uses and mathematical applications. (84d:20013)
- Srivastava, A. N. (with Singh, L. S.) On a theorem for obtaining bilateral and bilinear generating functions for a sequence of special functions. (84d:33015)
- Štěpán, Josef *See* Hurt, Jan; et al., (84h:60025)
- Straubing, Howard A combinatorial proof of the Cayley-Hamilton theorem. (84c:15019)
- Sugihara, Masaaki (with Murota, Kazuo) Multidimensional Bell polynomials. (84c:05005)
- Szepesvári, István On the number of uniform polyhedra. I, II. (Hungarian) (84c:51031)
- Thien, Tran Cong (with Sato, Masako) One-dimensional random walk with unequal step lengths restricted by an absorbing barrier. (84c:60015)
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- Viennot, Gérard Interprétations combinatoires des nombres d'Euler et de Genocchi. (English summary) [Combinatorial interpretations of Euler and Genocchi numbers] (84i:10013)
- Vorlíková, Dana *See* Hurt, Jan; et al., (84h:60025)
- Walker, James W. *See* Björner, Anders, (84f:06003)
- Warren, Richard H. The number of topologies. (84g:54002)
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05A17 Partitions [See also 10A45.]

- Abbott, H. L. (with Liu, Andy C. F.) Remarks on a paper of Hirschfeld concerning Ramsey numbers. (84d:05018)
- Burge, William H. A symmetrical plane partition correspondence. (84m:05009)
- Chen, Wai Kai *See* Kajitani, Yōji; et al., (84d:05020)
- Collatz, L. Equipartition with square numbers. (84c:05019)
- Deuber, W. (with Voigt, Bernd) Partitionseigenschaften endlicher affiner und projektiver Räume. (English summary) [Partition properties of finite affine and projective spaces] (84c:05011)
- Fenner, Trevor I. (with Loizou, Georgios) Tree traversal related algorithms for generating integer partitions. (84h:05009)
- Franzblau, D. S. (with Zeilberger, Doron) A bijective proof of the hook-length formula. (84h:05016)
- Fujishige, Satoru Canonical decompositions of symmetric submodular systems. (84m:05010)
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- Gibbons, Joel C. Finite partitions of spheres. (84b:05017)
- Grassl, Richard M. *See* Hillman, A. P., (84g:05017)
- Hillman, A. P. (with Grassl, Richard M.) Slicing skew-tableau frames. (84g:05017)
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- Isbell, John R. $N(5, 4; 3) \geq 24$. (84m:05011)
- Kajitani, Yōji (with Ueno, Shuichi; Chen, Wai Kai) On the number of essential complementary partitions. (84d:05020)
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- Mills, George A quintessential proof of van der Waerden's theorem on arithmetic progressions. (84c:05014)
- Mukherjee, Swapna Some identities on $\mathcal{A}_P(n)$. (84h:05010)
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- Tort, J.-R. Un problème de partition de l'ensemble des parties à trois éléments d'un ensemble fini. (English summary) [A partition problem for the set of triples of a finite set] (84c:05014)
- Ueno, Shuichi *See* Kajitani, Yōji; et al., (84d:05020)
- Voigt, Bernd *See* Deuber, W., (84c:05011; Nešetřil, Jaroslav; et al., (84f:05014 and Prömel, H. J., (84i:05017)
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- Zeilberger, Doron *See* Franzblau, D. S., (84h:05016)

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- Beutelspacher, Albrecht (with Brestovansky, Walter) Generalized Schur numbers. (84f:10019)
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- Bressoud, D. M. A matrix inverse. (84g:33003)
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- Delorme, Charles Un théorème de coloration pour les groupes abéliens. [A coloring theorem for abelian groups] (84c:20062)
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- Frankl, Peter (with Wilson, Richard M.) Intersection theorems with geometric consequences. (84g:03085)
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- Iommi Amonátegui, G. A nonrecursive expression for the number of irreducible representations of the symmetric group S_n . (84a:20022)
- Ketonen, Jussi (with Solovay, Robert) Rapidly growing Ramsey functions. (84c:03100)
- Kharazishvili, A. B. ★Элементы комбинаторной теории бесконечных множеств. (Russian) [Elements of the combinatorial theory of infinite sets] (84c:04001)
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- Lausmaa, T. Informational properties of a partition. (Russian. English and Estonian summaries) (84i:68071)
- Mills, George *See* Erdős, Paul, (84c:03099)
- Milne, S. C. *See* Garsia, Adriano M., (84g:05018)
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- Prodinger, Helmut A correspondence between ordered trees and noncrossing partitions. (84j:05014)
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- Regev, Amitai Combinatorial sums, identities and trace identities of the 2×2 matrices. (84h:20006)
- Remmel, Jeffrey B. Bijective proofs of some classical partition identities. (84d:05022)
- (with Whitney, Roger) A bijective proof of the hook formula for the number of column strict tableaux with bounded entries. (84h:05007)
- Robbins, D. P. (with Bolker, E. D.) The bias of three pseudorandom shuffles. (84h:05015a)
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- Sagan, Bruce E. Bijective proofs of certain vector partition identities. (84i:05012)
- Solovay, Robert *See* Ketonen, Jussi, (84c:03100)
- Stachowiak, Tadeusz (with Stańczak, Wiesław) Partitioning a set of entities due to their mutual dissimilarities. (Russian and Polish summaries) (84c:93007)
- Stańczak, Wiesław *See* Stachowiak, Tadeusz, (84c:93007)
- Stockhofe, Dieter Bijektive Abbildungen auf der Menge der Partitionen einer natürlichen Zahl. [Bijective mappings on the set of partitions of a natural number] (84c:10019)
- Tannenbaum, Peter Partitions of abelian groups into sets with zero sums. (84d:20053)
- Partitions of \mathbb{Z}_2^n . (84c:20055)
- Voigt, Bernd (with Wolfsdorf, Kurt) Ein Zerlegungssatz für $[x]^{**}$. (English summary) [A decomposition theorem for $[x]^{**}$] (84c:04003)
- See also* Deuber, W.; et al., (84c:05066)
- Wachs, Michelle L. Minimum cost partitions of a rectangle. (84e:05045)
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- Wilson, Richard M. *See* Frankl, Peter, (84g:05085)
- Wolfsdorf, Kurt *See* Voigt, Bernd, (84c:04003)

05A19 Combinatorial identities

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- Brini, Andrea *See* Barnabei, Marilena; et al., (84i:05020)
- Carlitz, Leonard Some restricted multiple sums. (84c:05012)
- Clark, Dean S. On some abstract properties of binomial coefficients. (84a:05005)
- Di Cave, Annalisa (with Ricci, Paolo Emilio) On Bell polynomials and Fibonacci and Bernoulli numbers. (Italian. English summary) (84h:05011)
- Dragomir, A. (with Laziu, V.) Generalized combinations. (Romanian. English summary) (84h:05012)
- Garsia, Adriano M. (with Milne, S. C.) A Rogers-Ramanujan bijection. (84g:05018)

- Gustafson, R. A. (with Milne, S. C.) Schur functions, Good's identity, and hypergeometric series well poised in $SU(n)$. **84m:05013**
- Howard, F. T. A theorem relating potential and Bell polynomials. **84c:05015**
- Klorys, C. Applications of binomial coefficients. (Russian and Lithuanian summaries) **84c:05021**
- Koh, E. L. See Nasir, N. E., **84c:05016**
- Lazium, V. See Dragomir, A., **84h:05012**
- Lepowsky, James (with Wilson, Robert Lee) A Lie theoretic interpretation and proof of the Rogers-Ramanujan identities. **84d:05021**
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- Moser, W. O. J. Some combinatorial identities. **84c:05015**
- Nasir, N. E. (with Koh, E. L.) On a binomial coefficient summation. **84c:05016**
- Nicoletti, Giorgio See Barnabei, Marilena; et al., **84i:05020**
- Pečarić, Josip E. Notes on two identities of D. D. Adamović. **84a:05006**
- Rai, P. N. (with Singh, Surya Narain) On the generalization of Eulerian polynomials. **84c:05013**
- Rommel, Jeffrey B. Bijective proofs of some classical partition identities. **84d:05022**
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- Wilson, Robert Lee See Lepowsky, James, **84d:05021**

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- Baxter, Rodney J. Rogers-Ramanujan identities in the hard hexagon model. (**84m:82104**)
- Bazhanov, V. V. (with Stroganov, Yu. G.) Trigonometric and S_n symmetric solutions of triangle equations with variables on the faces. (**84j:82091**)
- Bressoud, D. M. An easy proof of the Rogers-Ramanujan identities. (**84h:10066**)
- Bryant, V. W. See Kasinski, T. A., (**84j:05012**)
- Carlitz, Leonard Some inversion theorems. (**84f:10015**)
- Fosta, Dominique Some Hermite polynomial identities and their combinatorics. (**84a:33021**)
- Gauthier, C. Une identité liée aux partitions. [An identity related to partitions] (**84a:05004**)
- Gessel, Ira M. A q -analogue of the exponential formula. (**84d:05013**) (with Stanton, Dennis) Applications of q -Lagrange inversion to basic hypergeometric series. (**84f:33009**)
- Hensley, Douglas Eulerian numbers and the unit cube. (**84d:10018**)
- Hirschhorn, M. D. A simple proof of an identity of Ramanujan. (**84h:10067**)
- Hwang, F. K. (with Wei, V. K.) A partition identity. (**84c:05013**)
- Kasinski, T. A. (with Bryant, V. W.) Diagonals. (**84j:05012**)
- Kato, Shin-ichi Spherical functions and a q -analogue of Kostant's weight multiplicity formula. (**84b:22030**)
- Kumari, Savita See Singhal, J. P., (**84d:33020**)
- Lavoie, J.-L. (with Tremblay, Richard) A note on the number of derangements. (**84c:05003**)
- Lepowsky, James Affine Lie algebras and combinatorial identities. (**84e:17014**)
- Singhal, J. P. (with Kumari, Savita) On an extension of an inverse series relation. (**84d:33020**)
- Stanković, Miomir S. On a convolution product for the transform which maps derivatives into differences. (**84b:44001**)
- Stanton, Dennis See Gessel, Ira M., (**84f:33009**)
- Stroganov, Yu. G. See Bazhanov, V. V., (**84j:82091**)
- Tremblay, Richard See Lavoie, J.-L., (**84c:05003**)
- Wei, V. K. See Hwang, F. K., (**84c:05013**)

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- Baston, Victor J. Inequalities involving maps of finite sets. **84g:05019**
- Cohen, Paula (with Regev, Amitai) Asymptotic estimates of some S_n characters and the identities of the 2×2 matrices. **84c:05016**
- Daykin, David E. (with Frankl, Peter) Inequalities for subsets of a set and KLYM posets. **84c:05014**
- Du, Ding Zhu (with Hwang, F. K.) Minimizing a combinatorial function. **84c:05015**
- Frankl, Peter A probabilistic proof for the LYM-inequality. **84k:05017**
- See also Daykin, David E., **84c:05014**
- Hwang, F. K. See Du, Ding Zhu, **84c:05015**
- Popescu, Dragoş The partitions of a set. (Romanian. English summary) **84d:05023**
- Regev, Amitai See Cohen, Paula, **84c:05016**
- Vijayan, K. S. A characterization of the simplex. **84g:05020**

secondary classifications:

- Chen, Wen De On the construction of a kind of binary periodic sequences. (Chinese. English summary) (**84e:94004**)
- Frankl, Peter (with Wilson, Richard M.) Intersection theorems with geometric consequences. (**84g:05085**)
- Gronau, Hans-Dietrich O. F. An extremal set problem. (**84c:05003**)
- Kierstead, Henry A. (with Trotter, William T., Jr.) An extremal problem in recursive combinatorics. (**84d:06003**)
- Lassak, Marek Superior estimation of Carathéodory's dimension for n -cell convexity. (**84c:52005**)
- Lin, Xin Ding Inequalities for compound and induced matrices and their applications to combinatorial analysis. (Chinese) (**84k:15016**)
- Mishra, M. N. (with Nayak, N. N.; Pattanayak, S.) Lower bound for the number of real roots of a random algebraic polynomial. (**84i:60071**)
- Nayak, N. N. See Mishra, M. N.; et al., (**84i:60071**)
- Pattanayak, S. See Mishra, M. N.; et al., (**84i:60071**)
- Rödl, Vojtěch Note on packing, covering and Turán numbers. (**84a:05021**)
- Sterboul, F. New results on finite polarized partition relations. (**84f:05015**)

- Trotter, William T., Jr. See Kierstead, Henry A., (**84d:06003**)
- Wilson, Richard M. See Frankl, Peter, (**84g:05085**)

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- Bourgain, Jean On lacunary sets. **84c:05007**
- Chan, Agnes Hui (with Games, Richard A.; Key, Edwin L.) On the complexities of de Bruijn sequences. **84d:05024**
- Games, Richard A. See Chan, Agnes Hui; et al., **84d:05024**
- Joyal, André Une théorie combinatoire des séries formelles. (English summary) [A combinatorial theory of formal series] **84d:05025**
- Kandelaki, N. P. Distinguished intervals and nonpositional systems. (Russian) **84h:05019**
- Kettle, St. John G. A class of natural bijections between Catalan families. **84g:05021**
- Key, Edwin L. See Chan, Agnes Hui; et al., **84d:05024**
- de Luca, Aldo A combinatorial property of the Fibonacci words. **84i:05023**
- On some combinatorial problems in free monoids. **84c:05017**
- McKay, Michael D. (with Waterman, Michael S.) Self-descriptive strings. **84h:05013**
- Meir, Amram (with Moon, J. W.) Stream lengths in random channel networks. **84c:05018**
- Moon, J. W. See Meir, Amram, **84c:05018**
- Prodinger, Helmut Nonrepetitive sequences and Gray code. **84d:05026**
- Schechtman, Gideon Lévy type inequality for a class of finite metric spaces. **84g:05027**
- Stein, Peter On Chvátal's conjecture related to a hereditary system. **84d:05028**
- Waterman, Michael S. See McKay, Michael D., **84h:05013**

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- Allaway, William R. A comparison of two umbral algebras. (**84j:08007**)
- Björner, Anders (with Wachs, Michelle L.) On lexicographically shellable posets. (**84c:06004**)
- Even, S. On protocols for cake cutting. (**84j:90118**)
- Friedman, Harvey M. (with McAloon, Kenneth; Simpson, Stephen G.) A finite combinatorial principle which is equivalent to the 1-consistency of predicative analysis. (**84c:03138**)
- Graovac, Ante See Polansky, Oskar E., (**84i:05109**)
- Leon'ev, V. K. Relations between the lengths of trajectories in combinatorial choice problems. (Russian) (**84a:90084**)
- McAloon, Kenneth See Friedman, Harvey M.; et al., (**84c:03138**)
- Oberschelp, Walter Matching polynomials and rook theory. (**84d:05105**)
- Pansiot, Jean-Jacques Mots infinis de Fibonacci et morphismes itérés. (English summary) [Infinite Fibonacci words and iterated morphisms] (**84i:20059**)
- Polansky, Oskar E. (with Graovac, Ante) On the expansion of the μ -polynomial of a simple graph partitioned into subgraphs with at least two components. (**84i:05109**)
- Prodinger, Helmut (with Urbanek, Friedrich J.) On monotone functions of tree structures. (**84d:05067**)
- Séebold, Patrice Sur les morphismes qui engendrent des mots infinis ayant des facteurs prescrits. (English summary) [Morphisms which generate infinite words with prescribed factors] (See **84b:68003**)
- Senéchal, L. J. Chain algebras. (**84k:47013**)
- Simpson, James E. Langford sequences: perfect and hooked. (**84d:10019**)
- Simpson, Stephen G. See Friedman, Harvey M.; et al., (**84c:03138**)
- Thomas, Wolfgang A combinatorial approach to the theory of ω -automata. (**84d:68054**)
- Urbanek, Friedrich J. See Prodinger, Helmut, (**84d:05067**)
- Wachs, Michelle L. See Björner, Anders, (**84f:06004**)

05Bxx Designs and configurations (For applications of design theory, see 94C30.)

- Assmus, E. F., Jr. Applications of algebraic coding theory to finite geometric problems. **84c:05018**
- Beutelspacher, Albrecht ★Einführung in die endliche Geometrie. I. (German) [Introduction to finite geometry. I] **84j:05015**
- Erdős, Paul Problems and results on block designs and set systems. **84m:05014**

secondary classifications:

- Simon, Imre ★Configurações combinatorias. (Portuguese) [Combinatorial designs] (**84j:05004**)

05B05 Block designs [See also 51E05, 62K10.]

- Baker, Ronald D. Resolvable BIBD and SOLS. **84c:05019**
- Bergstrand, Deborah J. New uniqueness proofs for the $(5, 8, 24)$, $(5, 6, 12)$ and related Steiner systems. **84d:05029**
- Bernasconi, Carlo Designs obtained from affine spaces. **84j:05016**
- Beth, Thomas A note on the resolvability of the Steiner systems $S(5, 6, 12)$ and $S(5, 8, 24)$. **84c:05020**
- Beutelspacher, Albrecht (with Porta, Ursula) On the parameters of strongly resolvable designs. **84c:05021**
- (with Lamberty, Ulf) Strongly resolvable (r, λ) -designs. **84m:05015**
- Bhagwandas (with Bridges, W. G.) Applications of algebraic duality to group divisible structures. **84j:05017**
- Billington, Elizabeth J. Further constructions of irreducible designs. **84m:05016**
- More balanced ternary designs with block size three. **84h:05020**
- On lambda coverings of pairs by triples, repeated elements allowed in triples. **84h:05021**
- Bridges, W. G. See Bhagwandas, **84j:05017**
- Bush, K. A. Families of related designs. **84h:05014**
- Cameron, Peter J. Extremal results and configuration theorems for Steiner systems. (See **84d:05039**)

- Ceccherini, Pier Vittorio (with Spanicciati, Renata) ★Introduzione ai disegni. (Italian) [Introduction to designs] **84m:05017**
- Chen, Zhong Lian Combinatorial recursion methods of constructing GD designs. (Chinese) **84c:05022**
- Chouinard, Leo G., II Partitions of the 4-subsets of a 13-set into disjoint projective planes. **84b:05015**
- Colbourn, Charles J. (with Colbourn, Marlene J.) The chromatic index of cyclic Steiner 2-designs. **84b:05022**
(with Colbourn, Marlene J.; Harms, Janelle J.; Rosa, Alexander) A complete census of $(10, 3, 2)$ block designs and of Mendelsohn triple systems of order ten. III. $(10, 3, 2)$ block designs without repeated blocks. **84j:05018**
(with Colbourn, Marlene J.) Every twofold triple system can be directed. **84b:05016**
- Colbourn, Marlene J. (with Mathon, Rudolf A.) On cyclic Steiner 2-designs. (See **84d:05039**)
See also Colbourn, Charles J., **84b:05022**; **84b:05016** and **84j:05018**
- Dehon, Michel On the existence of 2-designs $S_2(2, 3, v)$ without repeated blocks. **84d:05030**
- Denniston, R. H. F. The problem of the higher values of t . (See **84d:05039**)
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- Diener, Immo On cyclic Steiner systems $S(3, 4, 22)$. (See **84d:05039**)
- Dinitz, Jeffrey H. (with Margolis, Stuart W.) Continuous maps on block designs. **84j:05019**
- Doyen, Jean (with Rosa, Alexander) An updated bibliography and survey of Steiner systems. (See **84d:05039**)
- Engel, Konrad Optimalitätsaussagen über Tripelsysteme. [Optimality statements on triple systems] **84h:05017**
- Frankl, Peter (with Pach, János) On the number of sets in a null t -design. **84g:05022**
- Fulton, J. D. (with Hare, William R.; Laskar, Renu; Hare, E. O.) On symmetric cyclic and transitive BIB designs. **84f:05017**
- Ganter, Bernhard (with Werner, Heinrich) Co-ordinatizing Steiner systems. (See **84d:05039**)
- Gionfriddo, Mario On the set $J(v)$ for Steiner quadruple systems of order $v = 2^n$ with $n \geq 4$. **84d:05031**
- Hall, Jonathan I. On identifying $PG(3, 2)$ and the complete 3-design on seven points. (See **84d:05039**)
- Hanani, Haim (with Hartman, Alan; Kramer, Earl S.) On three-designs of small order. **84f:05018**
- Hare, E. O. See Fulton, J. D.; et al., **84f:05017**
- Hare, William R. See Fulton, J. D.; et al., **84f:05017** and McClanahan, Gregory A.; et al., **84f:05020**
- Harms, Janelle J. See Colbourn, Charles J.; et al., **84j:05018**
- Hartman, Alan A survey on resolvable quadruple systems. (See **84d:05039**)
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- Hedayat, A. S. See Kageyama, Sanpei, **84g:05024**
- Hughes, Daniel R. On the nonexistence of a semisymmetric 3-design with 78 points. **84g:05023**
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- Kageyama, Sanpei (with Hedayat, A. S.) The family of t -designs. II. **84g:05024**
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- Kelly, Graham Symmetric designs with elations. **84c:05016**
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- Lamberty, Ulf See Beutelspacher, Albrecht, **84m:05015**
- Laskar, Renu See Fulton, J. D.; et al., **84f:05017** and McClanahan, Gregory A.; et al., **84f:05020**
- Lenz, Handfried A few simplified proofs in design theory. **84c:05024**
- Lindner, C. C. A survey of embedding theorems for Steiner systems. (See **84d:05039**)
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- Liu, Zhang Wen On a class of partially balanced designs with two treatments per block. (Chinese) **84d:05033**
- Margolis, Stuart W. See Dinitz, Jeffrey H., **84j:05019**
- Mathon, Rudolf A. See Colbourn, Marlene J., (See **84d:05039**)
- McClanahan, Gregory A. (with Laskar, Renu; Hare, William R.) Mendelsohn and directed (k, t, λ) -systems. **84f:05020**
- McDonough, T. P. A 2-design admitting C_3 . **84d:05034**
- Mohan, R. N. (with Kageyama, Sanpei) On a characterization of affine- μ -resolvable BIB designs. **84d:05035**
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- Moon, Aeryung An embedding theorem for affine resolvable designs. **84b:05023**
- Neumaier, Arnold Regular sets and quasisymmetric 2-designs. **84c:05025**
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- Pach, János See Frankl, Peter, **84g:05022**
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- Phelps, Kevin T. On cyclic Steiner systems $S(3, 4, 20)$. (See **84d:05039**)
- Piper, F. C. On symmetric designs which admit axial automorphisms. **84j:05020**
- Porta, Ursula See Beutelspacher, Albrecht, **84c:05021**
- Preece, D. A. Some partly cyclic 13×4 Youden "squares" and a balanced arrangement for a pack of cards. **84d:05036**
- Quackenbush, Robert W. Algebraic speculations about Steiner systems. (See **84d:05039**)
- Raev, R. V. See Tonchev, V. D., **84c:05026** and **84c:05027**
- Raktoe, B. L. See Saha, G. M.; et al., **84h:05020**
- Rands, B. M. I. An extension of the Erdős, Ko, Rado theorem to t -designs. **84i:05024**
- de Resmini, Mariahuja J. On sets of type (m, n) in BIBDs with $\lambda \geq 2$. **84g:05026**
- Rosa, Alexander Intersection properties of Steiner systems. (See **84d:05039**)
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- Rumov, B. T. Existence of certain block designs. (Russian) **84d:05037**
- Saha, G. M. (with Pesotan, H.; Raktoe, B. L.) Some results on t -complete designs. **84h:05020**
- Seberry, Jennifer R. Some families of partially balanced incomplete block designs. **84d:05038**
- Solakov, D. E. See Tonchev, V. D., **84c:05025**
- Spanicciati, Renata See Ceccherini, Pier Vittorio, **84m:05017**
- Street, Anne Penfold A survey of neighbour designs. **84j:05021**
- Street, Deborah J. (with Wilson, William H.) On directed balanced incomplete block designs with block size five. **84h:05021**
- Tonchev, V. D. (with Raev, R. V.) Cyclic 2- $(13, 5, 5)$ designs. **84c:05026**
(with Raev, R. V.) Cyclic 2- $(17, 8, 7)$ designs and related doubly-even codes. **84c:05027**
(with Solakov, D. E.) Some nonembeddable 2- $(11, 6, 6)$ designs. **84i:05025**
Automorphisms of 2- $(33, 11, 5)$ designs. (Bulgarian. English summary) **84j:05022**
- Wang, Yang Xian The use of matrices to construct association schemes with several associative classes. (Chinese) **84c:05028**
- Werner, Heinrich See Ganter, Bernhard, (See **84d:05039**)
- Wild, Peter Generalized Hussain graphs and semiplanes with $k \leq 6$. **84i:05026**
Incidence graphs and subdesigns of semisymmetric designs. **84c:05017**
- Wilson, Richard M. Incidence matrices of t -designs. **84b:05024**
Inequalities for t -designs. **84j:05023**
- Wilson, William H. See Street, Deborah J., **84h:05021**
- Woolbright, David E. On the size of partial parallel classes in Steiner systems. (See **84d:05039**)
- Yao, Ching Hsing On combining elements from distinct finite rings for mixed factorial designs when the numbers of levels of factors are relatively prime in pairs. **84g:05027**
- Zhu, Xian Hai Some optimal block-factorial designs. (Chinese. English summary) **84c:05029**
- Bibliography:**
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Topics on Steiner systems ★Topics on Steiner systems. **84d:05039**
- secondary classifications:
- Anderson, Ian The toroidal thickness of the symmetric quadripartite graph. **(84b:05042)**
- Beth, Thomas (with Jungnickel, Dieter) On the codes generated by certain divisible designs. **(84i:05034)**
- Butson, Alton T. See Summer, John S., **(84h:05022)**
- Ceranka, Bronislaw (with Mejza, Stanislaw) A new proposal for classification of block designs. **(84c:62119)**
- Chan, Agnes Hui Embedding of a pseudopoint residual design into a Möbius plane. **(84c:51020)**
- Chandak, M. L. On the block structure of PBIB designs. **(84c:62120)**
- Cheng, Ch'ing Shui Maximizing the total number of spanning trees in a graph: two related problems in graph theory and optimum design theory. **(84d:05100)**
Construction of optimal balanced incomplete block designs for correlated observations. **(84d:62130)**
(with Wu, Chien Fu) Correction: "Balanced repeated measurements designs" [Ann. Statist. **8** (1980), no. 6, 1272-1283; MR 82c:62100]. **(84d:62131)**
- Colbourn, Charles J. (with Colbourn, Marlene J.; Phelps, Kevin T.; Rödl, Vojtěch) Coloring block designs is NP-complete. **(84c:68038)**
Distinct cyclic Steiner triple systems. **(84d:05041)**
- Colbourn, Marlene J. See Colbourn, Charles J.; et al., **(84b:68038)**
- Dey, A. See Sinha, Kishore, **(84f:62102)**
- Deza, Michel Some new generalizations of sharply t -transitive groups and sets. **(84g:05010)**
- Evans, Trevor Universal-algebraic aspects of combinatorics. **(84d:08004)**
- Frankl, Peter On the trace of finite sets. **(84g:05006)**
- Gionfriddo, Mario Some results on partial Steiner quadruple systems. **(84f:05031)**
- Hall, W. B. See Jarrett, R. G., (See **84c:62002b**)
- Hsu, D. Frank ★Cyclic neofields and combinatorial designs. **(84g:05001)**
- Jacroux, Mike On the structure of general block designs. **(84d:05052)**
- Jarrett, R. G. (with Hall, W. B.) Some design considerations for variety trials. (See **84c:62002b**)
- John, Peter W. M. Incomplete block designs for the 2^3 factorial. **(84b:62117)**
- Jungnickel, Dieter Difference sets with multiplier -1. **(84g:05030)**
See also Beth, Thomas, **(84i:05034)**
- Kageyama, Sanpei Connectedness of two-associate PBIB designs. **(84d:62137)**
- Kimberley, M. E. (with Piper, F. C.; Wild, Peter) The faithful orbit theorem for biplanes. **(84c:51005)**
- Klin, M. Kh. See Zaichenko, V. A., **(84j:20036)**
- Kramer, Earl S. (with Kreher, Donald L.; Mesner, Dale M.) Some crowded Room rectangles. **(84b:05036)**
- Kreher, Donald L. See Kramer, Earl S.; et al., **(84b:05036)**
- Lam, Clement W. H. See Seberry, Jennifer R., **(84b:05034)**
- Majumdar, Dibyen (with Notz, William I.) Optimal incomplete block designs for a comparing treatments with a control. **(84c:62106)**
- Mavron, Vassili C. Constructions for resolvable and related designs. **(84k:05027)**
- Megrelishvili, R. P. (with Nikolaishvili, T. G.) A class of codes with unequal protection of symbols based on balanced incomplete solvable block-designs. (Russian. English and Georgian summaries) **(84a:94025)**
- Mejza, Stanislaw See Ceranka, Bronislaw, **(84c:62119)**
- Mesner, Dale M. See Kramer, Earl S.; et al., **(84b:05036)**
- Moon, Aeryung Characterization of the graphs of the Johnson schemes $G(3k, k)$ and $G(3k+1, k)$. **(84f:05077a)**
On the uniqueness of the graphs $G(n, k)$ of the Johnson schemes. **(84f:05077b)**
- Nikolaishvili, T. G. See Megrelishvili, R. P., **(84a:94025)**
- Notz, William I. See Majumdar, Dibyen, **(84b:62106)**

- Panandikar, Sanjeev C. Further results on GGD designs. (84d:62138)
- Phelps, Kevin T. See Colbourn, Charles J.; et al., (84b:68038)
- Piper, F. C. See Kimberley, M. E.; et al., (84c:51005)
- Ridl, Vojtěch See Colbourn, Charles J.; et al., (84b:68038)
- Roy, Bimal K. Construction of (M, S) -optimal design for block size 3. (84m:62102)
- Saxl, Jan Groups on points and sets. (See 84c:05001)
- Scotti, Fernanda A characterization of the total graphs of BIB designs. (Italian) (84i:05098)
- Seberry, Jennifer R. (with Lam, Clement W. H.) On orthogonal matrices with constant diagonal. (84b:05034)
- Sinha, Bikas Kumar Some aspects of simplicity in the analysis of block designs. (84c:62122)
- Sinha, Kishore (with Dey, A.) A series of truly self-dual PBIB designs. (84f:62102)
- Summer, John S. (with Butson, Alton T.) Generalized relative difference sets and partially balanced incomplete block designs. (84b:05022)
- Wild, Peter See Kimberley, M. E.; et al., (84c:51005)
- Wu, Chien Fu See Cheng, Ch'ing Shui, (84d:62131)
- Zaichenko, V. A. (with Klin, M. Kh.) Construction and investigation by computer of some block designs and strongly regular graphs that are invariant with respect to exponentiation of symmetric groups. (Russian) (84j:20036)

05B07 Steiner triple systems

- Babai, László Almost all Steiner triple systems are asymmetric. (See 84d:05039)
- Bénéteau, Lucien Les systèmes triples de Hall de dimension 4. (English summary) [4-dimensional Hall triple systems] 84c:05030
- Hall triple systems and related topics. 84f:05021
- Cho, Chung Je Rotational Steiner triple systems. 84b:05025
- Colbourn, Charles J. Disjoint cyclic Steiner triple systems. 84d:05040
- Computing the chromatic index of Steiner triple systems. 84c:05008
- Distinct cyclic Steiner triple systems. 84d:05041
- (with Colbourn, Marlene J.; Rosa, Alexander) Completing small partial triple systems. 84g:05028
- Colbourn, Marlene J. See Colbourn, Charles J.; et al., 84g:05028
- Denniston, R. H. F. Nonisomorphic reverse Steiner triple systems of order 19. (See 84d:05039)
- Hilton, A. J. W. (with Teirlinck, Luc) Dimension in Steiner triple systems. (See 84d:05039)
- Lenz, Hanfried (with Zeidler, Herbert) Arcs and ovals in Steiner triple systems. 84g:05029
- Limbois, Monique Projective embeddings of small "Steiner triple systems". (See 84d:05039)
- Lo Faro, Giovanni On the size of partial parallel classes in Steiner systems STS(19) and STS(27). 84m:05019
- Lu, Jia Xi On large sets of disjoint Steiner triple systems. I. 84c:05031a
- On large sets of disjoint Steiner triple systems. II. 84c:05031b
- On large sets of disjoint Steiner triple systems. III. 84c:05031c
- Mendelsohn, E. Perpendicular arrays of triple systems. (See 84d:05039)
- Phelps, Kevin T. A survey of derived triple systems. (See 84d:05039)
- Prince, Alan R. Steiner triple systems of order 19 constructed from the Steiner triple system of order 9. 84f:05022
- Rosa, Alexander (with Vanstone, S. A.) Kirkman cubes. 84f:05023
- See also Colbourn, Charles J.; et al., 84g:05028
- Teirlinck, Luc See Hilton, A. J. W., (See 84d:05039)
- Vanstone, S. A. See Rosa, Alexander, 84f:05023
- Zeidler, Herbert See Lenz, Hanfried, 84g:05029

secondary classifications:

- Cohen, Gérard Denis (with Frankl, Peter) On generalized perfect codes and Steiner systems. (See 84c:05001)
- Colbourn, Charles J. (with Colbourn, Marlene J.) Greedy colourings of Steiner triple systems. (84f:05030)
- Embedding partial Steiner triple systems is NP-complete. (84c:68033)
- Colbourn, Marlene J. See Colbourn, Charles J., (84f:05030)
- Evans, Trevor Universal-algebraic aspects of combinatorics. (84d:08004)
- Frankl, Peter See Cohen, Gérard Denis, (See 84c:05001)
- Kramer, Earl S. (with Kreher, Donald L.; Mesner, Dale M.) Some crowded Room rectangles. (84b:05036)
- Kreher, Donald L. See Kramer, Earl S.; et al., (84b:05036)
- Mesner, Dale M. See Kramer, Earl S.; et al., (84b:05036)
- Rahman, Mushfiqur Asymptotically double error-correcting codes based on triple systems. (84m:94024)
- Rosa, Alexander See Vanstone, S. A., (84g:05037)
- Roy, Bimal K. Construction of (M, S) -optimal design for block size 3. (84m:62102)
- Vanstone, S. A. (with Rosa, Alexander) Starter-adder techniques for Kirkman squares and Kirkman cubes of small sides. (84g:05037)
- Wallis, Walter D. The problem of the hospitable golfers. (84m:05020)

05B10 Difference sets (number-theoretic, group-theoretic, etc.) [See also 10L05.]

- Abraham, Jaromir (with Kotzig, Anton) Critical perfect systems of difference sets with the minimum start. 84c:05018
- Belov, N. V. See Parkhomov, L. G.; et al., 84d:05042
- Butson, Alton T. See Summer, John S., 84d:05043 and 84b:05022
- Hitotumatu, Sin Note on the combinatorial problem of Masuyama. 84b:05026
- Ilyukhin, V. V. See Parkhomov, L. G.; et al., 84d:05042
- Jungnickel, Dieter Difference sets with multiplier -1. 84g:05030

- Kantor, William M. Exponential numbers of two-weight codes, difference sets and symmetric designs. 84c:05027
- Ko, Hai Ping (with Ray-Chaudhuri, Dijen K.) Multiplier theorems. 84c:05019
- (with Wang, Stuart Sui Sheng) Supplement to multiplier theorems. 84c:05020
- Kotzig, Anton See Abraham, Jaromir, 84c:05018
- Newman, Morris Circulants and difference sets. 84c:05028
- Parkhomov, L. G. (with Rau, V. G.; Ilyukhin, V. V.; Belov, N. V.) Necessary conditions for the existence of some Cochran cyclotomic sets with equal multiplicity. (Russian) 84d:05042
- Rau, V. G. See Parkhomov, L. G.; et al., 84d:05042
- Ray-Chaudhuri, Dijen K. See Ko, Hai Ping, 84c:05019
- Slater, Peter J. On repeated difference sequences of a permutation of N . 84g:05031
- Summer, John S. (with Butson, Alton T.) Generalized relative difference sets and partially balanced incomplete block designs. 84b:05022
- (with Butson, Alton T.) Relative addition sets and partially balanced incomplete block designs. 84d:05043
- Wang, Kai A generalization of group difference sets and the matrix equation $A^m = dI + \lambda J$. 84b:05023
- Wang, Stuart Sui Sheng See Ko, Hai Ping, 84c:05020

secondary classifications:

- Colbourn, Charles J. Distinct cyclic Steiner triple systems. (84d:05041)
- Evans, Ronald J. Twenty-fourth power residue difference sets. (84c:12024)
- Jain, N. K. On series of PBIB designs. (84b:05018)
- Mohanty, S. P. On cyclic difference of pairs of integers. (84k:10009)
- Riznyk, V. V. Ideal ring relationships and possibilities for their practical use. (84c:51012)
- Rumov, B. T. Existence of certain block designs. (Russian) (84d:05037)
- Ruzsa, Imre Z. Uniform distribution, positive trigonometric polynomials and difference sets. (84b:10073)

05B15 Orthogonal arrays, Latin squares, Room squares

- Arkin, Joseph (with Smith, Paul; Straus, E. G.) Euler's 36 officers problem in three dimensions—solved. 84c:05032
- Ashakiran, Y. C. On the construction of singly magic squares of order 4. 84g:05032
- Belyanskaya, G. B. The spectrum of partial admissibility of finite quasigroups (Latin squares). (Russian) 84j:05024
- Bennett, F. E. Latin squares with pairwise orthogonal conjugates. 84f:05024
- Bondi, Hermann See Ollerenshaw, Kathleen, 84i:05031
- Brouwer, A. E. (with Van Rees, G. H. J.) More mutually orthogonal Latin squares. 84c:05019
- Chaffar, Robert A. A construction of orthogonal arrays and applications to embedding theorems. 84f:05025
- Dinitz, Jeffrey H. Pairwise orthogonal symmetric Latin squares. 84c:05033
- (with Stinson, D. R.) MOLS with holes. 84d:05044
- Finney, D. J. Some enumerations for the 6×6 Latin squares. 84g:05033
- Fuji-Hara, R. (with Vanstone, S. A.) Equidistant permutation arrays from finite geometries. 84b:05027
- Garner, Cyril W. L. See Herzberg, Agnes M., 84d:05045
- Goulden, I. P. (with Vanstone, S. A.) The number of solutions to an equation arising from a problem on Latin squares. 84b:05028
- Haines, Chris A useful group and an uninteresting operation. 84i:05029
- Heinrich, Katherine (with Wallis, Walter D.) The maximum number of intercalates in a Latin square. 84g:05034
- Disjoint subquasigroups. 84b:05029
- A covering problem for idempotent Latin squares. 84g:05035
- (with Hilton, A. J. W.) Doubly diagonal orthogonal Latin squares. 84i:05030
- Herzberg, Agnes M. (with Garner, Cyril W. L.) Latin queen squares. 84d:05045
- Hilton, A. J. W. Embedding incomplete Latin rectangles. 84b:05030
- (with Rodger, C. A.) Latin squares with prescribed diagonals. 84f:05026
- See also Heinrich, Katherine, 84i:05030
- Hoffman, D. G. Completing incomplete commutative Latin squares with prescribed diagonals. 84b:05024
- Horton, J. D. The construction of Kotzig factorizations. 84c:05034
- Hwang, F. K. (with Li, Kuo Wei) Latin squares and superqueens. 84c:05020
- Johnson, Allan William, Jr. A sixth-order prime magic square. 84d:05046
- Katagiri, Yoshinao (with Kobayashi, Toshio) Magic triangular regions of orders 5 and 6. 84c:05035
- Kerr, John The existence of k orthogonal Latin k -cubes of order 6. 84c:05021
- Kobayashi, Toshio See Katagiri, Yoshinao, 84c:05035
- Kuo, Tien Tao The construction of doubly-even magic squares. 84b:05025
- Li, Kuo Wei See Hwang, F. K., 84c:05020
- Liang, Pei Ji Double magic squares. (Chinese) 84b:05031
- Mullin, Ronald C. (with Vanstone, S. A.) Steiner systems and Room squares. (See 84d:05039)
- Nechvatil, James R. Asymptotic enumeration of generalized Latin rectangles. 84c:05036
- Ollerenshaw, Kathleen (with Bondi, Hermann) Magic squares of order four. 84i:05031
- Pranesachar, C. R. On the number of two-line and three-line Latin rectangles—an alternative approach. 84j:05025
- Rodger, C. A. See Hilton, A. J. W., 84f:05026
- Rosa, Alexander See Vanstone, S. A., 84g:05037
- Sibley, Thomas Q. Equidistance relations: a new bridge between geometric and algebraic structures. 84b:05032
- Smietaniuk, Bohdan A new construction of Latin squares. II. The number of Latin squares is strictly increasing. 84d:05047
- Smith, Paul See Arkin, Joseph; et al., 84c:05036
- Stinson, D. R. (with Van Rees, G. H. J.) Some large critical sets. 84g:05036
- See also Dinitz, Jeffrey H., 84d:05044
- Straus, E. G. See Arkin, Joseph; et al., 84c:05032

- Tosić, Ratko On the reconstruction of Latin squares. **84d:05048**
- Van Rees, G. H. J. See Brouwer, A. E., **84c:05019** and Stinson, D. R., **84g:05036**
- Vanstone, S. A. (with Rosa, Alexander) Starter-adder techniques for Kirkman squares and Kirkman cubes of small sides. **84g:05037**
- See also Fuji-Hara, R., **84b:05027**; Goulden, I. P., **84b:05028** and Mullin, Ronald C., (See **84d:05039**)
- Wallis, Walter D. (with Zhu, Lie) Four pairwise orthogonal diagonal Latin squares of side 12. **84b:05033**
- The problem of the hospitable golfers. **84m:05020**
- (with Zhu, Lie) Some new orthogonal diagonal Latin squares. **84d:05049**
- See also Heinrich, Katherine, **84g:05034**
- Wang, Jian Ming (with Zhu, Yu Jie) On the incompletely orthogonal Latin squares. (Chinese. English summary) **84j:05026**
- Zhu, Lie Orthogonal diagonal Latin squares of order fourteen. **84c:05021**
- See also Wallis, Walter D., **84b:05033** and **84d:05049**
- Zhu, Yu Jie See Wang, Jian Ming, **84j:05026**

secondary classifications:

- (Belyavskaya, G. B.) See Quasigroups and Latin squares, (**84c:20083**)
- Evans, Trevor Universal-algebraic aspects of combinatorics. (**84d:08004**)
- Heise, Werner (with Quattrocchi, Pasquale) Variable-order codes. (German and Italian summaries) (**84b:94026**)
- Hwang, Jun Shung The lattice of stable marriages and permutations. (**84c:06011**)
- Jungnickel, Dieter ★ Transversaltheorie. (German) [Transversal theory] (**84j:05005**)
- (with Sane, Sharad S.) On extensions of nets. (**84b:05030**)
- Keedwell, Anthony Donald On the sequenceability of nonabelian groups of order pq . (**84h:20016**)
- On R -sequenceability and R_1 -sequenceability of groups. (**84f:20025**)
- Kuwada, Masahide On some optimal fractional 2^n factorial designs of resolution V. (**84c:62100**)
- Leitsch, A. Decision algorithms for the associativity of Latin squares. (**84c:68074**)
- Lyubarschuk, I. V. Classification of lower-order pseudoplanes and pseudoternaries. (Russian) (**84b:51012**)
- Mavron, Vassili C. Translations and construction of generalised nets. (**84g:05041**)
- Mullin, Ronald C. (with Schellenberg, P. J.; Vanstone, S. A.; Wallis, Walter D.) On the existence of frames. (**84f:05033**)
- Quattrocchi, Pasquale See Heise, Werner, (**84b:94026**)
- Rosa, Alexander (with Wallis, Walter D.) Premature sets of 1-factors or how not to schedule round robin tournaments. (**84c:05052**)
- Rumov, B. T. Perpendicularly separable quasigroups. (Russian) (**84c:20085**)
- Existence of certain block designs. (Russian) (**84d:05037**)
- Sane, Sharad S. See Jungnickel, Dieter, (**84b:05030**)
- Schellenberg, P. J. See Mullin, Ronald C.; et al., (**84f:05033**)
- Singh, Parmanand Total number of perfect magic squares: Nārāyana's rule. (**84g:01019**)
- Strickland, Elisabetta An application of combinatorics of Young tableaux to geometric problems. (**84f:14034**)
- (Valutse, I. I.) See Quasigroups and Latin squares, (**84c:20083**)
- Vanstone, S. A. See Mullin, Ronald C.; et al., (**84f:05033**)
- Wallis, Walter D. See Rosa, Alexander, (**84c:05052**) and Mullin, Ronald C.; et al., (**84f:05033**)
- Quasigroups and Latin squares ★ Класифікація і латинські квадрати. (Russian) [Quasigroups and Latin squares] (**84c:20083**)

05B20 Matrices (incidence, Hadamard, etc.)

- Anstee, R. P. Triangular $(0, 1)$ -matrices with prescribed row and column sums. **84c:05022**
- The network flows approach for matrices with given row and column sums. **84d:05050**
- Boneva, Liliana I. Random $(0, 1)$ matrices in seriation. (Bulgarian summary) **84c:05023**
- Eades, Peter Bounds for asymptotic existence of weighing matrices. **84c:05022**
- de Gopi, B. C. Maximal incidence algebras. **84j:05027**
- Gupta, S. C. A new class of matrices with application in experimental designs. **84m:05021**
- Ito, Noboru (with Leon, Jeffrey S.; Longyear, Judith Q.) Classification of $3-(24, 12, 5)$ designs and 24-dimensional Hadamard matrices. **84c:05023**
- Note on Hadamard matrices of type Q . **84c:05024**
- Doubly regular tournaments of Szekeres type. **84c:05037**
- (with Leon, Jeffrey S.) An Hadamard matrix of order 36. **84d:05051**
- Jacroux, Mike On the structure of general block designs. **84d:05052**
- Lam, Clement W. H. See Seberry, Jennifer R., **84b:05034**
- Lehmer, D. H. Remarks on $(0, 1)$ matrices. **84c:05025**
- Leon, Jeffrey S. See Ito, Noboru; et al., **84c:05023** and **84d:05051**
- Longyear, Judith Q. See Ito, Noboru; et al., **84c:05023**
- Mena, R. A. The characteristic polynomials of the plane of order 2. **84c:05024**
- Miyamichi, Juichi Some maximal absolutely unstable sign patterns of 4×4 matrices. **84h:05026**
- Sadykov, R. G. On the solution of an assignment problem. (Russian) **84c:05038**
- Seberry, Jennifer R. (with Lam, Clement W. H.) On orthogonal matrices with constant diagonal. **84b:05034**
- Taranakanov, V. E. The depth of $(0, 1)$ -matrices with identical row and identical column sums. (Russian) **84m:05022**
- Tind, Jørgen Blocking and antiblocking polyhedra. (See **84h:90034a**)
- Tonchev, V. D. Hadamard matrices of order 28 with automorphisms of order 13. **84c:05032**
- Ust'yuzhaninov, V. G. Typical length of minimal covering for tables with a spectrum. **84j:05028**
- Wei, Wan Di The class $\mathfrak{N}(R, S)$ of $(0, 1)$ -matrices. **84j:05029**
- Xia, Ming Yuan Several classes of Hadamard matrices. (Chinese. English summary) **84h:05027**
- Yang, Chao Hui Hadamard matrices and δ -codes of length $3n$. **84c:05033**

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- Borzacchini, Luigi (with Pulito, Carmelo) Some results on conversion matrices. (**84c:05073**)
- Bush, K. A. Families of related designs. (**84b:05014**)
- "Cyclic" solutions for finite projective planes. (**84f:51020**)
- Cerasoli, Mauro Two matrices constructed in the manner of Tartaglia's triangle. (Italian) (**84c:05009**)
- Drake, David A. (with Sane, Sharad S.) Auxiliary sets of matrices with new step parameter sequences. (**84b:51016**)
- The use of auxiliary sets of matrices in the construction of Hjelmlev and Klingenberg structures. (**84g:51010**)
- Galil, Zvi (with Kiefer, Jack Carl) On the characterization of D -optimum weighing designs for $n \equiv 3 \pmod{4}$. (**84j:62068**)
- Golomb, Solomon W. Normed division domains. (**84c:06002**)
- Greenberg, Harvey J. (with Lundgren, J. Richard; Maybee, John S.) Rectangular matrices and signed graphs. (**84m:05052**)
- Gregory, David A. (with Pullman, Norman J.) Prime Boolean matrices—a graph theoretic approach. (**84b:05088**)
- Harary, Frank (with Lindström, Bernt; Zetterström, Hans-Olov) On balance in group graphs. (**84c:05055**)
- Hershey, John E. See Yariagadda, R., (**84j:15011**)
- Hoffman, Alan J. The role of unimodularity in applying linear inequalities to combinatorial theorems. (See **84h:90034a**)
- Hoskins, J. A. Factoring binary matrices: a weaver's approach. (**84a:51010**)
- Hsu, D. Frank ★ Cyclic neofields and combinatorial designs. (**84g:05001**)
- Kiefer, Jack Carl See Galil, Zvi, (**84j:62068**)
- Kounias, Stratis See Moysiadiis, Chronis, (**84b:62113**)
- Lam, Clement W. H. Nonskew symmetric orthogonal matrices with constant diagonals. (**84f:15021**)
- Lindström, Bernt See Harary, Frank; et al., (**84c:05055**)
- Lopes Troya, Josefa Optimal designs for covariates' models. (**84c:62101**)
- Lundgren, J. Richard See Greenberg, Harvey J.; et al., (**84m:05052**)
- Maybee, John S. See Greenberg, Harvey J.; et al., (**84m:05052**)
- Moysiadiis, Chronis (with Kounias, Stratis) The exact D -optimal first order saturated design with 17 observations. (**84b:62113**)
- Newman, Morris On a problem of H. J. Ryser. (**84d:15020**)
- Circulants and difference sets. (**84c:05028**)
- Piebler, Joachim Einige Betrachtungen über 0-1-Determinanten. [Some observations on 0-1 determinants] (**84c:15023**)
- Pulito, Carmelo See Borzacchini, Luigi, (**84c:05073**)
- Pullman, Norman J. See Gregory, David A., (**84b:05088**)
- Rogers, M. J. See Stanton, Ralph G., (**84c:05042**)
- Ross, Jeffrey A. On the exponent of a primitive, nearly reducible matrix. II. (**84f:15025**)
- Sane, Sharad S. See Drake, David A., (**84b:51016**)
- Stanton, Ralph G. (with Rogers, M. J.) Packings and coverings by triples. (**84c:05042**)
- Tamir, Arie A class of balanced matrices arising from location problems. (**84c:05064**)
- van der Waal, Robert W. On p -rational monomial matrix groups and Hadamard matrices. (**84b:20051a**)
- Erratum: "On p -rational monomial matrix groups and Hadamard matrices". (**84b:20051b**)
- Wiener, Gerry Some structural results concerning certain classes of qualitative matrices and their inverses. (**84j:15036**)
- Wilson, Richard M. Incidence matrices of t -designs. (**84c:05024**)
- Yariagadda, R. (with Hershey, John E.) A note on the eigenvectors of Hadamard matrices of order 2^n . (**84j:15011**)
- Zetterström, Hans-Olov See Harary, Frank; et al., (**84c:05055**)

05B25 Finite geometries [See also 51D20, 51Exx.]

- Beth, Thomas (with Jungnickel, Dieter) Mathieu groups, Witt designs, and Golay codes. **84c:05009**
- (with Jungnickel, Dieter) On the codes generated by certain divisible designs. **84i:05034**
- Bichara, Alessandro (with Korchmáros, Gábor-Gabriele) Note on $(q+2)$ -sets in a Galois plane of order q . **84f:05027**
- Bruck, R. H. Enriched arcs as partial geometries. (See **84b:51003**)
- Bruen, Aiden A. (with de Resmini, Maria Luisa J.) Blocking sets in affine planes. **84j:05030**
- Bruyneel, G. See Mielants, W., **84c:05035**
- Ceccherini, Pier Vittorio (with Tallini, Giuseppe) Caps related to incidence structures and to linear codes. **84c:05010**
- Cordovil, Raul Sur les matroïdes orientés de rang 3 et les arrangements de pseudodroites dans le plan projectif réel. (English summary) [Oriented matroids of rank 3 and arrangements of pseudolines in the real projective plane] **84j:05031**
- Erdős, Paul (with Silverman, Ruth; Stein, Alan H.) Intersection properties of families containing sets of nearly the same size. **84j:05032**
- (with Mullin, Ronald C.; Sós, Vera T.; Stinson, D. R.) Finite linear spaces and projective planes. **84c:05026**
- Feng, Ke Qin (with Wu, Li Sheng; Zhu, Lie) Cycle index of $\text{PGL}_2(q)$ and 5-designs on the projective lines. (Chinese) **84c:05011**
- Fuji-Hara, R. (with Vanstone, S. A.) Recursive constructions for skew resolutions in affine geometries. **84c:05025**
- (with Vanstone, S. A.) Affine geometries obtained from projective planes and skew resolutions on $\text{AG}(3, q)$. **84f:05028**
- Fumy, Walter The large Witt design—materialized. **84c:05012**
- Higman, D. G. Admissible graphs. **84c:05026**
- Hirschfeld, J. W. P. Caps in elliptic quadrics. **84i:05035**
- Jungnickel, Dieter See Beth, Thomas, **84c:05009** and **84i:05034**

- Kestenband, Barbu C. Finite projective geometries that are incidence structures of caps. **84c:05013**
- Korchmáros, Gábor-Gabriele. See Bichara, Alessandro, **84f:05027**
- Lam, Clement W. H. (with Thiel, L.; Swiercz, S.; McKay, John) The nonexistence of ovals in a projective plane of order 10. **84c:05028**
- Mavron, Vassili C. Constructions for resolvable and related designs. **84c:05027**
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- Turzik, Daniel See Poljak, Svatopluk, **84d:05059**
- Walter, Manfred Construction of matroidal families by partly closed sets. **84a:05020**
- Weinberg, Louis Matroids, oriented matroids, and polymatroids: theory and applications. **84h:05034**
See also Lawrence, Jim, **84g:05045**
- Woodall, D. R. Vector transversals. **84j:05045**
Some notes on Feinberg's k -independence problem. **84j:05046**
- Zaslavsky, Thomas See Greene, Curtis, **84h:05032**
- Lipski, Witold, Jr. ★Kombinatoryka dla programistów. (Polish) [Combinatorics for programmers] **(84j:05002)**
- Maffioli, Francesco ★An introduction to matroid optimization. **(84h:90086)**
- Mandelbrot, Benoit B. See Gefen, Yuval; et al., **(84f:82006)**
- McDiarmid, Colin Integral decomposition in polyhedra. **(84c:90072)**
- Meir, Yigal See Gefen, Yuval; et al., **(84f:82006)**
- Nadal, J. P. (with Derrida, B.; Vannimenus, J.) Directed lattice animals in 2 dimensions: numerical and exact results. (French summary) **(84h:82041)**
- Oxley, James G. On some extremal connectivity results for graphs and matroids. **(84g:05097)**
- Pezzoli, Luigi Weight functions on modular lattices. (Italian. English summary) **(84d:06015)**
- Provan, J. Scott (with Billera, Louis J.) Leontief substitution systems and matroid complexes. **(84j:90054)**
- Pulleyblank, William R. Polyhedral combinatorics. **(84m:90075)**
- Seitz, W. A. See Klein, D. J., **(84f:82038)**
- Shemer, Ido Neighborly polytopes. **(84c:52008)**
- Stern, Manfred Exchange properties in lattices of finite length. **(84f:06011)**
- Sugihara, Kōkichi A unifying approach to descriptive geometry and mechanisms. **(84d:51031)**
- Sulanke, Robert A. q -counting n -dimensional lattice paths. **(84c:05009)**
- Sykes, M. F. See Gaunt, D. S.; et al., **(84h:82040)**
- Tallini, Giuseppe ★Geometrie d'incidenza e matroidi. (Italian) [Incidence geometries and matroids] **(84j:05001)**
- Tamari, Robert See Gavril, Fănică, **(84m:05061)**
- Torrie, G. M. See Gaunt, D. S.; et al., **(84h:82040)**
- Trapp, George E. (with Anderson, William N., Jr.) Algebraic properties of networks on matroids. (See **84f:93006b**)
- Trotter, L. E., Jr. See Baum, S., **(84c:90069)**
- Truemper, K. On the efficiency of representability tests for matroids. **(84a:68067)**
- Tucker, A. C. (with Zemanian, Armen H.) A matroid related to finitely chainlike, countably infinite networks. **(84m:94038)**
- Vannimenus, J. See Nadal, J. P.; et al., **(84h:82041)**
- Vijayan, K. S. A characterization of the simplex. **(84g:05020)**
- Vince, Andrew Graphic matroids, shellability and the Poincaré conjecture. **(84i:57002)**
- Weinberg, Louis An introduction to matroids. (See **84f:93006b**)
- Whittington, S. G. See Gaunt, D. S.; et al., **(84h:82040)**
- Wolsey, Laurence A. An analysis of the greedy algorithm for the submodular set covering problem. **(84k:90055)**
- Zaslavsky, Thomas Signed graphs. **(84c:05095a)**
Bicircular geometry and the lattice of forests of a graph. **(84h:05050c)**
Erratum: "Signed graphs". **(84c:05095b)**
- Zemanian, Armen H. See Tucker, A. C., **(84m:94038)**
- Zimmermann, U. Minimization of some nonlinear functions over polymatroidal network flows. **(84i:90145)**

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- Aharony, Amnon See Gefen, Yuval; et al., **(84f:82006)**
- Anderson, William N., Jr. See Trapp, George E., **(84f:93006b)**
- Bacławski, Kenneth Cohen-Macaulay connectivity and geometric lattices. **(84d:06001)**
- Baum, S. (with Trotter, L. E., Jr.) Integer rounding for polymatroid and branching optimization problems. **(84c:90069)**
- Bennett, Mary Katherine Affine geometry: a lattice characterization. **(84g:51016)**
- Billera, Louis J. See Provan, J. Scott, **(84j:90054)**
- Bixby, Robert E. Matroids and operations research. (See **84d:90034**)
- Borwein, Peter B. The Desmic conjecture. **(84i:51006)**
- Cartier, Pierre Les arrangements d'hyperplans: un chapitre de géométrie combinatoire. [Arrangements of hyperplanes: a chapter of combinatorial geometry] **(84d:32017)**
- Cordovil, Raul Sur les matroides orientés de rang 3 et les arrangements de pseudodroites dans le plan projectif réel. (English summary) [Oriented matroids of rank 3 and arrangements of pseudolines in the real projective plane] **(84j:05031)**
- Derrida, B. See Nadal, J. P.; et al., **(84h:82041)**
- Deza, Michel Some new generalizations of sharply t -transitive groups and sets. **(84g:05010)**
- Dhar, Deepak Exact solution of a directed-site animals-enumeration problem in three dimensions. **(84k:82088)**
- Euler, Reinhardt Regular $(2, 2)$ -systems. **(84j:90056)**
- Family, Fereydoon Cluster renormalisation study of site lattice animals in two and three dimensions. **(84g:82029)**
- Gaunt, D. S. (with Sykes, M. F.; Torrie, G. M.; Whittington, S. G.) Universality in branched polymers on d -dimensional hypercubic lattices. **(84h:82040)**
- Gavril, Fănică (with Tamari, Robert) An algorithm for constructing edge-trees from hypergraphs. **(84m:05061)**
- Gefen, Yuval (with Meir, Yigal; Mandelbrot, Benoit B.; Aharony, Amnon) Geometric implementation of hypercubic lattices with noninteger dimensionality by use of low lacunarity fractal lattices. **(84f:82006)**
- Girlich, Eberhard (with Kovalev, M. M.) ★Nichtlineare diskrete Optimierung. (German) [Nonlinear discrete optimization] **(84h:90041)**
- Gritsak, V. V. Independence systems of matroid type. (Russian. English summary) **(84h:05009)**
Some combinatorial multicriteria problems. (Russian. English summary) **(84i:90149)**
- Hamacher, Horst ★Flows in regular matroids. **(84k:90029)**
Optimal cocircuits in regular matroids and applications. **(84j:90030)**
- Junison-Waldner, Robert E. Convexity and block graphs. **(84h:05081)**
- Jungnickel, Dieter ★Transversaltheorie (German) [Transversal theory] **(84j:05005)**
- Klein, D. J. (with Seitz, W. A.) Self-similar self-avoiding structures: models for polymers. **(84f:82038)**
- Kovalev, M. M. See Girlich, Eberhard, **(84h:90041)**
- Barnes, Frank W. Algebraic theory of brick packing. I. **84c:05044a**
Algebraic theory of brick packing. II. **84c:05044b**
- Beister, Jochen A relationship between two lower bounds on the cardinality of a minimal cover. (French and German summaries) **84d:05061**
- Billington, Elizabeth J. (with Stanton, Ralph G.) Bipackings and lambda packings of pairs into triples, repeated elements allowed in triples. **84f:05034**
- Carnielli, Walter Alexandre Some investigations on covering problems. **84m:05024**
- Cowan, D. D. See Stanton, Ralph G.; et al., **84j:05047**
- Fishburn, Peter C. Balanced integer arrays: a matrix packing theorem. **84c:05031**
- Gordeev, É. N. New estimates in the covering problem. (Russian) **84k:05033**
- Krys, Jaromir Solution of a combinatorial problem using a plane cubic curve. (Czech. English summary) **84h:05035**
- Mills, W. H. A covering of triples by quadruples. **84k:05034**
- Protasov, I. V. Charts of subsets and covering and packing problems. (Russian) **84g:05047**
- Quinn, R. F. See Stanton, Ralph G.; et al., **84j:05047**
- Rödl, Vojtěch Note on packing, covering and Turán numbers. **84a:05021**
- Rogers, M. J. See Stanton, Ralph G., **84i:05042** and **84j:05047**
- Shiloach, Yossi (with Vishkin, Uzi; Zaks, Shmuel) Golden ratios in a pairs covering problem. **84c:05032**
- Skillicorn, David B. Directed packings of pairs into quadruples. **84h:05036**
Directed coverings. **84g:05048**
- Smith, H. Paul Minimal packings of partial planes. **84c:05035**
- Stanton, Ralph G. (with Rogers, M. J.) Packings and coverings by triples. **84i:05042**
(with Rogers, M. J.; Quinn, R. F.; Cowan, D. D.) Bipackings of pairs into triples, and isomorphism classes of small bipackings. **84j:05047**
See also Billington, Elizabeth J., **84f:05034**
- Todorov, D. T. (with Tonchev, V. D.) On some coverings of triples. **84c:05033**
On Turán numbers. (Bulgarian summary) **84k:05036**
- Tonchev, V. D. See Todorov, D. T., **84c:05033**
- Vishkin, Uzi See Shiloach, Yossi; et al., **84c:05032**
- Wachs, Michelle L. Minimum cost partitions of a rectangle. **84c:05045**
- Zaks, Shmuel See Shiloach, Yossi; et al., **84c:05032**

secondary classifications:

- Baker, Brenda S. (with Coffman, E. G., Jr.; Rivest, Ronald L.) Orthogonal packings in two dimensions. (See **84h:94002**)
(with Calderbank, Robert; Coffman, E. G., Jr.; Lagarias, Jeffrey C.)
Approximation algorithms for maximizing the number of squares packed into a rectangle. **(84i:68056)**
- Barnes, E. S. (with Sloane, N. J. A.) New lattice packings of spheres. **(84f:52010)**

- Berge, Claude Packing problems and hypergraph theory: a survey. (See 84b:90034a)
(Rind, G.) See Problems: Discrete geometry, (84c:51003)
- Calderbank, Robert See Baker, Brenda S.; et al., (84i:68056)
- Coffman, E. G., Jr. (with Garey, Michael R.; Johnson, David Stifler) Dynamic bin packing. (84i:68024)
See also Baker, Brenda S.; et al., (84i:68056) and (See 84b:94002)
- Fejes Tóth, G. (with Fejes Tóth, László) Dictators on a planet. (84h:52023)
- Fejes Tóth, László See Fejes Tóth, G., (84h:52023)
- Garey, Michael R. See Coffman, E. G., Jr.; et al., (84i:68024)
- (Goodman, Jacob Eli) See Problems: Discrete geometry, (84c:51003)
- Griggs, Jerrold R. (with Lagarias, Jeffrey C.; Odlyzko, Andrew M.; Shearer, James B.) On the tightest packing of sums of vectors. (84m:52021)
- Groemer, H. Covering and packing properties of bounded sequences of convex sets. (84h:52021)
- Guba, Wolfgang Ein lokaler Algorithmus zum Aufbau minimaler Überdeckungen. [A local algorithm for the construction of minimal coverings] (84j:68015)
- Johnson, David Stifler See Coffman, E. G., Jr.; et al., (84i:68024)
- (Kelly, L. M.) See Problems: Discrete geometry, (84c:51003)
- (Klee, Victor) See Problems: Discrete geometry, (84c:51003)
- Lagarias, Jeffrey C. See Baker, Brenda S.; et al., (84i:68056) and Griggs, Jerrold R.; et al., (84m:52021)
- Lifschitz, Vladimir (with Pittel, B. G.) The worst and the most probable performance of a class of set-covering algorithms. (84c:90070)
- Lovász, László Graph theory and integer programming. (See 84h:90034a)
- Makeyev, V. V. Universal coverings. II. (Russian) (84c:52005)
- McLarnan, T. J. The numbers of polytypes in close-packings and related structures. (84i:05010)
- Medek, Václav Boundary of the union of rectangles in the plane. (Russian and Czech summaries) (84j:52009)
- (Monson, B. R.) See Problems: Discrete geometry, (84c:51003)
- Morikawa, Ryozo On a method to construct covering sets. (84i:10057)
Some examples of covering sets. (84j:10064)
- (Moser, W. O. J.) See Problems: Discrete geometry, (84c:51003)
- Ninomiya, Toshiyuki Medium range order in dense random packed structure. (See 84j:82004)
- Odlyzko, Andrew M. (with Sloane, N. J. A.) A theta-function identity for nonlattice packings. (84c:10039)
See also Griggs, Jerrold R.; et al., (84m:52021)
- Österreicher, F. (with Rohm, W.) Die minimale 3-Nachbarnpackung kongruenter Kreise. [The minimal 3-neighborly packing of congruent circles] (84g:52024)
- Padberg, Manfred W. Covering, packing and knapsack problems. (See 84h:90034a)
- Pittel, B. G. See Lifschitz, Vladimir, (84c:90070)
- (Purdy, G. B.) See Problems: Discrete geometry, (84c:51003)
- Rivest, Ronald L. See Baker, Brenda S.; et al., (See 84b:94002)
- Roditty, Y. Packing and covering of the complete graph with a graph G of four vertices or less. (84c:05087)
- Rohm, W. See Österreicher, F., (84g:52024)
- (Rousseau, Christiane) See Problems: Discrete geometry, (84c:51003)
- Shearer, James B. See Griggs, Jerrold R.; et al., (84m:52021)
- Sloane, N. J. A. See Odlyzko, Andrew M., (84c:10039) and Barnes, E. S., (84f:52010)
- Weissbach, Bernulf Eine Bemerkung zur Überdeckung beschränkter Mengen durch Mengen kleineren Durchmessers. [A comment on the covering of bounded sets by sets of smaller diameter] (84f:52014)
- (Wetzel, John E.) See Problems: Discrete geometry, (84c:51003)
- (Wilker, J. B.) See Problems: Discrete geometry, (84c:51003)
- Problems:
Discrete geometry ★ Problems in discrete geometry, 1980. (84c:51003)

05B45 Tessellation and tiling problems

- Di Paola, Jane W. Tiling in the hyperbolic plane. 84d:05062
- Lim, Chong Keang Mathematical designs. I. Tessellations of plane. 84i:05043
- Robinson, Peter J. Fault-free rectangles tiled with rectangular polyominoes. 84a:05022
- Szabó, Sándor Rational tilings by n -dimensional crosses. 84c:05034
- secondary classifications:
- Ahrens, J. H. Paving the chessboard. (84d:05009)
- Barnes, Frank W. Algebraic theory of brick packing. I. (84c:05044a)
Algebraic theory of brick packing. II. (84c:05044b)
- Barnette, David Generating the triangulations of the projective plane. (84f:57009)
All triangulations of the projective plane are geometrically realizable in E^4 . (84f:57010)
- Bezdek, A. Remark on the closest packing of convex discs. (84c:52018)
- Cassidy, Charles (with Lord, Graham) A square acutely triangulated. (84j:51036)
- Chung, F. R. K. (with Gilbert, E. N.; Graham, R. L.; Shearer, James B.; van Lint, J. H.) Tiling rectangles with rectangles. (84c:52022)
- Dekking, F. M. Replicating superfigures and endomorphisms of free groups. (84i:51019)
Pentagon tilings. (84c:52019a)
Comment on: "Pentagon tilings". (84c:52019b)
- Ebbinghaus, H.-D. Undecidability of some domino connectivity problems. (84c:03083)
- Fejes Tóth, G. (with Fejes Tóth, László) Dictators on a planet. (84h:52023)
- Fejes Tóth, László Solid packing of circles in the hyperbolic plane. (84c:52019)
See also Fejes Tóth, G., (84h:52023)
- Fontaine, Anne (with Martin, George Edward) Tetramorphic and pentamorphic prototiles. (84g:52022a)
(with Martin, George Edward) Polymorphic prototiles. (84g:52022b)
- Gilbert, E. N. See Chung, F. R. K.; et al., (84c:52022)
- Gilbert, William J. An easy way to construct spacefillings. (84j:52018)
- Graham, R. L. See Chung, F. R. K.; et al., (84c:52022)

- Grünbaum, Branko (with Miller, J. C. P.; Shephard, G. C.) Uniform tilings with hollow tiles. (84c:52011)
(with Shephard, G. C.) Spherical tilings with transitivity properties. (84h:52012)
- Kramer, Peter Nonperiodic central space filling with icosahedral symmetry using copies of seven elementary cells. (84c:52026)
- van Lint, J. H. See Chung, F. R. K.; et al., (84c:52022)
- Lord, Graham See Cassidy, Charles, (84j:51036)
- Martin, George Edward See Fontaine, Anne, (84g:52022a) and (84g:52022b)
- Miller, J. C. P. See Grünbaum, Branko; et al., (84c:52011)
- Read, Ronald C. The dimer problem for narrow rectangular arrays: a unified method of solution, and some extensions. (84g:05013)
- Shearer, James B. See Chung, F. R. K.; et al., (84c:52022)
- Shephard, G. C. See Grünbaum, Branko; et al., (84c:52011) and (84c:52012)
- Szabó, Sándor Rational lattice tilings of n -dimensional Euclidean space by crosses. (84c:52022)
On the problem of regularity of a type of n -dimensional tilings. (84c:52023)
- Valette, Alain On simplicial tilings of the plane. (84c:52028)
- Wieting, Thomas W. ★ The mathematical theory of chromatic plane ornaments. (84h:51043)

05B50 Polyominoes

- Barnes, Frank W. (with Shearer, James B.) Barring rectangles from the plane. 84c:05046
- Gronau, Hans-Dietrich O. F. (with Larisch, Hans-Herbert) On the SOMA-cube-puzzle. 84d:05063
- Larisch, Hans-Herbert See Gronau, Hans-Dietrich O. F., 84d:05063
- Redelmeier, D. Hugh Counting polyominoes: yet another attack. 84g:05049
- Shearer, James B. Barring the Z pentomino from the infinite checkerboard. 84d:05064
See also Barnes, Frank W., 84c:05046

secondary classifications:

- Delest, M. P. (with Viennot, Gérard) Algebraic languages and polyominoes enumeration. (84m:68063)
- Hering, F. (with Read, Ronald C.; Shephard, G. C.) The enumeration of stack polytopes and simplicial clusters. (84c:52012)
- van Leeuwen, Jan See Wijshoff, H. A. G., (See 84b:68003)
- Read, Ronald C. See Hering, F.; et al., (84c:52012)
- Shephard, G. C. See Hering, F.; et al., (84c:52012)
- Viennot, Gérard See Delest, M. P., (84m:68063)
- Wijshoff, H. A. G. (with van Leeuwen, Jan) Periodic versus arbitrary tessellations of the plane using polyominoes of a single type (extended abstract). (See 84b:68003)

05B99 None of the above, but in this section

- Cottle, Richard W. Minimal triangulation of the 4-cube. 84d:05065a
- Katchalski, Meir (with Lewis, Ted) Cutting rectangles in the plane. 84g:05050
- Lewis, Ted See Katchalski, Meir, 84g:05050
- Sallee, John F. A triangulation of the n -cube. 84d:05065b
- Smelyakov, S. V. See Stoyan, Yu. G., 84b:05039
- Stoyan, Yu. G. (with Smelyakov, S. V.) Discovery of the optimal path in a multiply connected domain on a class of paths in \mathbb{R}^2 . (Russian) 84b:05039

secondary classifications:

- Baclawski, Kenneth (with Garsia, Adriano M.) Combinatorial decompositions of a class of rings. (84a:06003a)
Rings with lexicographic straightening law. (84a:06003b)
- Dinitz, Jeffrey H. (with Margolis, Stuart W.) Continuous maps on block designs. (84j:05019)
- Dodunekova, Rositsa D. Two informational problems on generalized BCH codes. (Russian) (84c:94013)
- Erdős, Paul Combinatorial problems in geometry. (84i:52014)
- Garsia, Adriano M. See Baclawski, Kenneth, (84a:06003a)
- Hine, Timothy C. (with Mavron, Vassili C.) Translations of symmetric and complete nets. (84j:51015)
- Hintze, Wolfgang ★ Der ungarische Zauberwürfel. (German) [The Hungarian magic cube] (84b:20006)
- Holladay, Kenneth Growth rules for a class of polygonal animals. (84d:52016)
- Hoskins, J. A. (with Hoskins, W. D.; Street, Anne Penfold; Stanton, Ralph G.) Some elementary isonemal binary matrices. (84h:52018)
- Hoskins, W. D. See Hoskins, J. A.; et al., (84h:52018)
- Káteszi, Ferenc (with Lénárt, István) A generalization of the concept of projective plane. (Italian. English summary) (84j:51004)
- Khachatryan, L. G. Tables with the "window" property. (Russian. Armenian summary) (84k:94022)
- Lam, Clement W. H. (with Ma, S. L.; Siu, Man Keung) The existence and nonexistence of perfect addition sets. (84m:10053)
- Lénárt, István See Káteszi, Ferenc, (84j:51004)
- Ma, S. L. See Lam, Clement W. H.; et al., (84m:10053)
- Margolis, Stuart W. See Dinitz, Jeffrey H., (84j:05019)
- Mavron, Vassili C. See Hine, Timothy C., (84j:51015)
- Mrowka, Michael (with Weber, Wolfgang J.) Der Viererwürfel. [The quadruple cube] (84j:20007)
- Post, K. A. On some problems of embracement in space. (84j:52007)
- Preece, D. A. Some partly cyclic 13×4 Youden "squares" and a balanced arrangement for a pack of cards. (84d:05036)
- Siu, Man Keung See Lam, Clement W. H.; et al., (84m:10053)
- Stanton, Ralph G. See Hoskins, J. A.; et al., (84h:52018)
- Street, Anne Penfold See Hoskins, J. A.; et al., (84h:52018)

- Weber, Wolfgang J. See Mrowka, Michael, (84j:20007)
 Zassenhaus, Hans J. Rubik's cube: a toy, a Galois tool, group theory for everybody. (84c:20010)

05Cxx Graph theory {For applications of graphs, see 68D90, 68E10, 94C15.}

- Nešetřil, Jaroslav Representations of graphs by means of products and their complexity. (84c:05051)

secondary classifications:

- (Borowiecki, M.) See Graph theory, (84m:05004)
 (Embarek, Djilali) See Yablonskii, S. V., (84c:94001)
 Grötschel, Martin (with Lovász, László; Schrijver, A.) The ellipsoid method and its consequences in combinatorial optimization. (84a:90044)
 Halin, Rudolf ★Graphentheorie. II. (German) [Graph theory. II] (84h:05001)
 Immerman, Neil Upper and lower bounds for first order expressibility. (84a:68041)
 Ivanov, E. A. Parallel algorithms on graphs. (84j:68043)
 (Kennedy, John W.) See Graph theory, (84m:05004)
 Kowaltowski, Tomasz See Lucchesi, Claudio L.; et al., (84g:68001)
 Lipiski, Witold, Jr. ★Kombinatoryka dla programistów. (Polish) [Combinatorics for programmers] (84j:05002)
 Lovász, László Graph theory and integer programming. (See 84h:90034a)
 See also Grötschel, Martin; et al., (84a:90044)
 Lucchesi, Claudio L. (with Simon, Imre; Simon, Istvan; Simon, Janos; Kowaltowski, Tomasz) ★Aspectos teóricos da computação. (Portuguese) [Theoretical aspects of computation] (84g:68001)
 Schrijver, A. See Grötschel, Martin; et al., (84a:90044)
 Simon, Imre See Lucchesi, Claudio L.; et al., (84g:68001)
 Simon, Istvan See Lucchesi, Claudio L.; et al., (84g:68001)
 Simon, Janos See Lucchesi, Claudio L.; et al., (84g:68001)
 Syslo, Maciej M. See Graph theory, (84m:05004)
 Yablonskii, S. V. ★Introduction aux mathématiques discrètes. (French) [Introduction to discrete mathematics] (84k:94001)

Conference:

- Graph theory ★Graph theory. (84m:05004)
 Graph theory ★Graph theory. (84m:05004)
 Lagow ★Graph theory. (84m:05004)

05C05 Trees

- Bollobás, Béla (with Guy, Richard K.) Equitable and proportional coloring of trees. (84m:05025)
 Brodskii, G. M. (with Fomina, I. A.) On the lattice of subtrees of a tree. (Russian) (84c:05052)
 Caplan, S. Roy (with Zeilberger, Doron) T. L. Hill's graphical method for solving linear equations. (84f:05035)
 Courcelle, Bruno Fundamental properties of infinite trees. (84c:05047)
 Darcel, Nelly (with Zimmermann, Yvette) Partition en cycles du graphe de comparabilité d'un arbre. [Partition into cycles of the comparability graph of a tree] (84j:05048)
 Du, Ding Zhu See Hwang, F. K.; et al., (84g:05054)
 Duke, Richard A. (with Winkler, Peter M.) Degree sets of k -trees: small k . (84c:05053)
 Ecsedi-Toth, P. A theory of finite functions. I. On finite trees associated to certain finite functions. (84i:05044)
 Farrell, E. J. Forest decompositions of graphs with cyclomatic number 2. (84h:05040)
 Fomina, I. A. See Brodskii, G. M., (84c:05052)
 Frank, András On disjoint trees and arborescences. (84h:05037)
 Guy, Richard K. See Bollobás, Béla, (84m:05025)
 Harary, Frank (with Mokken, Robert J.; Plantholt, Michael J.) Interpolation theorem for diameters of spanning trees. (84j:05049)
 Hobbs, Arthur M. Packing trees. (84d:05066)
 Horibe, Yasuichi Notes on Fibonacci trees and their optimality. (84j:05050)
 Huang, Charlotte (with Kotzig, Anton; Rosa, Alexander) Further results on tree labellings. (84f:05036)
 Hwang, F. K. (with Weng, Jia Feng; Du, Ding Zhu) A class of full Steiner minimal trees. (84g:05054)
 Johnson, David E. (with Johnson, Johnny R.) On enumerating the trees of the wheel and other special graphs. (84h:05038)
 Johnson, Johnny R. See Johnson, David E., (84h:05038)
 Kemp, Rainer The average height of planted plane trees with m leaves. (84h:05039)
 Kirschenhofer, Peter Asymptotic results on a special kind of order preserving maps. (84j:05051)
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- Kulli, V. R. (with Annigeri, N. S.) Reconstruction of a pair of connected graphs from their line-concatenations. **84b:05095**
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- Ramachandran, S. On reconstructing separable digraphs. **84b:05096**
- secondary classifications:
- Lopez, Gérard Reconstruction d'une S -expansion. [Reconstruction of an S -expansion] **84f:04002**
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- Dodson, C. T. J. A new generalisation of graph theory. **84c:05068**
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- Fournier, J.-C. Hypergraphes de chaînes d'arêtes d'un arbre. (English summary) [Edge-path hypergraphs of a tree] **84b:05098**
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- Bandman, O. L.** (with Markova, V. P.) Fourier transformations of hypergraphs and graphs. (84c:94021)
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- Coverings of the complete (di)-graph with n vertices by complete bipartite (di)-graphs with n vertices. II. (84m:05063b)
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- Akl, Selim G.** The minimal directed spanning graph for combinatorial optimization. (84f:90033)
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- Fernandez de la Vega, W.** Sur la cardinalité maximum des couplages d'hypergraphes aléatoires uniformes. [On the maximum cardinality of the matchings of uniform random hypergraphs] (84c:05078)
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- Kostrzewski, Wiesław A method of determining Ford-Fulkerson cross-sections in a graph. (Polish. English and Russian summaries) (84j:90032)
- Kowalski, Kenneth L. Graphical structure of many-particle transition operators. (84c:81070)
- Kramer, Earl S. See Chouinard, Leo G., II; et al. (84c:05028)
- Kreher, Donald L. See Chouinard, Leo G., II; et al. (84c:05028)
- Kučera, L. (with Šedivá-Trnková, Věra) Isomorphism completeness for some algebraic structures. (84c:68070)
- Kummer, Bernd ★Игры на графах. (Russian) [Games on graphs] (84g:90128)
- Labbe, Martine Solution de Condorcet et médiane dans les réseaux simples. [Condorcet solutions and medians in simple networks] (84m:90037)
- Lavaud, Michel Estimates of general Mayer graphs. I. Construction of upper bounds for a given graph by means of sets of subgraphs. (84d:82012a)
- Estimates of general Mayer graphs. III. Upper bounds obtained by means of spanning n -trees. (84d:82012b)
- Estimates of general Mayer graphs. IV. On the computation of Gaussian integrals by the star-mesh transformation. (84d:82012c)
- Lepshinskii, N. A. See Baturina, L. N., (84m:90043)
- Mahanti, A. See Bagchi, Amitava, (84m:68069)
- Michel, Anthony N. See Tang, Wang, et al., (See 84f:93006d)
- Mielants, W. (with Bruyneel, G.) Minimal balanced sets and finite geometries. (84c:05035)
- Mihók, Peter On graphs critical with respect to vertex partition numbers. (84c:05050)
- Mirkin, B. G. (with Rodin, S. N.) ★Графы и гены. (Russian) [Graphs and genes] (84c:92032)
- Monien, Burkhard (with Sudborough, Ivan Hal) Bandwidth problems in graphs. (See 84b:94004)
- Murata, Tadao See Yu, Stone H., (See 84b:94002)
- Nenov, Nedyalko D. See Khadzhiivanov, Nikolai G.; et al., (84c:05077)
- Neumaier, Arnold Regular sets and quasisymmetric 2-designs. (84c:05025)
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- Nikitin, A. S. (with Skrikan, N. I.) Hierarchical graph structures and program facilities for their manipulation. (84d:68070)
- Nishio, Hidenosuke An automaton generating series of graphs. (84b:68038)
- Nishizeki, Takao See Chiba, Norishige; et al., (84c:68068)
- Pálffy, P. P. See Babai, László; et al., (84c:20003)
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- Puccio, Luigia (with Ricca, G.) An algorithm for determining the isomorphism of a pair of graphs. (Italian. English summary) (84c:68076)
- Rajagopal, A. K. See Sitharama Iyengar, S.; et al., (84m:10055)
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- Rodin, S. N. See Mirkin, B. G., (84c:92032)
- Ros, C. A note on the existence of perfect constant weight codes. (84j:94042)
- Roth, Jean-Pierre Spectre du laplacien sur un graphe. (English summary) [Spectrum of the Laplacian on a graph] (84g:58104)
- Rozenberg, Grzegorz (with Verraedt, R.) Graphs and languages. (84c:68092)
- Saito, Nobuji See Chiba, Norishige; et al., (84c:68068)
- Savage, John E. See Swamy, Sowmitri, (84b:68051)
- Schmidt, Gunther See Berghammer, R., (84c:06002)
- Schmitt, Alfred Reporting geometric inclusions with an application to the hidden line problem. (German summary) (84j:68067)
- Schrijver, A. Association schemes and the Shannon capacity: Eberlein polynomials and the Erdős-Ko-Rado theorem. (84d:94031)
- Šedivá-Trnková, Věra See Kučera, L., (84c:68070)
- Simon, Janos See Ja'Ja', Joseph, (84c:68069)
- Sitharama Iyengar, S. (with Rajagopal, A. K.; Uppuluri, V. R. R.) String patterns of leading digits. (84m:10055)
- Skrikan, N. I. See Nikitin, A. S., (84c:68070)
- Spircu, Tiberiu Extensions of a theorem of P. Gabriel. (84c:18001)
- Steinberg, Leon See Chin, Orin, (84c:90028)
- Sudborough, Ivan Hal See Monien, Burkhard, (See 84b:94004)
- Swamy, Sowmitri (with Savage, John E.) Space-time tradeoffs for linear recursion. (84b:68051)
- Tang, Wang (with Hale, H. W.; Michel, Anthony N.) Generalized graphs and digraphs. (See 84f:93006d)
- Tecuci, Gheorghe D. H-graphs and their applications to pattern recognition. (Romanian summary) (84f:68075)
- Tomková, Mária On multilattices with isomorphic graphs. (Russian summary) (84f:06008)
- Trotter, William T., Jr. See Kelly, David, (84c:06002)
- Uppuluri, V. R. R. See Sitharama Iyengar, S.; et al., (84m:10055)
- Ushio, Kazuhiko On balanced claw designs of complete multipartite graphs. (84c:05041)
- Vanden Cruyce, Patricia A characterization of the n -cube by convex subgraphs. (84c:05091)
- Verraedt, R. See Rozenberg, Grzegorz, (84c:68092)
- Viktorova, N. P. Development of algorithms of structural generalization. (Russian) (84d:68101)
- (Vorob'ev, N. N.) See Kummer, Bernd, (84g:90128)
- Walter, Manfred Construction of matroidal families by partly closed sets. (84c:05020)
- Wankmüller, F. Characterization of graph classes by forbidden structures and reductions. (See 84f:68006)
- Wilson, Robin J. See Chetwynd, Amanda G., (84f:05042)
- Witt, Kurt-Ulrich Finite graph-automata. (German summary) (See 84f:68004)
- Yen, Hung Sên See Huang, Wên Min, (84b:70004)
- Yu, Stone H. (with Murata, Tadao) PT-marked graphs: a reduced model of Petri nets. (See 84b:94002)
- Zelinka, Bohdan Domatically cocritical graphs. (Russian summary) (84g:05115)

06-XX ORDER, LATTICES, ORDERED ALGEBRAIC STRUCTURES [See also 18B35.]

06-01 Elementary exposition, textbooks

- Erné, Marcel ★Einführung in die Ordnungstheorie. (German) [Introduction to the theory of order] 84b:06001
- Skornyakov, L. A. ★Элементы теории строк. (Russian) [Elements of lattice theory] 84c:06001

06-02 Advanced exposition (research surveys, monographs, etc.)

- Kalmbach, Gudrun Orthomodulare Verbände. [Orthomodular lattices] 84f:06001
- Quackenbush, Robert W. Enumeration in classes of ordered structures. 84b:06001
- Rosenstein, Joseph G. ★Linear orderings. 84m:06001

06-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Erné, Marcel Distributivgesetze und Dedekind'sche Schnitte. (English summary) [Distributive laws and Dedekind cuts] (84i:06002)
- (Sikorski, Roman) See Traczyk, Tadeusz, (84j:01073b)
- Traczyk, Tadeusz The papers of Roman Sikorski in the theory of Boolean algebras. (Polish) (84j:01073b)

06-04 Explicit machine computation and programs (not the theory of computation or programming)

- Lomecky, Z. Algorithms for the computation of free lattices. 84a:06001

secondary classifications:

- Kalvin, Alan D. (with Varol, Yaakov L.) On the generation of all topological sortings. (84d:68067)
- Varol, Yaakov L. See Kalvin, Alan D., (84d:68067)

06-06 Proceedings, conferences, etc.

- (Huhn, A. P.) See Contributions to lattice theory. 84j:06001
- (Schmidt, E. Tamás) See Contributions to lattice theory. 84j:06001
- Colloquia Mathematica Societatis János Bolyai ★Contributions to lattice theory. 84j:06001
- Colloquium:
- Lattice theory ★Contributions to lattice theory. 84j:06001
- Contributions to lattice theory ★Contributions to lattice theory. 84j:06001
- Szeged ★Contributions to lattice theory. 84j:06001

secondary classifications:

- (Eigenhauer, Günther) See Contributions to general algebra. (84i:00014)
- (Freese, Ralph S.) See Universal algebra and lattice theory. (84i:08001)
- (Garcia, Octavio C.) See Universal algebra and lattice theory. (84i:08001)
- (Kaiser, Hans K.) See Contributions to general algebra. (84i:00014)
- (Müller, Winfried B.) See Contributions to general algebra. (84i:00014)
- (Nöbauer, Wilfried) See Contributions to general algebra. (84i:00014)
- Conference:
- Contributions to general algebra ★Contributions to general algebra. 2. (84i:00014)
- Universal algebra and lattice theory ★Universal algebra and lattice theory. (84i:08001)
- Contributions to general algebra ★Contributions to general algebra. 2. (84i:00014)
- Klagenfurt ★Contributions to general algebra. 2. (84i:00014)
- Puebla ★Universal algebra and lattice theory. (84i:08001)
- Universal algebra and lattice theory ★Universal algebra and lattice theory. (84i:08001)

06Axx Ordered sets

06A05 Total order

- Abel, Ulrich Sur les groupes d'itération monotones. (English summary) [On monotone iteration groups] 84c:06001
- Nevermann, Peter A note on axiomatizable order varieties. 84i:06001

secondary classifications:

- Charretton, Ch. (with Pouzet, Maurice) Comparaison des structures engendrées par des chaînes. (English summary) [Comparison of structures generated by chains] (See 84i:03008)
- Kelly, David (with Trotter, William T., Jr.) Dimension theory for ordered sets. (84b:06002)
- Knuth, Donald E. Huffman's algorithm via algebra. (84c:94009)
- Nešetřil, Jaroslav (with Prömel, H. J.; Rödl, Vojtěch; Voigt, Bernd) Canonical ordering theorems, a first attempt. (84f:05014)
- Pouzet, Maurice See Charretton, Ch., (See 84i:03008)
- Prömel, H. J. See Nešetřil, Jaroslav; et al., (84f:05014)
- Rival, Ivan Optimal linear extensions by interchanging chains. (84b:06002)
- Rödl, Vojtěch See Nešetřil, Jaroslav; et al., (84f:05014)
- Trotter, William T., Jr. See Kelly, David, (84b:06002)
- Voigt, Bernd See Nešetřil, Jaroslav; et al., (84f:05014)

06A10 Partial order

- Abian, Alexander (with Lihová, Judita) Compact partially ordered sets and compactification of partially ordered sets. (Russian summary) 84a:06002
- Anderson, Philip H. Lattices defined with generalized suprema and infima. 84f:06002
- Baclawski, Kenneth (with Garsia, Adriano M.) Combinatorial decompositions of a class of rings. 84a:06003a
- Rings with lexicographic straightening law. 84a:06003b
- Cohen-Macaulay connectivity and geometric lattices. 84d:06001
- Banaschewski, Bernhard (with Nelson, Evelyn) Completions of partially ordered sets. 84c:06001
- Berghammer, R. (with Schmidt, Gunther) Discrete ordering relations. 84c:06002
- Björner, Anders (with Walker, James W.) A homotopy complementation formula for partially ordered sets. 84f:06003
- (with Wachs, Michelle L.) On lexicographically shellable posets. 84f:06004
- Cheng, Charles Ching-an (with Mitchell, Barry) Posets of cohomological dimension one with finitely many tails. 84f:06005
- Edelman, Paul H. (with Klingsberg, Paul) The subposet lattice and the order polynomial. 84g:06001
- Erné, Marcel Distributivgesetze und Dedekind'sche Schnitte. (English summary) [Distributive laws and Dedekind cuts] 84c:06002
- Filippov, N. D. Comparability graphs of partially ordered sets of different types. (See 84j:06001)
- Garsia, Adriano M. See Baclawski, Kenneth, 84a:06003a
- Gierz, Gerhard (with Pogutke, Werner) Minimizing setups for ordered sets: a linear algebraic approach. 84d:06002
- Ginsburg, John A note on the cardinality of infinite partially ordered sets. 84m:06002
- Golomb, Solomon W. Normed division domains. 84c:06002
- Höft, Hartmut F. W. (with Höft, Margret H.) Coinitial sets and fixed points in partially ordered sets. 84c:06003
- Höft, Margret H. See Höft, Hartmut F. W., 84c:06003
- Kamimura, Tsutomu (with Tang, Adrian) Kleene chain completeness and fixed point properties. 84d:06003
- Katrnouka, František On the representation of orthocomplemented posets. 84c:06003
- Kelly, David (with Trotter, William T., Jr.) Dimension theory for ordered sets. 84c:06002
- Kerner, Otto On the number of indecomposable representations of a partially ordered set. 84m:06003
- Kierstead, Henry A. (with Trotter, William T., Jr.) An extremal problem in recursive combinatorics. 84d:06003
- Klingsberg, Paul See Edelman, Paul H., 84g:06001
- Krausser, D. On orthomodular amalgamations of Boolean algebras. 84d:06004
- Kreid, Tadeusz The theorem about inversion in the generalized incidence algebra. 84d:06005
- Kurepa, Djuro Measure and order. 84h:06003
- Leutola, K. (with Nieminen, Juhani) Posets and generalized lattices. 84g:06002
- Lihová, Judita See Abian, Alexander, 84a:06002
- Margush, T. Distances between trees. 84f:06006
- Miller, Gary Glenn Lexicographic products: continuity and completeness. 84j:06002
- Milner, E. C. On the decomposition of partially ordered sets into directed sets. 84c:06004
- (with Priky, Karel) The cofinality of a partially ordered set. 84m:06004
- Mitchell, Barry See Cheng, Charles Ching-an, 84f:06005
- Murty, Mellacheruvu Krishna See Swamy, U. M., 84h:06004
- Nelson, Evelyn See Banaschewski, Bernhard, 84c:06001
- Nieminen, Juhani See Leutola, K., 84g:06002
- Novák, Vítězslav Cyclically ordered sets. 84d:06006
- Pasztor, Ana Surjections of complete posets and of continuous algebras. 84i:06004
- Pimur, A. G. Uniqueness of linear extensions of partial orders. (Russian) 84c:06005
- Pogutke, Werner See Gierz, Gerhard, 84d:06002
- Priky, Karel See Milner, E. C., 84m:06004
- Rival, Ivan The retract construction. 84c:06005
- Optimal linear extensions by interchanging chains. 84i:06002
- Schmidt, Gunther See Berghammer, R., 84c:06002
- Schweigert, Dietmar Near lattices. (Russian summary) 84f:06002
- Skucha, Jerzy Topological properties of c -nets. 84f:06007
- Swamy, U. M. (with Murty, Mellacheruvu Krishna) Distributive partially ordered sets. 84h:06004
- Tang, Adrian See Kamimura, Tsutomu, 84i:06003
- Todorčević, Stevo Real functions on the family of all well-ordered subsets of a partially ordered set. 84g:06003
- Tomková, Mária On multilattices with isomorphic graphs. (Russian summary) 84f:06008
- Trotter, William T., Jr. See Kierstead, Henry A., 84d:06003 and Kelly, David, 84h:06002
- Vinogradova, L. P. (with Yakovlev, A. V.) Representations of a set with two of relations partial order. (Russian) 84m:06005
- Wachs, Michelle L. See Björner, Anders, 84f:06004
- Walker, James W. See Björner, Anders, 84f:06003
- Winkler, Peter M. Correlation among partial orders. 84m:06006
- Yakovlev, A. V. See Vinogradova, L. P., 84m:06005
- Zahn, Wolfgang Elementare Halbordnungen. [Elementary partial orders] 84k:06003
- Zervos, S. P. On cardinals as transitivity sets of posets with respect to their automorphism groups. 84c:06004
- secondary classifications:
- Berenguer, X. (with Diaz, Josep; Harper, L. H.) A solution of the Sperner-Erdős problem. (84f:68050)
- Brabec, Jiří On some mappings generating vector L -measures. (Czech summary) (84c:28012)
- Brenner, Gary (with Monk, Donald) Tree algebras and chains. (84m:06022)
- Buer, Hermann (with Möhring, Rolf H.) A fast algorithm for the decomposition of graphs and posets. (84j:05083)
- Courcelle, Bruno Fundamental properties of infinite trees. (84c:05047)
- Daykin, David E. (with Frankl, Peter) Inequalities for subsets of a set and KLYM posets. (84c:05014)
- Denig, W. A. A class of matroids derived from saturated chain partitions of partially ordered sets. (84g:05043)
- Diaz, Josep See Berenguer, X.; et al., (84f:68050)
- Dobbs, David E. (with Fontana, Marco; Papick, Ira J.) On certain distinguished spectral sets. (Italian summary) (84b:13006)
- Fontana, Marco See Dobbs, David E.; et al., (84b:13006)
- Frankl, Peter See Daykin, David E., (84c:05014)
- Gansner, Emden R. On the lattice of order ideals of an up-down poset. (84h:06012)
- Gottinger, Hans-W. Foundations of lexicographic utility. (84m:90022)
- Graham, R. L. Linear extensions of partial orders and the FKG inequality. (84b:60024)
- Harper, L. H. See Berenguer, X.; et al., (84f:68050)
- Harrison, K. J. (with Longstaff, W. E.) Subalgebras of incidence algebras determined by equivalence relations. (84c:05004)
- Höppner, Michael A note on the structure of injective diagrams. (84g:18010)
- Ito, Masami Some classes of automata as partially ordered sets. (84c:68042a)
- (with Tanaka, Genjiro) Cartesian composition of classes of automata. (84c:68042b)
- Some classes of automata as partially ordered sets. (84c:68043)
- Katerinichkina, N. N. Some inequalities connected with subsets of layers of an n -dimensional unit cube. (Russian) (84d:05004)
- Katrnouka, František M -base and the representation of orthocomplemented posets. (See 84c:54003)
- Kreid, Tadeusz Application of polynomials to investigations of Möbius algebras. (84i:05007)
- Li, Kuo Wei Connected planar graphs are Sperner posets. (84d:05076)
- Majorization of finite partially ordered sets. (84d:26013)
- Lodi, E. (with Luccio, F.) An information structure for posets. (See 84h:94001)
- Longstaff, W. E. See Harrison, K. J., (84c:05004)
- Luccio, F. See Lodi, E., (See 84h:94001)
- Manaster, Alfred B. (with Remmel, Jeffrey B.) Some recursion theoretic aspects of dense two-dimensional partial orderings. (84c:03060)
- McMorris, F. R. (with Zaslavsky, Thomas) Bound graphs of a partially ordered set. (84g:05123)
- Meseguer Gualta, José Order completion monads. (84i:18005)
- Möhring, Rolf H. On the distribution of locally undecomposable relations and independence systems. (84h:08002)
- See also Buer, Hermann, (84j:05083)
- Monk, Donald See Brenner, Gary, (84m:06022)
- Moroianu, M. On a theorem of Bourbaki. (84c:04004)
- Papick, Ira J. See Dobbs, David E.; et al., (84b:13006)
- Proctor, Robert A. Solution of two difficult combinatorial problems with linear algebra. (84f:05002)
- Remmel, Jeffrey B. See Manaster, Alfred B., (84c:03060)
- Sali, A. Stronger form of an M -part Sperner theorem. (84i:05005)
- Schmerl, James H. Decidability and N_0 -category of theories of partially ordered sets. (84g:03037)
- Skornyakov, L. A. A general view of representations of monoids. (Russian) (84c:20078)
- Steiner, Hans-Georg Eine gemeinsame Charakterisierung der Additivität von Rangordnungen auf endlichen Booleschen Verbänden und der Meßbarkeit von Abstimmungsbildern. [A common characterization of the additivity of rank orders on finite Boolean lattices and the measurability of voting bodies] (84a:90012)
- Tanaka, Genjiro See Ito, Masami, (84c:68042b)
- Tushkina, T. A. Finding the "wasp waist" in a graph of partial ordering. (Russian) (84c:68079)
- Vrancken-Mawet, L. Le lattis des sous-algèbres d'une algèbre de Heyting finie. (English summary) [The subalgebra lattice of a finite Heyting algebra] (84c:06014)
- Zaslavsky, Thomas See McMorris, F. R., (84g:05123)

06A12 Semilattices [See also 20M10.]

- Cornish, William H. (with Noor, A. S. A.) Standard elements in a nearlattice. 84c:06005
- Cowen, R. H. Compactness via prime semilattices. 84g:06004
- Dudek, Józef On bisemilattices. I. 84c:06006a
- On bisemilattices. II. 84c:06006b
- On bisemilattices. III. 84b:06005
- Fleischer, Isidore Congruence extension from a semilattice to the freely generated distributive lattice. 84g:06005
- Fofanova, T. S. Erratum: "Injective polygons over chains" [Math. Slovaca 28 (1978), no. 1, 21-32; MR 80h:06003]. (Russian) 84j:06003
- Hoo, C. S. Pseudocomplemented and implicative semilattices. 84d:06007
- (with Shum, Kar Ping) 0-distributive and P -uniform semilattices. 84j:06004
- Jayaram, C. Quasicomplemented semilattices. 84c:06006
- Semilattices and finite Boolean algebras. 84g:06006
- Congruence filters in semilattices. 84m:06007
- Ježek, Jaroslav Simple semilattices with two commuting automorphisms. 84c:06007
- Länger, Helmut A characterization of infimum functions. 84c:06007
- Murty, Mellacheruvu Krishna Neutrality in semilattices. 84c:06008
- See also Ramana Murty, P. V., 84b:06003
- Noor, A. S. A. See Cornish, William H., 84c:06005
- Pawar, Y. S. See Thakare, Nimhkrishna K., 84c:06009
- Raman, Vinjamuri See Ramana Murty, P. V., 84d:06008
- Ramana Murty, P. V. (with Murty, Mellacheruvu Krishna) Some remarks on certain classes of semilattices. 84b:06003
- (with Raman, Vinjamuri) Triple construction of semilattices with 1 admitting neutral p -closure operators. (Russian summary) 84d:06008
- Shum, Kar Ping See Hoo, C. S., 84j:06004

Thakare, Nimbakrishna K. (with Pawar, Y. S.) Minimal prime ideals in 0-distributive semilattices. **84c:06009**

Vrancken-Mawet, L. Sur des congruences d'un ensemble ordonné. Application à l'étude du lattis des sous-algèbres d'un demi-lattis de Brouwer fini. (English summary) [Congruences of an ordered set. Application to the study of the subalgebra lattice of a finite Brouwerian semilattice] **84d:06009**

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Bandelt, Hans-J. Tolerances on median algebras. **(84m:06004)**

Bandyopadhyay, S. P. (with Chandra, Subha) Class of universal algebras valued onto the same upper semilattice. **(84f:08005)**

Bosbach, Bruno Concerning representation of completely join distributive algebraic lattices. **(84b:06006)**

Chandra, Subha See Bandyopadhyay, S. P., **(84f:08005)**

Dudek, Józef (with Glazek, K.) On commutative groupoids with semilattice operations. **(84c:20072)**

Galbati, Jolanda Laura (with Veronesi, Maria Luisa) On Boolean semirings. (Italian. English summary) **(84g:16031)**

Glazek, K. See Dudek, Józef, **(84c:20072)**

Graczyńska, Ewa (with Pastijn, Francis) Marczewski independence in Płonka sums. **(84g:08004)**

Kröger, Henner Verallgemeinerte Verbände mit inner Verbandsstruktur. (English summary) [Generalized lattices with inner lattice structure] **(84b:06008)**

Krivoski, Pano The maximal semilattice decomposition of an n -semigroup. **(84b:20085)**

Meakin, John The free local semilattice on a set. **(84c:20070)**

Pastijn, Francis See Graczyńska, Ewa, **(84g:08004)**

Romanowska, Anna Idempotent distributive semirings with a semilattice reduct. **(84f:16045a)**

Free idempotent distributive semirings with a semilattice reduct. **(84f:16045b)**

Steinberg, Stuart A. Unital I -prime lattice-ordered rings with polynomial constraints are domains. **(84d:16050)**

Veronesi, Maria Luisa See Galbati, Jolanda Laura, **(84g:16031)**

06A15 Galois correspondences, closure operators

Dalík, Josef On semimodular lattices of generating systems. **84d:06010**

Thron, Reinhard Algebraische Hüllenoperatoren, bei denen jede endliche Menge durch die Menge ihrer isolierten Elemente erzeugt wird. [Algebraic closure operators for which every finite set is generated by the set of its isolated elements] **84g:06007**

secondary classifications:

Cousot, Patrick (with Cousot, Radhia) A constructive characterization of the lattices of all retractions, preclosure, quasiclosure and closure operators on a complete lattice. **(84c:06010)**

Cousot, Radhia See Cousot, Patrick, **(84c:06010)**

Melton, A. (with Strecker, G. E.) On the structure of factorization structures. **(84b:18001)**

Strecker, G. E. See Melton, A., **(84b:18001)**

06A23 Complete lattices, completions

Cousot, Patrick (with Cousot, Radhia) A constructive characterization of the lattices of all retractions, preclosure, quasiclosure and closure operators on a complete lattice. **84c:06010**

Cousot, Radhia See Cousot, Patrick, **84c:06010**

Dacić, Rade Order-reversing maps and unique fixed points in complete lattices. **84m:06008**

Havrdá, Jan Gram-Schmidt's orthogonalization based on the concept of generalized orthogonality. (Czech summary) **84d:06011**

Pouzet, Maurice (with Rival, Ivan) Which ordered sets have a complete linear extension? **84d:06012**

Rival, Ivan See Pouzet, Maurice, **84d:06012**

Wilke, Gerhard Eine Kennzeichnung topologischer Räume durch Vervollständigungen. [A characterization of topological spaces by completions] **84m:06009**

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Banaschewski, Bernhard (with Nelson, Evelyn) Completions of partially ordered sets. **(84k:05001)**

Dwinger, Ph. Structure of completely distributive complete lattices. **(84g:06014)**

Eberbach, Eugeniusz (with Janicki, Ryszard) A note on infinite set of equations and fixedpoint semantics of vectors of coroutines. **(84j:68007)**

Fleischer, Isidore Equivalence of x -systems and m -lattices. (See **84j:06001**)

Höft, Hartmut F. W. (with Höft, Margret H.) Coinitial sets and fixed points in partially ordered sets. **(84c:06003)**

Höft, Margret H. See Höft, Hartmut F. W., **(84c:06003)**

Iturrioz, Luisa A simple proof of a characterization of complete orthocomplemented lattices. **(84a:06005)**

Janicki, Ryszard See Eberbach, Eugeniusz, **(84j:68007)**

Nelson, Evelyn See Banaschewski, Bernhard, **(84k:06001)**

Nowakowski, Richard (with Rival, Ivan) On a class of isometric subgraphs of a graph. **(84f:05082)**

Rival, Ivan See Nowakowski, Richard, **(84f:05082)**

Schochetman, I. E. (with Tsui, Sze Kai) On the lattice theory of function seminorms. **(84j:46049)**

Tsui, Sze Kai See Schochetman, I. E., **(84j:46049)**

Zervos, S. P. On cardinals as transitivity sets of posets with respect to their automorphism groups. **(84c:06004)**

06A99 None of the above, but in this section

Hashimoto, Hiroshi Szpilrajn's theorem on fuzzy orderings. **84c:06004**

Powell, Wayne B. Boolean hypolattices with applications to I -groups. **84j:06005**

secondary classifications:

Ehrenfeucht, Andrzej (with Rozenberg, Grzegorz; Verraedt, R.) Basic formulas and languages. I. The theory. **(84f:68057a)**

(with Rozenberg, Grzegorz; Verraedt, R.) Basic formulas and languages. II. Applications to EOL systems and forms. **(84f:68057b)**

Nambooripad, K. S. S. Pseudosemilattices and biordered sets. II. Pseudo-inverse semigroups. **(84f:20071a)**

Pseudosemilattices and biordered sets. III. Regular locally testable semigroups. **(84f:20071b)**

Novotný, Miroslav Characterization of the category of connected machines. **(84c:68041)**

Proctor, Robert A. Classical Bruhat orders and lexicographic shellability. **(84j:20044)**

Rödding, Walburga Different approaches to the aggregation of preferences. **(84i:90011)**

Rozenberg, Grzegorz See Ehrenfeucht, Andrzej; et al., **(84f:68057a)** and **(84f:68057b)**

Sešela, Branimir (with Ulan, Janex) Structure of generalized equivalences contained in $(2, nA_1)$ -RT relations. (Serbo-Croatian summary) **(84f:04005)**

Tüshaus, Ulrich Approximation of binary relations by preorders. **(84b:68094)**

Ušan, Janex See Sešela, Branimir, **(84f:04005)**

Verraedt, R. See Ehrenfeucht, Andrzej; et al., **(84f:68057a)** and **(84f:68057b)**

06Bxx Lattices [See also 03G10.]

Wille, Rudolf Restructuring lattice theory: an approach based on hierarchies of concepts. **84b:06004**

06B05 Structure theory

Costa e Silva, Maria Cecilia See Domingues, Hygino Hugueros, **84b:06005**

Domingues, Hygino Hugueros (with Costa e Silva, Maria Cecilia) m -lattices with the ascending chain condition. (Portuguese. English summary) **84b:06005**

Erné, Marcel On the existence of decompositions in lattices. **84f:06009**

Gedeonová, Eva Lattices whose covering graphs are S -graphs. **84m:06010**

Hwang, Jun Shung The lattice of stable marriages and permutations. **84c:06011**

Johnson, Johnny A. The structure of a class of r -lattices. **84j:06006**

Ruckelshausen, W. (with Sands, B.) On finitely generated lattices of width four. **84f:06010**

Sands, B. See Ruckelshausen, W., **84f:06010**

Stern, Manfred Exchange properties in lattices of finite length. **84f:06011**

secondary classifications:

Björner, Anders On complements in lattices of finite length. **(84b:06010)**

Brodskii, G. M. (with Fomina, I. A.) On the lattice of subtrees of a tree. (Russian) **(84g:05052)**

Epstein, George (with Horn, Alfred) Core points in double Heyting algebras and dissectable lattices. **(84f:06019)**

Fomina, I. A. See Brodskii, G. M., **(84g:05052)**

Horn, Alfred See Epstein, George, **(84f:06019)**

Stern, Manfred On derivations in generalized matroid lattices. **(84b:06008)**

06B10 Ideals, congruence relations

Akilandam, S. See Iqbalunnisa, **84b:06007**

Bosbach, Bruno Concerning representation of completely join distributive algebraic lattices. **84b:06006**

Duda, Jaromir p -ideals in the lattice of semi- p -ideals. **84g:06008**

Gorbunov, V. A. (with Tumanov, V. I.) On the existence of prime ideals in semidistributive lattices. **84g:06009**

Iqbalunnisa (with Akilandam, S.) Standard elements of order two of a lattice. **84b:06007**

Kopeček, Ivan Distinguishing subsets in lattices. **84d:06013**

Schmidt, E. Tamás ★ A survey on congruence lattice representations. **84c:06012**

Schweigert, Dietmar Central relations on lattices. **84j:06007**

Sivák, Bohuslav Congruences on finite lattices. (Russian summary) **84a:06004**

Tumanov, V. I. See Gorbunov, V. A., **84g:06009**

secondary classifications:

Chevalier, Georges Relations binaires et congruences dans un treillis orthomodulaire. (English summary) [Binary relations and congruences in an orthomodular lattice] **(84i:06010)**

Cornish, William H. (with Noor, A. S. A.) Standard elements in a nearlattice. **(84c:06005)**

Eberhart, Carl (with Stepp, James W.) Lattices of closed equivalences: simplicity results. (Russian summary) **(84c:54080)**

On abelian semigroups whose congruences form a simple lattice. **(84f:20077)**

Herrmann, Christian On varieties of algebras having complemented modular lattices of congruences. **(84c:08006)**

Korec, Ivan Arithmetical equivalence lattice for which no Pixley function exists. (Russian and Slovak summaries) **(84c:08009)**

Nieminen, Juhani The congruence lattice of simple ternary algebras. **(84d:08001)**

Noor, A. S. A. See Cornish, William H., **(84c:06005)**

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Rodriguez, Gaetano Decomposition of a semiring in a semilattice of semirings. (Italian. English summary) **(84c:16069)**

Stepp, James W. See Eberhart, Carl, **(84c:54080)**

- Thakare, Nimbakrishna K.** (with Pawar, Y. S.) Minimal prime ideals in 0-distributive semilattices. (84c:06009)
- Thron, W. J.** (with Valent, R. A.) A class of maximal ideals in the lattice of topologies. (84c:54008)
- Trueman, D. C.** Fundamental preorders and partial orders on completely [0-] simple semigroups. (84b:20080)
- Tulipani, Sauro** On the congruence lattice of stable algebras with definability of compact congruences. (84c:03046)
- Valent, R. A.** See **Thron, W. J.**, (84c:54008)

06B15 Representation theory

- Iturrioz, Luisa** A simple proof of a characterization of complete orthocomplemented lattices. 84a:06005
- Tüma, Jiri** On a question of K. Leeb. 84a:06006
- Yuzvinsky, Sergey** The variety of primitive representations of a quiver with normal relations. 84m:06011

secondary classifications:

- Bosbach, Bruno** Concerning representation of completely join distributive algebraic lattices. (84b:06006)
- Stone, M. G.** (with Weedmark, R. H.) On representing M_n 's by congruence lattices of finite algebras. (84m:08006)
- Weedmark, R. H.** See **Stone, M. G.**, (84m:08006)

06B20 Varieties of lattices

- Grätzer, G.** (with Kelly, David) A survey of products of lattice varieties. (See 84j:06001)
- Kamara, Morike** Spaltende modulare Polaritätsverbände. [Splitting modular polarity lattices] 84m:06012
- Kelly, David** See **Grätzer, G.**, (See 84j:06001)
- Lender, V. B.** Multiplication of prevarieties of lattices. (Russian) 84d:06014
- A theorem on multiplication of prevarieties of lattices. (Russian) 84i:06006

secondary classifications:

- Godowski, Radosław** States on orthomodular lattices. (84f:06013)
- Holland, W. Charles** A survey of varieties of lattice ordered groups. (84j:06020)
- Ruckelshausen, W.** (with Sands, B.) On finitely generated lattices of width four. (84f:06010)
- Sands, B.** See **Ruckelshausen, W.**, (84f:06010)

06B25 Free lattices, projective lattices, word problems [See also 03D40, 08A50, 20F10.]

- Garcia, Octavio C.** (with de la Peña, J. A.) Lattices with a finite Whitman cover. 84g:06010
- Grätzer, G.** (with Huhn, A. P.) Amalgamated free product of lattices. II. Generating sets. 84j:06008
- Huhn, A. P.** See **Grätzer, G.**, 84j:06008
- de la Peña, J. A.** See **Garcia, Octavio C.**, 84g:06010

secondary classifications:

- Adámek, Jiri** (with Nelson, Evelyn; Reiterman, Jan) Tree constructions of free continuous algebras. (84c:06008)
- Lomecky, Z.** Algorithms for the computation of free lattices. (84a:06001)
- Nelson, Evelyn** See **Adámek, Jiri**; et al., (84c:06008)
- Reiterman, Jan** See **Adámek, Jiri**; et al., (84c:06008)

06B30 Topological lattices, order topologies [See also 06F30, 54F05, 54H12.]

- Dobbs, David E.** Posets admitting a unique order-compatible topology. 84a:06007
- Savel'ev, L. Ya.** Measures on ortholattices. (Russian) 84c:06005

06B99 None of the above, but in this section

- Adámek, Jiri** (with Nelson, Evelyn; Reiterman, Jan) Tree constructions of free continuous algebras. 84c:06008
- Beran, Ladislav** Some applications of Boolean skew-lattices. 84f:06012
- Cerasoli, Mauro** (with Eugeni, Franco) On completely multiplicative elements in some incidence algebras. (Italian. English summary) 84g:06011
- Di Nola, Antonio** (with Sessa, Salvatore) A representation of n -fuzzy sets by means of Boolean matrices. (Italian. English summary) 84j:06009
- Eugeni, Franco** See **Cerasoli, Mauro**, 84g:06011
- Hu, Shi Geng** Proximities, contiguities and nearness on lattices. (Chinese. English summary) 84c:06013
- Kröger, Henner** Verallgemeinerte Verbände mit inner Verbandsstruktur. (English summary) [Generalized lattices with inner lattice structure] 84b:06008
- Nelson, Evelyn** See **Adámek, Jiri**; et al., 84c:06008
- Novak, Dan** On a duality between the concepts "finite" and "directed". 84i:06007
- Reiterman, Jan** See **Adámek, Jiri**; et al., 84c:06008
- Sessa, Salvatore** See **Di Nola, Antonio**, 84j:06009
- Verdu Solans, Ventura** Algebras characterized by means of rules of inference. (Catalan) (See 84i:03003)

secondary classifications:

- Bachman, George** (with Stratigos, Panagiotis D.) On general lattice repleteness and completeness. (84m:54029)

- Bagyinszki, János** See **Demetrovics, János**, (84g:03103)
- Bennett, Mary Katherine** Lattices arising in convexity. (84c:52003)
- Cherepov, A. N.** Description of the structure of closed classes in P_2 containing the class of polynomials. (Russian) (84j:03055)
- Demetrovics, János** (with Bagyinszki, János) The lattice of linear classes in prime-valued logics. (84g:03103)
- Di Maio, Giuseppe** (with Russo, Assunta) Some lattice properties of T_7 -topologies and of one of their generalizations. (Italian. English summary) (84i:54003)
- Di Nola, Antonio** (with Ventre, Aldo G. S.) Ordering via fuzzy entropy. (84i:03096)
- Dzuan Tam Gué** The minimum number of generators of a lattice of submodules of a semisimple module. (Russian) (84m:13014)
- Goralčík, P.** (with Goralčíková, A.; Koubek, V.; Rödl, Vojtěch) Fast recognition of rings and lattices. (84g:68025)
- Goralčíková, A.** See **Goralčík, P.**; et al., (84g:68025)
- Koubek, V.** See **Goralčík, P.**; et al., (84g:68025)
- Leutola, K.** (with Nieminen, Juhani) Posets and generalized lattices. (84g:06002)
- de Luca, Aldo** (with Termini, Settimo) On some algebraic aspects of the measures of fuzziness. (84m:03077)
- Negru, I. S.** Algebraic properties of the lattice of Post classes and their many-valued generalizations. (Russian) (84m:03102)
- Nieminen, Juhani** See **Leutola, K.**, (84g:06002)
- Rödl, Vojtěch** See **Goralčík, P.**; et al., (84g:68025)
- Rump, Wolfgang** Systems of lattices in vector spaces and their invariants. (84i:16037)
- Russo, Assunta** See **Di Maio, Giuseppe**, (84i:54003)
- Schweigert, Dietmar** (with Szymańska, Magdalena) Polynomial functions of correlation lattices. (84g:08013)
- Stratigos, Panagiotis D.** See **Bachman, George**, (84m:54029)
- Szymańska, Magdalena** See **Schweigert, Dietmar**, (84g:08013)
- Termini, Settimo** See **de Luca, Aldo**, (84m:03077)
- Ventre, Aldo G. S.** See **Di Nola, Antonio**, (84i:03096)
- Vonkomeřová, Marta** A note on C-lattices. (Russian and Slovak summaries) (84m:28021)
- Warner, M. W.** Lattices and lattice-valued relations in biology. (84k:92033)

06Cxx Modular lattices, complemented lattices

06C05 Modular lattices, Desarguesian lattices

- Chandran, V. R.** (with Lakshmanan, Vimala) On supermodular lattices. 84i:06008
- Chuang, H. M.** Remark on finitely projected modular lattices of breadth two. 84b:06006
- Czédli, Gábor** On properties of rings that can be characterized by infinite lattice identities. 84c:06006
- Day, Alan** Equational theories of projective geometries. 84i:06008
- Geometrical applications in modular lattices. 84i:06009
- A note on Arguesian lattices. 84c:06007
- Fournneau, René** Modularité et distributivité affaiblies dans les lattis. [Weak modularity and weak distributivity in lattices] 84c:06009
- Herrmann, Christian** Über die von vier Moduln erzeugte Dualgruppe. [On the dual group generated by four modules] 84b:06007
- A characterization of distributivity for modular polarity lattices. 84m:06013
- On the word problem for the modular lattice with four free generators. 84m:06014
- Kamara, Morike** Nichtdistributive, modulare Polaritätsverbände. [Nondistributive, modular polarity lattices] 84b:06009
- Lakshmanan, Vimala** See **Chandran, V. R.**, 84i:06008
- Maeda, Shūichirō** A note on modularity in atomistic lattices. 84a:06008
- Pezzoli, Luigi** Weight functions on modular lattices. (Italian. English summary) 84d:06015
- Schmidt, E. Tamás** (with Wille, Rudolf) Note on compatible operations of modular lattices. 84c:06009
- Wille, Rudolf** See **Schmidt, E. Tamás**, 84c:06009

secondary classifications:

- Kamara, Morike** Spaltende modulare Polaritätsverbände. [Splitting modular polarity lattices] (84m:06012)

06C10 Semimodular lattices, geometric lattices

- Stern, Manfred** On derivations in generalized matroid lattices. 84b:06008

secondary classifications:

- Bennett, Mary Katherine** Affine geometry: a lattice characterization. (84g:51016)
- Björner, Anders** (with Walker, James W.) A homotopy complementation formula for partially ordered sets. (84f:06003)
- Dalik, Josef** On semimodular lattices of generating systems. (84d:06010)
- Kung, Joseph P. S.** A factorization theorem for comaps of geometric lattices. (84g:05044)
- Saarić, Mikko** Counterexamples to the algebraic closed graph theorem. (84g:46011)
- Walker, James W.** See **Björner, Anders**, (84f:06003)

06C15 Complemented lattices, orthocomplemented lattices

- Björner, Anders** On complements in lattices of finite length. 84b:06010
- Bruns, Günter** (with Greechie, Richard J.) Some finiteness conditions for orthomodular lattices. 84b:06011a
- (with Greechie, Richard J.) Orthomodular lattices which can be covered by finitely many blocks. 84b:06011b
- Varieties of modular ortholattices. 84j:06010
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- Gensheimer, H. Measures on orthomodular lattices. **84c:06010**
 Godowski, Radosław States on orthomodular lattices. **84f:06013**
 Greechie, Richard J. See Bruns, Günter, **84c:06011**
 Haapasalo, Lenni (with Niemistö, Pekka) Lattice generation program for computing a vector space lattice. **84g:06012**
 Havrda, Jan Independence in a set with orthogonality. (Czech summary) **84c:06010**
 Kalmbach, Gudrun The Hilbert space model of orthomodular lattices. (See **84j:06001**)
 Köhler, Egmont Orthomodulare Verbände mit Regularitätsbedingungen. [Orthomodular lattices with regularity conditions] **84j:06011**
 Müller, Bruno J. Continuous geometries, continuous regular rings, and continuous modules. **84f:06014**
 Neubrunn, Tibor (with Šipoš, Ján) Generalized measure spaces and dominance. (Russian and Slovak summaries) **84c:06011**
 Niemistö, Pekka See Haapasalo, Lenni, **84g:06012**
 Poguntke, Werner Finitely generated ortholattices: the commutator and some applications. **84m:06015**
 Pták, Pavel (with Rogalewicz, Vladimir) Measures on orthomodular partially ordered sets. **84f:06015**
 Logics with given centers and state spaces. **84f:06016**
 Riečan, Beloslav Two notes on the individual ergodic theorem. (See **84m:58002**)
 Rogalewicz, Vladimir See Pták, Pavel, **84f:06015**
 Šimon, Jiří Operations dérivées des treillis orthomodulaires. II. (Russian and Czech summaries) [Derived operations of orthomodular lattices. II] **84c:06012**
 Šipoš, Ján See Neubrunn, Tibor, **84c:06011**

secondary classifications:

- Aerts, Dirk Description of many separated physical entities without the paradoxes encountered in quantum mechanics. **(84b:81008)**
 Brabec, Jiří (with Pták, Pavel) On compatibility in quantum logics. **(84b:81009)**
 Czelakowski, Janusz Partial referential matrices for quantum logics. **(84j:03121)**
 Greechie, Richard J. A nonstandard quantum logic with a strong set of states. **(84c:03143)**
 Iturrioz, Luisa A simple proof of a characterization of complete orthocomplemented lattices. **(84c:06005)**
 Kalmbach, Gudrun Omologie as a Hilbert type calculus. **(84j:03129)**
 Orthomodulare Verbände. [Orthomodular lattices] **(84f:06001)**
 Męczyński, Maciej Commutativity and generalized transition probability in quantum logic. **(84j:03131)**
 Mittelstaedt, Peter Classification of different areas of work afferent to quantum logic. **(84j:03133)**
 Mukherjee, M. K. A note on the characterization of orthogonality and compatibility of elements of a quantum logic. **(84b:81009)**
 Navara, Mirko (with Pták, Pavel) Two-valued measures on σ -classes. (Russian and Czech summaries) **(84m:28006)**
 Pták, Pavel See Brabec, Jiří, **(84b:81009)** and Navara, Mirko, **(84m:28006)**
 Save'ev, L. Ya. Measures on ortholattices. (Russian) **(84c:06005)**
 Wang, Shi Qiang (with Wu, Wang Ming) On a classification problem for complemented lattices. **(84d:03029)**
 Wu, Wang Ming See Wang, Shi Qiang, **(84d:03029)**

06C20 Complemented modular lattices, continuous geometries

- Halperin, Israel von Neumann's coordinatization theorem. **84m:06016**

06C99 None of the above, but in this section

06Dxx Distributive lattices

06D05 Structure and representation theory

- Adams, M. E. (with Trnková, Věra) Isomorphisms of sums of countable bounded distributive lattices. **84d:06016**
 Bandelt, Hans-J. \mathfrak{R} -distributive lattices. **84f:06017**
 Chen, Chuan Chong (with Koh, K. M.) On the length of the lattice of sublattices of a finite distributive lattice. **84g:06016a**
 (with Koh, K. M.; Lee, S. C.) On the purity of the lattice of sublattices of a finite distributive lattice. **84g:06016b**
 (with Koh, K. M.; Lee, S. C.) On finite distributive lattices of grade one. **84d:06017**
 Dudek, Józef A characterization of distributive lattices. **84k:06011**
 Gansner, Emden R. On the lattice of order ideals of an up-down poset. **84b:06012**
 Koh, K. M. See Chen, Chuan Chong; et al., **84d:06017**; **84g:06016a** and **84g:06016b**
 Lee, S. C. See Chen, Chuan Chong; et al., **84d:06017** and **84g:06016b**
 Pawar, Y. S. (with Thakare, Nimbakrishna K.) The space of minimal prime ideals in a 0-distributive semilattice. **84g:06013**
 Swaminathan, Thanjavur Venkatasubramanian See Swamy, K. L. N., **84h:06009**
 Swamy, K. L. N. (with Swaminathan, Thanjavur Venkatasubramanian) On compactly packed lattices and automatized algebras. **84h:06009**
 Thakare, Nimbakrishna K. See Pawar, Y. S., **84g:06013**
 Trnková, Věra See Adams, M. E., **84d:06016**
 Zarybski, W. A dual space characterization of P_1 - and P_2 -lattices of order ω^+ . **84k:06012**

secondary classifications:

- Fourneau, René Modularité et distributivité affaiblies dans les lattis. [Weak modularity and weak distributivity in lattices] **(84c:06009)**
 Herzog, Bernd Die Hilbertfunktionen bilden einen Artinschen Verband. [The Hilbert functions form an Artin lattice] **(84b:13016)**
 Hong, S. S. (with Nel, L. D.) Spectral dualities involving mixed structures. **(84k:18005)**

- Nel, L. D. See Hong, S. S., **(84k:18005)**
 Powell, Wayne B. (with Tsinakis, Constantine) The distributive lattice free product as a sublattice of the abelian I -group free product. **(84g:06032)**
 Prömel, H. J. (with Voigt, Bernd) Canonical partition theorems for finite distributive lattices. **(84c:05017)**
 Tsinakis, Constantine See Powell, Wayne B., **(84g:06032)**
 Voigt, Bernd See Prömel, H. J., **(84c:05017)**

06D10 Complete distributivity

- Bandelt, Hans-J. Coproducts of bounded (α, β) -distributive lattices. **84c:06011**
 Dwinger, Ph. Structure of completely distributive complete lattices. **84g:06014**
 Liu, Ying Ming Intersection operation on union-preserving mappings in completely distributive lattices. **84h:06010**

secondary classifications:

- Bandelt, Hans-J. \mathfrak{R} -distributive lattices. **(84f:06017)**
 Bosbach, Bruno Concerning representation of completely join distributive algebraic lattices. **(84b:06006)**
 Ježek, Jaroslav The lattice of equational theories. II. The lattice of full sets of terms. **(84c:08007b)**
 Lambrou, M. S. Approximants, commutants and double commutants in normed algebras. **(84f:47053)**
 Novak, Dan On a duality between the concepts "finite" and "directed". **(84c:06007)**
 Pouzet, Maurice (with Rival, Ivan) Which ordered sets have a complete linear extension? **(84d:06012)**
 Rival, Ivan See Pouzet, Maurice, **(84d:06012)**

06D15 Pseudocomplemented lattices

- Adams, M. E. (with Katriňák, Tibor) A note on subdirectly irreducible distributive double p -algebras. **84g:06015**
 Chen, Chuan Chong (with Koh, K. M.; Teo, K. L.) On the length of the lattice of subalgebras of a finite Stone algebra. **84g:06016c**
 Düntsch, Ivo A description of the projective Stone algebras. **84c:06013**
 Katriňák, Tibor Free p -algebras. **84h:06011**
 See also Adams, M. E., **84g:06015**
 Koh, K. M. See Chen, Chuan Chong; et al., **84g:06016c**
 Teo, K. L. See Chen, Chuan Chong; et al., **84g:06016c**

secondary classifications:

- Blyth, T. S. (with Varlet, J. C.) On a common abstraction of De Morgan algebras and Stone algebras. **(84j:06013)**
 Hoo, C. S. (with Shum, Kar Ping) 0-distributive and P -uniform semilattices. **(84j:06004)**
 Shum, Kar Ping See Hoo, C. S., **(84j:06004)**
 Varlet, J. C. See Blyth, T. S., **(84j:06013)**

06D20 Heyting algebras [See also 03Gxx.]

- Banaschewski, Bernhard (with Brümmer, G. C. L.; Hardie, K. A.) Biframes and bispaces. **84h:06012**
 Brümmer, G. C. L. See Banaschewski, Bernhard; et al., **84h:06012**
 Düntsch, Ivo A note on atomic Stone algebras. **84f:06018**
 Eda, Katsuya Completions and coproducts of Heyting algebras. **84h:06013**
 Epstein, George (with Horn, Alfred) Core points in double Heyting algebras and dissectable lattices. **84f:06019**
 Hardie, K. A. See Banaschewski, Bernhard; et al., **84h:06012**
 Horn, Alfred See Epstein, George, **84f:06019**
 Meskhi, V. Yu. A variety of Heyting algebras with regular involution. (Russian) **84j:06012**
 Vrancken-Mawet, L. Le lattis des sous-algèbres d'une algèbre de Heyting finie. (English summary) [The subalgebra lattice of a finite Heyting algebra] **84c:06014**

secondary classifications:

- Banaschewski, Bernhard The power of the ultrafilter theorem. **(84f:03043)**
 Georgescu, George A representation theorem for polyadic Heyting algebras. **(84k:03147)**

06D25 Post algebras [See also 03G20.]

- Cardoso, Jayme Machado (with Katsume Miyaoka, Florida) ★Algebras de Post em 3-anéis unitários. (Portuguese) [Post algebras in unitary 3-rings] **84m:06017**
 Katsume Miyaoka, Florida See Cardoso, Jayme Machado, **84m:06017**
 Skordev, D. G. Imbedding of iterative Post algebras in semigroups. (Russian) **84i:06012**
 Yaqub, Fawzi M. Representation of Post L -algebras by rings of sets. **84h:06014**
 α -representable coproducts of distributive lattices. **84d:06018**

secondary classifications:

- Bairamov, R. A. Some new results in the theory of function algebras of finite-valued logics. **(84c:03105)**
 Straziński, I. On fundamental transformation groups in the algebra of logic. **(84g:03105)**

06D30 DeMorgan algebras, Łukasiewicz algebras [See also 03G20.]

- Blyth, T. S. (with Varlet, J. C.) On a common abstraction of De Morgan algebras and Stone algebras. **84j:06013**
 Cignoli, Roberto (with de Gallego, Marta S.) Dualities for some De Morgan algebras with operators and Łukasiewicz algebras. **84f:06020**

- Dunn, J. Michael A relational representation of quasi-Boolean algebras. **84a:06009**
 Esteva, Francesc On the representation of De Morgan algebras by fuzzy sets. (Catalan. English summary) (See **84i:03003**)
 de Gallego, Marta S. See Cignoli, Roberto, **84f:06020**
 Iturrioz, Luisa Symmetrical Heyting algebras with operators. **84m:06018**
 Loureiro, Isabel Prime spectrum of a tetravalent modal algebra. **84m:06019**
 Monteiro, Luiz *M*-algèbres de Kleene. [Kleene *M*-algebras] **84j:06014**
 Pawlovsky, V. (with Trillas, Enric) On rejection connectives. (Catalan. English summary) (See **84i:03003**)
 Trillas, Enric See Pawlovsky, V., (See **84i:03003**)
 Varlet, Jules Relative De Morgan lattices. **84j:06015**
 Varlet, J. C. See Blyth, T.S., **84j:06013**

secondary classifications:

- Esteva, Francesc (with Piera, Núria) On De Morgan algebras of fuzzy sets. (Catalan) (See **84i:03003**)
 Piera, Núria See Esteva, Francesc, (See **84i:03003**)
 Urquhart, Alasdair Distributive lattices with a dual homomorphic operation. II. (**84j:03138**)

06D99 None of the above, but in this section

- Ahmad, Bashir A note on prime dual ideals in Tanaka algebras. **84g:06017**
 Dual ideals in BCK-algebras. I. **84g:06018**
 Randelt, Hans-J. (with Hedlíková, Jarmila) Median algebras. **84h:06015**
 Cornish, William H. A minimal equational base for commutative BCK-algebras. **84f:06021**
 Daykin, David E. Functions on a distributive lattice with a polarity. **84e:06014**
 Dyrda, Kazimiera Some remarks on WMV-algebras. **84k:06013**
 Fournneau, René Idéaux des lattices $C(X)$ et $C^*(X)$. [Ideals of the lattices $C(X)$ and $C^*(X)$] **84b:06013**
 Hedlíková, Jarmila See Randelt, Hans-J., **84h:06015**
 Idziak, Paweł M. A minimal equational base for certain varieties of BCK-algebras. **84c:06015**
 On varieties of BCK-algebras. **84c:06016**
 Iséki, Kiyoshi Some remarks on BCK-algebras with condition (S). **84m:06020**
 Koh, K. M. On the length of the sublattice-lattice of a finite distributive lattice. **84f:06022**
 Komori, Yuichi The variety generated by BCC-algebras is finitely based. **84g:06019**
 Krzysiek, Piotr S. Commutative BCK-algebras do not enjoy the interpolation property. **84c:06014**
 Palasinski, Marek On a space of prime ideals of a BCK-algebra. **84g:06020**
 Decomposition of ideals in certain BCK-algebras. **84g:06021**
 Representation theorem for commutative BCK-algebras. **84j:06016**
 On a problem on BCI-algebras. **84c:06015**
 Savelev, L. Ya. Exterior measures and exterior topologies. (Russian) **84f:06023**
 Schweigert, Dietmar (with Szymańska, Magdalena) A completeness theorem for correlation lattices. **84m:06021**
 Szymańska, Magdalena See Schweigert, Dietmar, **84m:06021**
 Wroński, Andrzej BCK-algebras do not form a variety. **84e:06015**
 Reflections and distensions of BCK-algebras. **84e:06016**

secondary classifications:

- Bandelt, Hans-J. (with Petrich, Mario) Subdirect products of rings and distributive lattices. (**84g:16030**)
 Duffus, Dwight (with Rival, Ivan) Graphs orientable as distributive lattices. (**84f:05075**)
 Fleischer, Isidore Congruence extension from a semilattice to the freely generated distributive lattice. (**84g:06005**)
 Gurevich, Yuri Decision problem for separated distributive lattices. (**84f:03041**)
 Hwang, Jun Shung The lattice of stable marriages and permutations. (**84c:06011**)
 Krynicki, Michał (with Väinänen, Jouko) On orderings of the family of all logics. (**84g:03053**)
 Petrich, Mario See Bandelt, Hans-J., (**84g:16030**)
 Rival, Ivan See Duffus, Dwight, (**84f:05075**)
 Rodriguez Salas, A. J. On the algebraic significance of the importation-exportation law. (Catalan) (See **84i:03003**)
 Rump, Wolfgang On the tame irreducible representations of orders. (**84k:16038**)
 Todua, Z. B. Relative homology and cohomology groups of a distributive lattice over a pair of coefficient groups. (Russian. English and Georgian summaries) (**84f:18030**)
 Väinänen, Jouko See Krynicki, Michał, (**84g:03053**)
 Yaqub, Fawzi M. α -representable coproducts of distributive lattices. (**84d:06018**)

06Exx Boolean algebras [See also 03G05.]

06E05 Structure theory

- Brenner, Gary A simple construction for rigid and weakly homogeneous Boolean algebras answering a question of Rubin. **84d:06019**
 Trias Pairó, Joan Boolean algebras and lattice isometries in Riesz spaces. (Catalan. English summary) (See **84i:03003**)

secondary classifications:

- Baumgartner, James E. (with Weese, Martin) Partition algebras for almost-disjoint families. (**84g:03074**)
 Boffa, Maurice Algèbres de Boole atomiques et modèles de la théorie des types. [Atomic Boolean algebras and models of type theory] (**84g:03085**)
 Böttner, Michael (with Günther, Arnold) On Ballmer on Keenan and Faltz. (**84f:03025a**)
 Burris, Stanley The first order theory of Boolean algebras with a distinguished group of automorphisms. (**84f:03008**)

- Czelakowski, János Partial Boolean algebras in a broader sense as a semantics for quantum logic. (**84i:03112**)
 Dölger, Werner (with Zifonun, Gisela) Keenan, Faltz, and Ballmer or: how to read and not read Keenan and Faltz. (**84f:03025b**)
 Günther, Arnold See Böttner, Michael, (**84f:03025a**)
 Jayaram, C. Semilattices and finite Boolean algebras. (**84g:06006**)
 Meskhi, Slava Complete Boolean powers of quasiprimal algebras with lattice reducts. (**84g:06012**)
 Molzan, Burkhard On the number of different theories of Boolean algebras in several logics. (**84h:03092**)
 The theory of superatomic Boolean algebras in the logic with the binary Ramsey quantifier. (**84d:03045**)
 Morozov, A. S. Decidability of theories of Boolean algebras with a distinguished ideal. (Russian) (**84i:03086**)
 Vojtáš, Peter Simultaneous strategies and Boolean games of uncountable length. (**84f:03054**)
 Weese, Martin See Baumgartner, James E., (**84g:03074**)
 Zifonun, Gisela See Dölger, Werner, (**84f:03025b**)

06E10 Chain conditions, complete algebras

- Brenner, Gary (with Monk, Donald) Tree algebras and chains. **84m:06022**
 McKenzie, Ralph N. (with Monk, J. Donald) Chains in Boolean algebras. **84h:06014**
 Monk, Donald See Brenner, Gary, **84m:06022**
 Monk, J. Donald See McKenzie, Ralph N., **84h:06014**

secondary classifications:

- Koppelberg, Sabine On Boolean algebras with distinguished subalgebras. (**84a:03017a**)
 On Boolean algebras with distinguished subalgebras. (**84a:03017b**)
 Lipparini, Paolo Existentially complete closure algebras. (Italian summary) (**84h:03087**)
 Trias Pairó, Joan On generalized idempotents, lattice-dilations and contractions in f -rings. (**84i:06015**)
 Weber, Hans Vergleich monotoner Ringtopologien und absolute Stetigkeit von Inhalten. [Comparison of monotone ring topologies and absolute continuity of contents] (**84e:28011**)

06E15 Topological representation

- Balcar, Bohuslav (with Simon, Petr) Cardinal invariants in Boolean spaces. **84f:06024**
 de Jonghe, Ep A representation theorem for weakly α -distributive Boolean α -algebras. (Russian summary) **84d:06020**
 Mori, Tōru Results on a compact space which has certain properties and their applications to superatomic Boolean algebras. **84g:06022**
 Simon, Petr See Balcar, Bohuslav, **84f:06024**
 Tembrowski, Bronisław On some class of Boolean algebras with an additional binary operation. **84c:06017**

secondary classifications:

- Adams, M. E. (with Katriňák, Tibor) A note on subdirectly irreducible distributive double p -algebras. (**84g:06015**)
 Grigoliya, R. Sh. Free S_4 -algebras with a finite number of generators. (Russian) (**84m:03099**)
 Katriňák, Tibor See Adams, M. E., (**84g:06015**)
 Lenzi, Domenico On the finitely additive functions in a Boolean algebra. (Italian. English summary) (**84d:28012**)

06E20 Boolean rings [See also 16A30, 16A32.]

- Banković, Dragić Solving systems of arbitrary equations. **84m:06023**
 Swaminathan, Thanjavur Venkatasubramanian Submaximal ideals in a Boolean-like ring. **84h:06016**

secondary classifications:

- Dubois, D. W. (with Recio Muñiz, Tomás J.) Subordinate structure sheaves. (**84c:14018**)
 Jurie, Pierre-François Décidabilité de la théorie élémentaire des anneaux booléens à opérateurs dans un group fini. (English summary) [Decidability of the elementary theory of Boolean rings with operators in a finite group] (**84a:03016**)
 Moore, H. G. (with Yaqub, Adil) Certain generalizations of Boolean rings. (**84a:16062**)
 Park, Young Lim Conditions for rings of type-A to be Boolean. (**84c:17016**)
 Recio Muñiz, Tomás J. See Dubois, D. W., (**84c:14018**)
 Weber, Hans Die atomare Struktur topologischer Boolescher Ringe und α -beschränkter Inhalte. (English summary) [The atomic structure of topological Boolean rings and of α -bounded contents] (**84m:28009**)
 Yakabe, Iwao Generalized Boolean-like rings. (**84m:16013**)
 Yaqub, Adil See Moore, H. G., (**84a:16062**)

06E99 None of the above, but in this section

- Abashidze, M. A. Some properties of Magari algebras. (Russian) **84j:06017**
 Banković, Dragić Some remarks on Boolean equations. **84c:06017**
 Bibilo, P. N. Probability of nonessentiality of subsets of arguments of Boolean functions. **84i:06013**
 Both, N. Some remarks concerning Boolean functions. (Romanian summary) **84b:06015**
 Breitbart, Yuri A family of Boolean functions with nonlinear formula size. (See **84h:94002**)
 Brown, Frank Markham Segmental solutions of Boolean equations. **84a:06010**
 (with Rudeanu, Sergiu) Recurrent covers and Boolean equations. **84m:06024**
 Bulatović, Jelena On a random function defined on a pseudo-Boolean algebra. **84j:06018**

Gilezan, Koriolan Les dérivées partielles des fonctions pseudo-booléennes généralisées. (English summary) [Partial derivatives of generalized pseudo-Boolean functions] **84c:06018**

Melter, Robert A. (with Rudeanu, Sergiu) Characterizations of Boolean functions. **84c:06018**

Rudeanu, Sergiu Linear Boolean equations and generalized minterms. **84c:06019**
Isotony detectors of Boolean functions. **84c:06014**

See also Melter, Robert A., **84c:06018** and Brown, Frank Markham, **84m:06024**
Schürfeld, Ute New lower bounds on the formula size of Boolean functions. **84g:06023**
Sychev, A. N. Linear symmetry of Boolean functions. **84j:06019**

Tošić, Ratko Constant-preserving Boolean functions over the finite Boolean algebras. **84c:06016**

secondary classifications:

Andres, Zdeněk (with Zelinka, Bohdan) Logics of bipartite graphs and complete multipartite graphs. (Czech summary) **(84d:05144)**

Anellis, Irving H. Boolean groups. **(84g:03102)**

Beran, Ladislav Some applications of Boolean skew-lattices. **(84f:06012)**

Błaszczyk, A. A note on rigid spaces and rigid Boolean algebras. **(84d:54066)**

Charretton, Ch. (with Pouzet, Maurice) Comparaison des structures engendrées par des chaînes. (English summary) [Comparison of structures generated by chains] (See **84c:03008**)

Di Nola, Antonio (with Sessa, Salvatore) A representation of n -fuzzy sets by means of Boolean matrices. (Italian. English summary) **(84j:06009)**

Gilezan, Koriolan Some properties of linear operators of discrete functions. (Serbo-Croatian summary) **(84f:94021)**

A note on generalized pseudo-Boolean functional equations with constant coefficients and n variables. (Serbo-Croatian summary) **(84f:94022)**

Grigoryan, A. K. (with Zolotarevskaya, M. Ya.) Modification of logical algorithms and programs. **(84b:68030)**

Guidotti, L. (with Nicoletti, Giorgio) Minors in Boolean structures and matroids. **(84a:05016)**

Hemmo, Jaak On equivalent sets of functions. **(84b:03038)**

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Karakhanian, V. M. Minimization of Boolean functions in the class of ball coverings. (Russian. English summary) **(84g:94025)**

Kim, Ki Hang ★ Boolean matrix theory and applications. **(84a:15001)**

Korshunov, A. D. Complexity of shortest disjunctive normal forms of Boolean functions. (Russian) **(84c:94022)**

Krausser, D. On orthomodular amalgamations of Boolean algebras. **(84d:06004)**

Liu, Yun Feng An axiomatic structure of fuzzy set theory and fuzzy logic. (Chinese. English summary) **(84a:03066)**

Maddux, Roger Some varieties containing relation algebras. **(84a:03079)**

Montagna, Franco The well-founded algebras. **(84f:03055)**

Nguyen Kim An' Some characteristics of algorithms for minimization of Boolean functions. (Russian) **(84g:94027)**

Nicoletti, Giorgio See Guidotti, L., **(84a:05016)**

Padmanabhan, R. A self-dual equational basis for Boolean algebras. **(84a:03077)**

Petrosyan, A. V. Some differential properties of Boolean functions. (Russian. English summary) **(84g:06028)**

(with Vardanyan, V. A.) Complexity of realization of Boolean functions with a given vector of activities. (Russian. English summary) **(84f:94024)**

Pouzet, Maurice See Charretton, Ch., (See **84c:03008**)

Pühringer, Christine Ein Vollständigkeitsbeweis für die Theorie der atomlosen \cap - \cup -partiellen Booleschen Algebren. [A completeness proof for the theory of the atomless \cap - \cup -partial Boolean algebras] **(84c:03063)**

(Rota, Gian-Carlo) See Kim, Ki Hang, **(84a:15001)**

Sessa, Salvatore See Di Nola, Antonio, **(84j:06009)**

Simi, Giulia Premodal algebra. I. A class of algebras linked to the introduction of a probability operator. (Italian. English summary) **(84a:03080a)**

Premodal algebra. II. The variety of premodal algebras. (Italian. English summary) **(84a:03080b)**

Stiefel, Berndt Über Iterierte einer Booleschen Funktion. [On the iterates of a Boolean function] **(84c:94028)**

Sutherland, Roderick I. On Kochen and Specker's impossibility proof. (Italian and Russian summaries) **(84c:81007)**

Tăndăreanu, Nicolae On generalized Boolean functions. II. **(84f:94026)**

Tchuente, Maurice Computation of Boolean functions on networks of binary automata. **(84c:68088)**

Toman, Eduard Lower bound for the diameter of a graph of a random Boolean function. (Russian. English and Slovak summaries) **(84d:94029)**

Tulipani, Sauro Invariants of elementary equivalence for an axiomatic class of general measure spaces. (Italian. English summary) **(84a:03037)**

Vardanyan, V. A. See Petrosyan, A. V., **(84f:94024)**

Winker, Steve Generation and verification of finite models and counterexamples using an automated theorem prover answering two open questions. **(84g:03021)**

Zelinka, Bohdan See Andres, Zdeněk, **(84d:05144)**

Zolotarevskaya, M. Ya. See Grigoryan, A. K., **(84b:68030)**

06Fxx Ordered structures [See also 22A26, 54F05.]

06F05 Ordered semigroups [See also 20Mxx.]

Kehayopulu, Niovi On regular poe-semigroups. **84k:06017**

Repnitskii, V. B. Varieties of l -semigroups. (Russian) **84d:06021**

Cross and almost Cross varieties of commutative dld-semigroups. (Russian) **84k:06018**

Saito, Tatsuhiro Arithmetics on Behrens' partially ordered semigroups. (See **84a:20003**)

Saitō, Tōru Archimedean classes in a nonnegatively ordered semigroup. **84g:06024**

Correction of my paper: "The orderability of idempotent semigroups" [Semigroup Forum 7 (1974), no. 1-4, 264-285; MR 52 #222]. **84d:06022**

The orderability of regular semigroups. **84g:06025**

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Behrens, Ernst August Semigroups of normal ideals and Asano orders. **(84j:16002)**

Blyth, T. S. (with Gomes, Gracinda M. S.) On the compatibility of the natural order on a regular semigroup. **(84h:20063)**

Breazu, Valeriu (with Stănășilă, Octavian) A generalization of Kleene's theorem and nondeterministic structured programming. **(84a:68077)**

Clement, A. (with Pastijn, Francis) Inverse semigroups with idempotents dually well-ordered. **(84m:20065)**

Gabovich, Eugen On spectral theory in discrete programming. **(84c:90060)**

Gomes, Gracinda M. S. See Blyth, T. S., **(84h:20063)**

Grygiel, Grażyna Algebraic Σ_1 -assignment problems. (Russian and Polish summaries) **(84c:90054)**

McAlister, D. B. Regular Rees matrix semigroups and regular Dubreil-Jacotin semigroups. **(84d:20062)**

Mizumoto, Masaharu (with Tanaka, Kokichi) Fuzzy sets of type 2 under algebraic product and algebraic sum. **(84c:03095)**

Murata, Kentaro A divisor theory and integrally closed orders. **(84m:20071)**

Pastijn, Francis See Clement, A., **(84m:20065)**

Stănășilă, Octavian See Breazu, Valeriu, **(84a:68077)**

Tanaka, Kokichi See Mizumoto, Masaharu, **(84c:03095)**

Trueman, D. C. Fundamental preorders and partial orders on completely [0-] simple semigroups. **(84b:20080)**

06F10 Noether lattices

Anderson, D. D. (with Johnson, E. W.; Johnson, Johnny A.) Structure and embedding theorems for small strong- π -lattices. **84c:06020**

Johnson, E. W. See Anderson, D. D.; et al., **84c:06020**

Johnson, Johnny A. Principal elements in multiplicative lattices. (Italian summary) **84c:06019**

Totally quasi-local multiplicative lattices. **84c:06023**

See also Anderson, D. D.; et al., **84c:06020**

secondary classifications:

Johnson, Johnny A. The structure of a class of π -lattices. **(84j:06006)**

06F15 Ordered groups [See also 20F60.]

Ball, Richard N. The generalized orthocompletion and strongly projectable hull of a lattice ordered group. **84c:06021**

Ball, Rick (with Davis, Gary) The α -completion of a lattice ordered group. **84g:06026**

Davis, Gary See Ball, Rick, **84g:06026**

Glass, A. M. W. Countable lattice-ordered groups. **84k:06019**

Holland, W. Charles A survey of varieties of lattice ordered groups. **84j:06020**

Jakubík, Jan Distributivity of intervals of torsion radicals. **84f:06025**

Torsion radicals of lattice ordered groups. **84j:06021**

On K -radical classes of lattice ordered groups. **84f:06026**

On lexico extensions of lattice ordered groups. (Russian summary) **84g:06027**

Jambu-Giraudet, M. Bi-interpretable groups and lattices. **84g:06028**

Kopytov, V. M. Nilpotent lattice-ordered groups. (Russian) **84b:06016**

Free lattice-ordered groups. (Russian) **84d:06024**

Martinez, Jorge Almost finite-valued l -groups. **84g:06029**

Medvedev, N. Ya. On the theory of varieties of lattice-ordered groups. (Russian) **84c:06020**

l -varieties without an independent basis of identities. (Russian) **84b:06017**

The lattice of radicals of finitely generated l -groups. (Russian. English summary) **84h:06017**

Pedersen, Franklin D. (with Sizer, Walter S.) Relating certain semigroup

homomorphisms with group retractions. **84h:06018**

Rachunek, Jiří A characterization of ordered groups by means of segments. (Russian and Czech summaries) **84g:06030**

Šik, František Topology on regulators of lattice ordered groups. II. Completely regular regulators. (Russian summary) **84c:06021**

Regulators of type α of lattice ordered groups. (Russian summary) **84d:06025**

Sizer, Walter S. See Pedersen, Franklin D., **84h:06018**

Todorinov, S. A. Lattice orderable groups. (Russian) **84j:06022a**

Right-orderable groups. (Russian) **84j:06022b**

Tong, Dao Rong The intrinsic topologies of a lattice group. (Chinese) **84k:06020**

Zheleva, S. D. Half-homogeneously cyclically ordered groups. (Russian. English and Bulgarian summaries) **84k:06021a**

Cyclically and T -like ordered groups. (Russian. English and Bulgarian summaries) **84k:06021b**

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Bourbaki, Nicolas ★ Éléments de mathématique. (French) [Elements of mathematics] **(84d:00002)**

Chiti, Emanuela Saturated models of particular theories of ordered abelian groups. (Italian. English summary) **(84c:03061)**

Mosznier, Zenon Le prolongement de la solution de l'équation et de l'inégalité de translation avec l'agrandissement borné de la fibre. [Extension of the solution of the translation equation and inequality with bounded growth from the fiber] **(84c:39004)**

Powell, Wayne B. Boolean hypolattices with applications to l -groups. **(84j:06005)**

- Riečan, Beloslav On measures and integrals with values in ordered groups. (Russian summary) (84c:28017)
- Swaminathan, Thanjavur Venkatasubramanian See Swamy, K. L. N., (84c:06009)
- Swamy, K. L. N. (with Swaminathan, Thanjavur Venkatasubramanian) On compactly packed lattices and atomized algebras. (84c:06009)
- Trias Pairó, Joan Boolean algebras and lattice isometries in Riesz spaces. (Catalan. English summary) (See 84i:03003)
- Weinert, Hanns Joachim Zur Theorie der Halbkörper. [On the theory of seminear-fields] (84c:16025)

06F20 Ordered abelian groups, ordered linear spaces [See also 46A40.]

- Handelman, David E. Free rank $n+1$ dense subgroups of \mathbb{R}^n and their endomorphisms. (84c:06019)
- Jakubik, Ján Weak isomorphisms of abelian lattice ordered groups. (84c:06031)
- Powell, Wayne B. (with Tsinakis, Constantine) Free products of abelian l -groups are cardinally indecomposable. (84c:06011)
- (with Tsinakis, Constantine) The distributive lattice free product as a sublattice of the abelian l -group free product. (84c:06032)
- (with Tsinakis, Constantine) Free products in the class of abelian l -groups. (84c:06022)
- Pringerová, Gabriela On semisimple classes of abelian linearly ordered groups. (Russian summary) (84c:06027)
- Rolland, Raymond Étude des coupures dans les groupes et corps ordonnés. [Study of cuts in ordered groups and fields] (84c:06023)
- Tsinakis, Constantine See Powell, Wayne B., 84c:06011; 84c:06022 and 84c:06032

secondary classifications:

- Gordon, E. I. K -spaces in Boolean-valued models of the theory of sets. (Russian) (84c:03091)
- Handelman, David E. Positive matrices and dimension groups affiliated to C^* -algebras and topological Markov chains. (84c:46058)
- Extensions for AF C^* algebras and dimension groups. (84c:46063)
- Miyajima, Shizuo A characterization and the structure of operators with Maharam property. (84c:47040)
- Pedersen, Franklin D. (with Sizer, Walter S.) Relating certain semigroup homomorphisms with group retractions. (84c:06018)
- Sizer, Walter S. See Pedersen, Franklin D., (84c:06018)

06F25 Ordered rings, algebras, modules (For ordered fields, see 10M15, 12J15; see also 13J25, 16A86.)

- Căzănescu, Virgil Emil (with Ștefănescu, Gheorghe) The category of ordered algebras. (Romanian. English summary) (84c:06012)
- Ștefănescu, Gheorghe See Căzănescu, Virgil Emil, 84c:06012
- Steinberg, Stuart A. Archimedean, semiperfect and π -regular lattice-ordered algebras with polynomial constraints are f -algebras. (84c:06022)
- Trias Pairó, Joan On generalized idempotents, lattice-dilations and contractions in f -rings. (84c:06015)
- Zakharov, V. K. A characterization of orthocompleteness and the divisibility of modules by means of intrinsic order. (Russian) (84c:06018)

secondary classifications:

- Bhandari, M. C. (with Radhakrishna, A.) Radicals in lattice ordered nonassociative rings. (84c:17002)
- Henriksen, Melvin (with Smith, F. A.) Sums of z -ideals and semiprime ideals. (84d:54032)
- Powell, Wayne B. (with Tsinakis, Constantine) Free products in the class of abelian l -groups. (84c:06022)
- Prabhakara Rao, K. B. Vector near-rings. (84j:16020)
- Radhakrishna, A. See Bhandari, M. C., (84c:17002)
- Smith, F. A. See Henriksen, Melvin, (84d:54032)
- Steinberg, Stuart A. Unital l -prime lattice-ordered rings with polynomial constraints are domains. (84d:16050)
- Symmatzschke, J. Über eindimensionale Elemente halbgeordneter Algebren. [On one-dimensional elements of partially ordered algebras] (84c:46013)
- Tsinakis, Constantine See Powell, Wayne B., (84c:06022)

06F30 Topological lattices, order topologies [See also 06B30, 54F05, 54H12.]

- Anderson, Marlow (with Conrad, Paul) The hulls of $C(Y)$. (84d:06026)
- Conrad, Paul See Anderson, Marlow, 84d:06026
- Pons, Montserrat T -topologies on a lattice ordered group. (84c:06023)
- Schmidt, Klaus D. A general Jordan decomposition. (84d:06027)

secondary classifications:

- Bačlawski, Kenneth Cohen-Macaulay connectivity and geometric lattices. (84d:06001)
- Baker, Catharine Anne (with Lane, N. D.; Lorimer, J. W.) Order and topology in projective Hjelmslev planes. (84f:51014)
- Betrema, J. Topologies sur des espaces ordonnés. (English summary) [Topologies on ordered spaces] (84c:54058)
- Chertanov, G. I. The connection between Aronszajn trees and nonmetrizable N_1 -monolithic linearly ordered compacta that satisfy the first axiom of countability. (Russian) (84c:54059)
- Katsaras, A. K. Ordered fuzzy topological spaces. (84b:54013)
- Lane, N. D. See Baker, Catharine Anne; et al., (84f:51014)
- Lorimer, J. W. See Baker, Catharine Anne; et al., (84f:51014)

- Savel'ev, L. Ya. Exterior measures and exterior topologies. (Russian) (84f:06023)
- Tong, Dao Rong The intrinsic topologies of a lattice group. (Chinese) (84c:06020)
- Turinic, Mihai Maximal elements in topological and generalized metric spaces. (84b:54068)
- A maximality principle on ordered metric spaces. (Spanish summary) (84c:54055)
- Weber, Hans Vergleich monotoner Ringtopologien und absolute Stetigkeit von Inhalten. [Comparison of monotone ring topologies and absolute continuity of contents] (84c:28011)

06F99 None of the above, but in this section

- Pasztor, Ana Chain-continuous algebras: a variety of partial algebras. (84c:06025)
- Tiurny, Jerzy Fixed points in the power set algebra of infinite trees. (84c:06022)

secondary classifications:

- Cohen, Michael See Luce, R. Duncan, (84d:92048)
- Golomb, Solomon W. Normed division domains. (84c:06002)
- Luce, R. Duncan (with Cohen, Michael) Factorizable automorphisms in solvable conjoint structures. I. (84c:92048)
- Maravall Casesnoves, Dario Attempt at a theory of the infinitely large and the infinitely small, certain and random, and the laws of large numbers. (Spanish. English summary) (84c:03142)
- Min, Kyung Chan Exponential laws for ordered "topological" vector spaces. (84f:18016)
- Schmidt, Klaus D. A general Jordan decomposition. (84d:06027)

08-XX GENERAL MATHEMATICAL SYSTEMS

08-01 Elementary exposition, textbooks

- Taylor, Walter Some interesting identities. (84c:08001)

08-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

- Bokut', L. A. Algorithmic problems and imbedding theorems: some open problems for rings, groups and semigroups. (Russian) (84j:20001)

08-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Fearnley-Sander, Desmond Hermann Grassmann and the prehistory of universal algebra. (84f:01023)

08-04 Explicit machine computation and programs (not the theory of computation or programming)

- Demel, Jiri Fast algorithms for finding a subdirect decomposition and interesting congruences of finite algebras. (84c:08002)

08-06 Proceedings, conferences, etc.

- (Freese, Ralph S.) See Universal algebra and lattice theory, 84i:08001
- (Garcia, Octavio C.) See Universal algebra and lattice theory, 84i:08001
- Conference:
- Universal algebra and lattice theory ★ Universal algebra and lattice theory. (84i:08001)
- Puebla ★ Universal algebra and lattice theory. (84i:08001)
- Universal algebra and lattice theory ★ Universal algebra and lattice theory. (84i:08001)

secondary classifications:

- (Eigenhaller, Günther) See Contributions to general algebra, (84i:00014)
- (Kaiser, Hans K.) See Contributions to general algebra, (84i:00014)
- (Müller, Winfried B.) See Contributions to general algebra, (84i:00014)
- (Nöbauer, Wilfried) See Contributions to general algebra, (84i:00014)
- Conference:
- Contributions to general algebra ★ Contributions to general algebra. 2. (84i:00014)
- Contributions to general algebra ★ Contributions to general algebra. 2. (84i:00014)
- Klagenfurt ★ Contributions to general algebra. 2. (84i:00014)

08Axx Universal algebra [See also 03C05.]

08A02 Relational systems, laws of composition

- Both, N. (with Purdea, Ioan) On the compatibility of relations. (84c:08003)
- Pattison, Philippa E. The analysis of semigroups of multirelational systems. (84j:08005b)
- Purdea, Ioan See Both, N., 84c:08003
- Trnková, Věra Cardinal multiplication of relational structures. (84f:08001)

secondary classifications:

- Bankston, Paul Obstacles to duality between classes of relational structures. (84j:18005)
- Bauer, Luboš Association schemes. I. (84g:05040a)
- Association schemes. II. (84g:05040b)
- Birsan, T. Generation of the probabilistic quasipseudometric spaces. (84f:54045)
- Constantin, Gheorghe (with Istrătescu, Ioana) ★ Elemente de analiză probabilistică și aplicații. (Romanian) [Elements of probabilistic analysis and applications] (84c:60017)

- Dedeić, Rajko See Hadžić, Olga, (84b:54004)
 Hadžić, Olga (with Dedeić, Rajko) A generalization of contraction principle for multivalued mappings in probabilistic metric spaces. (84b:54004)
 Some theorems on the fixed points in probabilistic metric and random normed spaces. (Italian summary) (84g:54057)
 On common fixed point in probabilistic metric spaces. (84e:54050)
 Höhle, Ulrich Probabilistic topologies induced by L -fuzzy uniformities. (84h:54007a)
 Istrătescu, Ioana See Constantin, Gheorghe, (84d:60017)
 Jacas, J. (with Rubio, J.; Trillas, Enric; Vila, A.) Characterization of the spectrum and the metric morphisms between two Boolean metric spaces. (Catalan. English summary) (See 84i:03003)
 Kabe, D. G. Some results of fixed point theory on statistical metric spaces. (84b:54006)
 Kur'min, V. B. ★ Построение грунтовых решений в пространствах четких и нечетких бинарных отношений. (Russian) [Construction of collective decisions in spaces of fuzzy and nonfuzzy binary relations] (84f:92062)
 (Onicescu, Octav) See Constantin, Gheorghe; et al., (84k:60017)
 Rubio, J. See Jacas, J.; et al., (See 84i:03003)
 Šik, František Schreier-Zassenhaus theorem for algebras. II. (84k:04003)
 Trillas, Enric See Jacas, J.; et al., (See 84i:03003)
 Vila, A. See Jacas, J.; et al., (See 84i:03003)
 Zhang, Shi Sheng Random fixed point theorems for commuting random operators in probabilistic functional analysis. (84k:60004)

08A05 Structure theory

- De Smet, H. J. P. See van Maaren, H., 84m:08003
 Duda, Jaromir An application of diagonal operation: direct decomposability of homomorphisms. 84g:08001
 Solution of the problem of directly decomposable homomorphisms. (Czech summary) 84g:08002
 Dudek, Jozef On the variety $V_{\infty}(+, \cdot)$. (84i:08002)
 Feldman, Norman Axiomatization of polynomial substitution algebras. 84b:08001
 Ferrara, Ugo Mutually dual binary operations. (Italian. English summary) 84e:08001
 Fleischer, Isidore Subdirect decomposability into irreducibles. 84g:08003
 Graczyńska, Ewa (with Pastijn, Francis) Marczewski independence in Plonka sums. 84g:08004
 Knoebel, Arthur A decomposition theorem for several-sorted algebras. 84g:08005
 Lex, W. Simple acts. 84m:08001
 van Maaren, H. A degree theorem and decision methods for algebras of affine forms. 84m:08002
 (with De Smet, H. J. P.) Polynomials in algebras of linear forms. 84m:08003a
 (with De Smet, H. J. P.) Extremal points, separation and Carathéodory, Helly and Radon numbers in nonreal linear spaces. 84m:08003b
 Möhring, Rolf H. On the distribution of locally undecomposable relations and independence systems. 84b:08002
 Pastijn, Francis See Graczyńska, Ewa, 84g:08004
 Poyatos Suarez, Francisco G -principal series of stocks in an algebra. 84j:08001
 Schweigert, Dietmar On varieties of clones. 84j:08002
 Skornyakov, L. A. Convexors. 84j:08003
 Zhitomirskii, G. I. Extension of universal algebras. (Russian) 84i:08003

secondary classifications:

- Duda, Jaromir p -ideals in the lattice of semi- p -ideals. (84g:06008)
 Fried, E. (with Kaiser, Hans K.; Márki, L.) An elementary approach to polynomial interpolation in universal algebras. (84g:08011)
 Kaiser, Hans K. See Fried, E.; et al., (84g:08011)
 Márki, L. See Fried, E.; et al., (84g:08011)
 Plonka, Jerzy A concept of the algebraic dimensional space. (French and Russian summaries) (84k:00032)

08A30 Subalgebras, congruence relations

- Baldwin, John T. (with Berman, Joel) Definable principal congruence relations: kith and kin. 84c:08002
 Bandelt, Hans-J. Tolerances on median algebras. 84m:08004
 Bartlett, Warren K. See Pattison, Philippa E., 84j:08005a
 Berman, Joel See Baldwin, John T., 84e:08002
 Both, N. See Purdea, Ioan, 84c:08003
 Chajda, Ivan Tolerance Hamiltonian varieties of algebras. 84g:08006
 Varieties with directly decomposable diagonal subalgebras. 84i:08004
 Crvenković, Siniša See Čupona, Gorgi; et al., 84h:08001 and 84h:08002
 Čupona, Gorgi (with Crvenković, Siniša; Vojvodić, Gradimir) Subalgebras of commutative semigroups satisfying the law $x' = x'^{n+m}$. (Serbo-Croatian summary) 84h:08001
 (with Markovski, S.) Polynomial subalgebras. 84h:08003
 (with Vojvodić, Gradimir; Crvenković, Siniša) Subalgebras of abelian torsion groups. 84h:08002
 Czédli, Gábor (with Klukovits, L.) A note on tolerances of idempotent algebras. (Serbo-Croatian summary) 84j:08004
 Fried, E. (with Szabó, László; Szendrei, Ágnes) Algebras with p -uniform principal congruences. 84g:08007
 Klukovits, L. See Czédli, Gábor, 84j:08004
 Lee, Sin Min Note on congruences of a direct product of algebras. 84f:08002
 A construction of simple one-element extension of n -groupoids. 84g:08008
 Markovski, S. On quasivarieties of generalized subalgebras. 84j:08006b
 See also Čupona, Gorgi, 84h:08003
 Niederle, Josef Decomposability conditions for compatible relations. 84m:08005
 Nieminen, Juhani The congruence lattice of simple ternary algebras. 84d:08001

- Pattison, Philippa E. (with Bartlett, Warren K.) A factorization procedure for finite algebras. 84j:08005a
 Purdea, Ioan (with Both, N.) Partial tolerances on groups. 84e:08003
 Stone, M. G. (with Weedmark, R. H.) On representing M_n 's by congruence lattices of finite algebras. 84m:08006
 Szabó, László See Fried, E.; et al., 84g:08007
 Szendrei, Ágnes See Fried, E.; et al., 84g:08007
 Uroşu, Carmencita Sous-algèbres complètes des produits directs des algèbres universelles. [Complete subalgebras of direct products of universal algebras] 84g:08009
 Ideals of universal algebras. (Romanian. French summary) 84h:08003
 W -subalgebras of universal algebras. (Romanian. French summary) 84h:08004
 S -congruences in regular varieties of universal algebras. (Romanian. French summary) 84h:08005
 Decomposable compact congruences on direct products. (Romanian. French summary) 84h:08006a
 On a condition of Mal'tsev type for universal algebras. (Romanian. French summary) 84h:08006b
 C -translate congruences. (Romanian. French summary) 84f:08003
 Vojvodić, Gradimir See Čupona, Gorgi; et al., 84h:08001 and 84h:08002
 Weedmark, R. H. See Stone, M. G., 84m:08006

secondary classifications:

- Baranskii, V. A. Independence of related structures of algebraic systems. (Russian) (84g:08010)
 Both, N. (with Purdea, Ioan) On the compatibility of relations. (84c:08003)
 Bozapalides, Syméon (with Firarides, Anestis) Formal translation monoid and algebra congruences in a monoidal category. (84i:18007)
 Corsini, Piergiulio Recent results in the theory of hypergroups. (Italian. English summary) (84i:20077)
 Demel, Jiří Fast algorithms for finding a subdirect decomposition and interesting congruences of finite algebras. (84c:08002)
 Duda, Jaromir Solution of the problem of directly decomposable homomorphisms. (Czech summary) (84g:08002)
 A Mal'tsev characterization of n -permutable varieties with directly decomposable congruences. (84j:08012)
 Firarides, Anestis See Bozapalides, Syméon, (84i:18007)
 Fleischer, V. Varieties of algebras that are regular at zero. (Russian. English and Estonian summaries) (84j:08014)
 Golosov, A. O. (with Tulovskii, V. N.; Tsalenko, M. Sh.) Optimization problems in tolerance spaces. (84h:92045)
 Jakubiková-Studenovská, Danica On congruence relations of monounary algebras. I. (84a:08004)
 Liu, Shao Xue (with Tsai, Chester E.) Wedderburn theorem on varieties of algebras. (84a:17003)
 Pult, Aleš Subdirect irreducibility and congruences. (84a:18004)
 Purdea, Ioan See Both, N., (84c:08003)
 Schmidt, E. Tamás ★ A survey on congruence lattice representations. (84c:06012)
 Šešelja, Branimir Characterization of fuzzy equivalence relations and of fuzzy congruence relations on algebras. (84i:03105)
 Tsai, Chester E. See Liu, Shao Xue, (84a:17003)
 Tsalenko, M. Sh. See Golosov, A. O.; et al., (84h:92045)
 Tulpani, Sauro On the congruence lattice of stable algebras with definability of compact congruences. (84c:03046)
 Tulovskii, V. N. See Golosov, A. O.; et al., (84h:92045)
 Warner, M. W. Tolerance nets. (84c:92017)

08A35 Automorphisms, endomorphisms

- Baranskii, V. A. Independence of related structures of algebraic systems. (Russian) 84g:08010
 Gould, Matthew Rectangular bands in universal algebra: two applications. 84f:08004
 Schultz, Barbara Über die Vollständigkeit der induktiven Gruppoide der partiellen Automorphismen von Algebren. [On the completeness of the inductive groupoids of the partial automorphisms of algebras] 84b:08004

secondary classifications:

- Baldwin, John T. (with Berman, Joel; Glass, A. M. W.; Hodges, Wilfrid) A combinatorial fact about free algebras. (84e:08009)
 Berman, Joel See Baldwin, John T.; et al., (84e:08009)
 Chvalina, Jan Note on compatible binary relations on algebras. (84a:08003)
 Duda, Jaromir An application of diagonal operation: direct decomposability of homomorphisms. (84g:08001)
 Glass, A. M. W. See Baldwin, John T.; et al., (84e:08009)
 Hodges, Wilfrid See Baldwin, John T.; et al., (84e:08009)
 Libeicher, Jaroslav Grätzer algebras and 2-homogeneous quasigroups. (Czech summary) (84d:20074a)
 A note on Belousov's classification of Grätzer algebras. (Czech. English summary) (84d:20074b)
 Marchenkov, S. S. Homogeneous algebras. (Russian) (84h:08007)
 Novotný, Miroslav Commutativity of endomorphisms of linear spaces. (Czech. English summary) (84j:15017)
 Palfy, P. P. (with Szabó, László; Szendrei, Ágnes) Automorphism groups and functional completeness. (84d:08002)
 Pinus, A. G. Full imbeddings of categories of algebraic systems and determinability of a model by the semigroup of its endomorphisms. (Russian) (84a:03036)
 Szabó, László See Palfy, P. P.; et al., (84d:08002)
 Szendrei, Ágnes See Palfy, P. P.; et al., (84d:08002)

08A40 Operations, polynomials, primal algebras

- Allaway, William R. A comparison of two umbral algebras. **84j:08007**
- Bandyopadhyay, S. P. (with Chandra, Subha) Class of universal algebras valued onto the same upper semilattice. **84f:08005**
- Chandra, Subha See Bandyopadhyay, S. P., **84f:08005**
- Csákány, Béla (with Gavalová, Tatjana) Three-element quasiprimal algebras. **84j:08008**
- Demetrovics, János (with Hannák, L.) How to construct a large set of nonequivalent functionally complete algebras. (Russian and Hungarian summaries) **84b:08005a**
- (with Hannák, L.; Rónyai, L.) On functional completeness of prime-element algebras. (Russian and Hungarian summaries) **84b:08005b**
- Denecke, Klaus Independent sets and free preprimal algebras. **84c:08004**
- Dudek, József (with Plonka, Jerzy) On the monoarity of algebras. **84c:08001**
- Eigenhater, Günther Einige Bemerkungen über Clones und interpolierbare Funktionen auf universellen Algebren. [Some remarks on clones and interpolable functions on universal algebras] **84j:08009**
- Fried, E. (with Kaiser, Hans K.; Márki, L.) An elementary approach to polynomial interpolation in universal algebras. **84g:08011**
- Gavalová, Tatjana See Csákány, Béla, **84j:08008**
- Hannák, L. See Demetrovics, János, **84b:08005a** and **84b:08005b**
- Jo, Young Soo (with Lee, Sang Ki) A note on \mathbb{N} -ideals. **84a:08001**
- Kaiser, Hans K. See Fried, E. et al., **84g:08011**
- Lee, Sang Ki See Jo, Young Soo, **84a:08001**
- Marchenkov, S. S. Homogeneous algebras. (Russian) **84b:08007**
- Márki, L. See Fried, E. et al., **84g:08011**
- Meldrum, J. D. P. (with Pilz, Günter) Polynomial algebras and polynomial maps. **84c:08002**
- Meskhi, Slava Complete Boolean powers of quasiprimal algebras with lattice reducts. **84g:08012**
- Pálfi, P. P. (with Szabó, László; Szendrei, Ágnes) Automorphism groups and functional completeness. **84d:08002**
- Pilz, Günter See Meldrum, J. D. P., **84c:08002**
- Plonka, Jerzy See Dudek, József, **84c:08001**
- Rónyai, L. See Demetrovics, János et al., **84b:08005b**
- Schweigert, Dietmar (with Szymańska, Magdalena) Polynomial functions of correlation lattices. **84g:08013**
- Silberger, Donald Morison On the article: "When is a term point universal?" [Algebra Universalis **10** (1980), no. 2, 135–154; MR **81d:08007**] **84d:08003**
- Sokhatskii, F. N. Positional algebras. (Russian) **84g:08014**
- Szabó, László See Pálfi, P. P.; et al., **84d:08002**
- Szendrei, Ágnes On the idempotent reducts of modules. I, II. **84j:08010**
- Algebras of prime cardinality with a cyclic automorphism. **84g:08015**
- See also Pálfi, P. P.; et al., **84d:08002**
- Szymańska, Magdalena See Schweigert, Dietmar, **84g:08013**
- Urzyczyn, Paweł The unwind property in certain algebras. **84c:08005**

secondary classifications:

- Bairamov, R. A. Some new results in the theory of function algebras of finite-valued logics. (84c:03105)
- Chajda, Ivan Tolerance Hamiltonian varieties of algebras. **84g:08006**
- Cheremov, A. N. Description of the structure of closed classes in P_1 containing the class of polynomials. (Russian) **84j:03055**
- Dudek, József On bisemilattices. I. **84c:06006a**
- On bisemilattices. II. **84c:06006b**
- A characterization of distributive lattices. **84c:06011**
- Fleischer, V. On projective Hamiltonian varieties. **84b:08010**
- Joyce, David Simple quandles. **84d:20078**
- Kirschenhofer, Peter (with Tichy, Robert Franz) Polynomalgebren und Diskrepanz. [Polynomial algebras and discrepancy] **84b:68109**
- Länger, Helmut The independence of certain associative laws. **84d:20077**
- Schweigert, Dietmar On varieties of clones. **84j:08002**
- Szabó, László (with Szendrei, Ágnes) Shupecki-type criteria for quasilinear functions over a finite-dimensional vector space. (German and Russian summaries) **84f:15006**
- Szendrei, Ágnes See Szabó, László, **84f:15006**
- Thron, Reinhard Algebraische Hüllenoperatoren, bei denen jede endliche Menge durch die Menge ihrer isolierten Elemente erzeugt wird. [Algebraic closure operators for which every finite set is generated by the set of its isolated elements] **84g:06007**
- Tichy, Robert Franz See Kirschenhofer, Peter, **84b:68109**

08A45 Equational compactness

08A50 Word problems [See also 03D40, 20F10.]

- Evans, Trevor Universal-algebraic aspects of combinatorics. **84d:08004**

secondary classifications:

- Day, Alan Equational theories of projective geometries. **84k:06008**
- Katriňák, Tibor Free p -algebras. **84b:06011**
- Kučera, L. (with Šedivá-Trnková, Věra) Isomorphism completeness for some algebraic structures. **84b:68070**
- Kukin, G. P. The word problem and free products of Lie algebras and associative algebras. (Russian) **84m:17012**
- Schweigert, Dietmar (with Szymańska, Magdalena) A completeness theorem for correlation lattices. **84m:06021**
- Šedivá-Trnková, Věra See Kučera, L., **84b:68070**
- Szymańska, Magdalena See Schweigert, Dietmar, **84m:06021**

08A55 Partial algebras

- Benecke, Klaus (with Reichel, Horst) Equational partiality. **84g:08016**
- Burmeister, Peter (with Reichel, Horst) Stand und Entwicklungstendenzen der Theorie partieller Algebren. [Level and trends of development of the theory of partial algebras] **84m:08007**
- Debrunner, Hans E. See Hertel, Elke, **84a:08002**
- Eigenhater, Günther Über Einbettungsfragen bei frei erzeugten Algebren. [On embedding theorems in freely generated algebras] **84b:08008**
- Hansoul, G. E. A subdirect decomposition theorem for multialgebras. **84j:08011**
- Hertel, Elke (with Debrunner, Hans E.) Zur Rolle von Subtraktionssatz und Divisionssatz in Zerlegungsstrukturen. [On the role of the subtraction theorem and the division theorem in decomposition structures] **84a:08002**
- Reichel, Horst See Benecke, Klaus, **84g:08016** and Burmeister, Peter, **84m:08007**

secondary classifications:

- Burmeister, Peter Partial algebras—survey of a unifying approach towards a two-valued model theory for partial algebras. **84g:03040**
- Evans, Trevor Universal-algebraic aspects of combinatorics. **84d:08004**
- Kratochvíl, Petr Sequential convergence as a partial operation. **84d:54004**
- Lyapun, E. S. Abstract characterization of a class of partial groupoids of transformations. (Russian) **84b:20077**
- Internal extension of partial actions to complete associative ones. (Russian) **84g:20097**
- Pasztor, Ana Chain-continuous algebras: a variety of partial algebras. **84m:06025**
- Schultz, Barbara Über die Vollständigkeit der induktiven Gruppoide der partiellen Automorphismen von Algebren. [On the completeness of the inductive groupoids of the partial automorphisms of algebras] **84b:08004**

08A60 Unary algebras

- Chvalina, Jan Note on compatible binary relations on algebras. **84a:08003**
- Jakubíková-Studenová, Danica On congruence relations of monounary algebras. I. **84a:08004**
- Skornyakov, L. A. Schreier and Hall varieties of unary algebras. (Russian. English summary) **84g:08017**

secondary classifications:

- Dudek, József (with Plonka, Jerzy) On the monoarity of algebras. **84c:08001**
- Novotný, Miroslav Commutativity of endomorphisms of linear spaces. (Czech. English summary) **84g:15017**
- Plonka, Jerzy See Dudek, József, **84c:08001**
- Rogers, Laurel Functions defined on p -trees. **84c:20063**

08A65 Infinitary algebras

- Isbell, John R. Generating the algebraic theory of $C(X)$. **84c:08004**

08A99 None of the above, but in this section

- Andréka, Hajnal (with Némethi, István) Some universal algebraic and model theoretic results in computer science. **84g:08018**
- Čupona, Gorgi Extensions of algebraic structures. (Macedonian. English summary) **84g:08019**
- Duda, Jaromír A functional characterization of parallelogram spaces. **84c:08006**
- Ferenčí, F. Groupoids of pseudoequations. (See **84a:20002**)
- Nelson, Evelyn Iterative algebras. **84c:08005**
- Némethi, István See Andréka, Hajnal, **84g:08018**
- Simovici, Dan A. On certain constructions in universal algebra inspired by automata theory. **84f:08006**
- V'yugin, V. V. Algebra of invariant properties of binary sequences. **84d:08005**

secondary classifications:

- Antonovskii, M. Ya. (with Choban, M. M.) Invariant generalized metrics on topological algebras. (Russian) **84c:22006**
- Babikov, G. V. Factorization of matrices over some universal algebras. (Russian) **84d:15028**
- Bartha, M. Linear deterministic attributed transformations. **84j:68047**
- Bergstra, Jan A. (with Tiuryn, Jerzy) Regular extensions of iterative algebras and metric interpretations. **84b:68059**
- Bonansinga, Pia Weakly quasicanonical hypergroups. (Italian. English summary) **84f:20087**
- Burstall, R. M. (with Goguen, J. A.) Algebras, theories and freeness: an introduction for computer scientists. **84c:68026**
- Celakoski, N. Compatible subassociatives. **84b:20084**
- Choban, M. M. See Antonovskii, M. Ya., **84c:22006** and Dumitrashtu, S. S., **84c:54066**
- Cotti Ferrero, Celestina (with Rinaldi, Maria Federica) On Ω -groups with nilpotent proper quotients. (Italian. English summary) **84f:20089**
- De Maria, Francesco Selection groups of hypergroups. **84a:20072**
- De Salvo, Mario (with Freni, Domenico) Complete cyclic hypergroups. (Italian. English summary) **84f:20088a**
- (with Freni, Domenico) Cyclic semihypergroups and hypergroups. (Italian. English summary) **84a:20073**
- Complete finite hypergroups. (Italian. English summary) **84f:20078**
- Dumitrashtu, S. S. (with Choban, M. M.) Free topological algebras with a continuous signature. (Russian) **84c:54066**

- Freni, Domenico Cyclic hypergroups and torsion in hypergroups. (Italian. English summary) (84f:20088b)
- See also De Salvo, Mario, (84a:20073) and (84f:20088a)
- Goguen, J. A. See Burstall, R. M., (84c:68026)
- Hatcher, William S. Clone embeddings and the hyperreals. (84m:03103)
- Hauptmann, Wolfgang Gruppenähnliche Strukturen. [Grouplike structures] (84b:20002)
- Ježek, Jaroslav (with Kepka, Tomáš; Němec, Petr) Distributive groupoids. (Russian summary) (84b:20066)
- Kepka, Tomáš See Ježek, Jaroslav; et al., (84b:20066)
- Lescanne, Pierre Modèles non déterministes de types abstraits. (English summary) [Nondeterministic models of abstract data types] (84i:68031)
- Manca, Vincenzo (with Salibra, A.) Universal algebra and logic in computer science. (Italian) (See 84b:03006)
- McKenzie, Ralph N. Subdirect powers of nonabelian groups. (84d:20027)
- Němec, Petr See Ježek, Jaroslav; et al., (84b:20066)
- Novotný, Miroslav Contextual grammars vs. context-free algebras. (84c:68069)
- Osadchiv, A. A. Language for representation of knowledge as a universal algebra over texts of a limited natural language. (Russian) (84d:68096)
- Prešić, Marica D. Some results on the extending of models. (84j:08006a) (with Prešić, Slavica B.) Some embedding theorems. (84j:03077)
- Prešić, Slavica B. See Prešić, Marica D., (84j:03077)
- Rinaldi, Maria Federica See Cotti Ferrero, Celestina, (84f:20089)
- Romeo, Grazia Direct limit of associativity semihypergroups and hypergroups. (Italian) (84m:20079)
- Salibra, A. See Manca, Vincenzo, (See 84b:03006)
- Sureau, Yves Normalité et théorème de Jordan-Hölder en théorie des hypergroupes opérant transitivement sur un ensemble. [Normality and Jordan-Hölder theorem in the theory of hypergroups acting transitively on a set] (84m:20080)
- Tiuryn, Jerzy Fixed points in the power set algebra of infinite trees. (84c:06022) See also Bergstra, Jan A., (84b:68059)
- Vakarelov, Dimit'r Filtration theorem for dynamic algebras with tests and inverse operator. (84c:68016)

08Bxx Varieties

08B05 Equational logic, Mal'cev (Mal'tsev) conditions

- Duda, Jaromír A Mal'cev characterization of n -permutable varieties with directly decomposable congruences. (84j:08012)
- Filippov, V. T. Generalized basis rank of varieties of algebras. (Russian) (84g:08020)
- Graczyńska, Ewa On normal identities. (Russian summary) (84g:08021)
- Harizanov, Valentina On some finite groupoids whose equational theories are not finitely based. (84b:08006)
- Kim, Ann Chi Laws in groupoids derived from semigroups. (84c:08007)
- Lipparini, Paolo On Hilbert's nullstellensatz in universal algebra. (Italian) (See 84b:03006)
- Molnár, József Hereditary properties of algebras with respect to inductive limits. (Russian and Czech summaries) (84g:08022)
- Pigozzi, Don On the structure of equationally complete varieties. II. (84f:08007)
- Reiterman, Jan The Birkhoff theorem for finite algebras. (84c:08008)

secondary classifications:

- Bergstra, Jan A. (with Meyer, John-Jules Ch.) The equational specification of finite minimal unoids using only unary hidden functions. (84m:03043)
- Budkin, A. I. Independent axiomatizability of quasivarieties of groups. (Russian) (84b:20029)
- Chandran, V. R. (with Lakshmanan, Vimala) On supermodular lattices. (84i:06008)
- Czédli, Gábor On properties of rings that can be characterized by infinite lattice identities. (84c:06006)
- DeMayo, Clement L. Mock-realcompactness and the equational completion of countable sets. (84c:54042)
- Dudek, József (with Glazek, K.) On commutative groupoids with semilattice operations. (84b:20072)
- A characterization of distributive lattices. (84b:06011)
- Glazek, K. See Dudek, József, (84b:20072)
- Ježek, Jaroslav The lattice of equational theories. I. Modular elements. (84c:08007a)
- Jónsson, Bjarni Varieties of relation algebras. (84g:08023)
- Kalmbach, Gudrun Omologues to a Hilbert type calculus. (84j:03129)
- Lakshmanan, Vimala See Chandran, V. R., (84i:06008)
- Medvedev, N. Ya. I -varieties without an independent basis of identities. (Russian) (84b:06017)
- Meyer, John-Jules Ch. See Bergstra, Jan A., (84m:03043)
- Palyutin, E. A. Number of models in complete varieties. (84g:03036)
- Rybakov, V. V. Bases of quasi-identities of finite modal algebras. (Russian) (84j:03137)
- Taylor, Walter Some interesting identities. (84c:08001)
- Valitskas, A. I. Absence of a finite basis of quasi-identities for a quasivariety of rings that can be imbedded in radical rings. (Russian) (84d:16014)

08B10 Congruence modularity, congruence distributivity

- Draškovićová, Hilda Modular median algebras. (Russian summary) (84a:08005)
- Herrmann, Christian On varieties of algebras having complemented modular lattices of congruences. (84c:08006)
- Korec, Ivan Arithmetical equivalence lattice for which no Pixley function exists. (Russian and Slovak summaries) (84c:08009)
- Zlatoš, Pavol On the ring of the variety of algebras over a ring. (84c:08005)

secondary classifications:

- Baldwin, John T. (with McKenzie, Ralph N.) Counting models in universal Horn classes. (84m:03042)
- Burris, Stanley The first order theory of Boolean algebras with a distinguished group of automorphisms. (84f:03000)
- McKenzie, Ralph N. See Baldwin, John T., (84m:03042)

08B15 Lattices of varieties

- Dudek, József (with Plonka, Jerzy) On covering in lattices of varieties of algebras. (Russian summary) (84m:08008)
- Goralčík, P. (with Koubek, V.) There are too many subdirectly irreducible bands. (84b:08009)
- Ježek, Jaroslav The lattice of equational theories. I. Modular elements. (84c:08007a) The lattice of equational theories. II. The lattice of full sets of terms. (84c:08007b) The lattice of equational theories. III. Definability and automorphisms. (84c:08007c)
- Jónsson, Bjarni Varieties of relation algebras. (84g:08023)
- Koubek, V. See Goralčík, P., (84b:08009)
- Plonka, Jerzy See Dudek, József, (84m:08008)
- Stoyanova-Venkova, A. N. Some lattices of varieties of associative algebras defined by identities of the fifth degree. (Russian) (84b:08007)
- Tonov, Ivan K. Chain varieties of associative algebras with a unit. (Russian) (84c:08008)

secondary classifications:

- Dremski, Veselin S. Lattices of varieties of associative algebras. (Russian) (84b:16003)
- Montagna, Franco (with Pasini, Leonardo) The equational class corresponding to the modal logic K43W. (Italian summary) (84f:03015)
- Pasini, Leonardo See Montagna, Franco, (84f:03015)
- Reilly, Norman R. The breadth of the lattice of those varieties of inverse semigroups which contain the variety of groups. (84b:20062)
- Schweigert, Dietmar Near lattices. (Russian summary) (84b:06002)
- Siderov, Plamen N. The Specht property of a variety of associative algebras defined by the product of three commutators of arbitrary length. (Russian) (84b:16004)

08B20 Free algebras

- Baldwin, John T. (with Berman, Joel; Glass, A. M. W.; Hodges, Wilfrid) A combinatorial fact about free algebras. (84c:08009)
- Baumgartner, Karlheinz ★ Fragmente: meine Konstruktion und die sie begleitenden allgemeinen Strukturtheorien. (German) [Fragments: my construction and the general structure theories that accompany it] (84b:08008)
- Berman, Joel See Baldwin, John T.; et al., (84c:08009)
- Burgin, M. S. Kurosh varieties of Ω -algebras that are linear over a field. (Russian) (84m:08009)
- Dumitrashku, S. S. Topological properties of homomorphisms of universal algebras. (Russian) (84j:08013)
- Glass, A. M. W. See Baldwin, John T.; et al., (84c:08009)
- Hodges, Wilfrid See Baldwin, John T.; et al., (84c:08009)
- Ježek, Jaroslav Free groupoids in varieties determined by a short equation. (Russian and Czech summaries) (84d:08006)
- Zakharova, E. N. Almost commutative nilpotent varieties of algebras. (Russian) (84b:08009)

secondary classifications:

- Adámek, Jiri (with Nelson, Evelyn; Reiterman, Jan) Tree constructions of free continuous algebras. (84c:06008)
- Denecke, Klaus Independent sets and free preprimal algebras. (84c:08004)
- Eigentlicher, Günther Über Einbettungsfragen bei frei erzeugten Algebren. [On embedding theorems in freely generated algebras] (84b:08008)
- Gardner, B. J. Radical properties defined by the absence of free subobjects. (84d:16047)
- Katriňák, Tibor Free p -algebras. (84b:06011)
- Nelson, Evelyn See Adámek, Jiri; et al., (84c:06008)
- Razmyslov, Yu. P. Varieties of representations of finite-dimensional algebras in prime algebras. (Russian. English summary) (84d:17011)
- Reiterman, Jan See Adámek, Jiri; et al., (84c:06008)
- Romanowska, Anna Idempotent distributive semirings with a semilattice reduct. (84f:16045a)
- Free idempotent distributive semirings with a semilattice reduct. (84f:16045b)
- Rozenblat, B. V. See Vazhenin, Yu. M., (84j:03028)
- Vazhenin, Yu. M. (with Rozenblat, B. V.) Positive theories of free algebraic systems. (Russian) (84j:03028)

08B25 Products, amalgamated products

secondary classifications:

- Bandelt, Hans-J. (with Petrich, Mario) Subdirect products of rings and distributive lattices. (84g:16030)
- Burgin, M. S. Kurosh varieties of Ω -algebras that are linear over a field. (Russian) (84m:08009)
- Clarke, G. T. Semigroup varieties with the amalgamation property. (84f:20064)
- Petrich, Mario See Bandelt, Hans-J., (84g:16030)
- Powell, Wayne B. (with Tsinakis, Constantine) Free products of abelian I -groups are cardinal indecomposable. (84a:06011)
- Tsinakis, Constantine See Powell, Wayne B., (84a:06011)

08B30 Injectives, projectives

Fleischer, V. On projective Hamiltonian varieties. **84b:08010**

Varieties of algebras that are regular at zero. (Russian. English and Estonian summaries) **84j:08014**

secondary classifications:

Gardner, B. J. Radical properties defined by the absence of free subobjects. **(84d:16047)**

08B99 None of the above, but in this section

Movsisyan, Yu. M. Balanced hyperidentities of length three. (Russian. Armenian summary) **84g:08024**

secondary classifications:

Artamonov, V. A. The structure of projective groups in products of varieties. (Russian. English summary) **(84e:20035)**

Crvenković, Sinisa. See Čupona, Gorgi; et al. **(84h:08001)**

Čupona, Gorgi. (with Crvenković, Sinisa; Vojvodić, Gradimir) Subalgebras of commutative semigroups satisfying the law $x' = x'^{r+m}$. (Serbo-Croatian summary) **(84h:08001)**

Isbell, John R. Generic algebras. **(84h:18010)**

Lysenko, F. F. Supervarieties of varieties consisting of 2-step nilpotent groups. (Russian) **(84c:20043)**

Mal'tsev, Yu. N. Almost Engel locally finite varieties of associative rings. (Russian) **(84d:16023)**

On critical rings. (Russian) **(84e:16009)**

Nevermann, Peter. A note on axiomatizable order varieties. **(84i:06001)**

Testa, Stefano. On a universe of monotone devices. (Italian) **(84b:18004)**

Vojvodić, Gradimir. See Čupona, Gorgi; et al. **(84h:08001)**

Volkov, M. V. Varieties of associative rings with amalgamation property. (Russian) **(84b:16024)**

08Cxx Classes of algebras

08C05 Categories of algebras [See also 18C05.]

Banaschewski, Bernhard. On categories of algebras equivalent to a variety. **84g:08025**

Bankston, Paul. (with Fox, Ralph) On categories of algebras equivalent to a quasivariety. **84g:08026**

Fox, Ralph. See Bankston, Paul. **84g:08026**

Gurevich, R. Löwenheim-Skolem problem for functions. **84g:08027**

Ježek, Jaroslav. A note on isomorphic varieties. **84i:08006**

Stănescu, Gheorghe. The characterization of universal-effective monomorphisms in the category of universal algebras and relational systems. (Romanian. English summary) **84b:08011**

secondary classifications:

Bankston, Paul. On productive classes of function rings. **(84c:03056)**

Coppey, Laurent. Sur quelques structures de base pour définir les structures. [Some basic structures for defining structures] **(84h:18011)**

Diers, Yves. Monades et multimondes de rang α sur les catégories localement α -multiprésentables. [Monads and multimondes of rank α on locally α -multipresentable categories] **(84i:18003)**

Franco Fernández, L. See Rodríguez Fernández, C. **(84j:18010)**

Meseguer Gualta, José. Order completion monads. **(84i:18005)**

Rodríguez Fernández, C. (with Franco Fernández, L.) Simplicial method and Baer-invariants. **(84j:18010)**

Rosický, Jiří. On algebraic categories. **(84a:18010)**
A note on algebraic categories. **(84d:18004)**

08C10 Axiomatic model classes [See also 03Cxx, in particular 03C60.]

Sangalli, Arturo A. L. A representation of varieties and their morphisms. **84i:08007**

secondary classifications:

Andréka, Hajnal. (with Németi, István) A general axiomatizability theorem formulated in terms of cone-injective subcategories. **(84a:03031a)**

Banaschewski, Bernhard. On categories of algebras equivalent to a variety. **(84g:08025)**

Bankston, Paul. (with Fox, Ralph) On categories of algebras equivalent to a quasivariety. **(84g:08026)**

Fox, Ralph. See Bankston, Paul. **(84g:08026)**

Indermark, K. On rational definitions in complete algebras without rank. **(84b:08025)**

Maddux, Roger. Some varieties containing relation algebras. **(84a:03079)**

Mez, Hans-Christian. Existentially closed linear groups. **(84a:20050)**

Németi, István. (with Sain, Ildikó) Cone-implicative subcategories and some Birkhoff-type theorems. **(84a:03031b)**

See also Andréka, Hajnal. **(84a:03031a)**

Sain, Ildikó. See Németi, István. **(84a:03031b)**

Vazhenin, Yu. M. Semigroups with one defining relation whose elementary theories are decidable. (Russian) **(84i:20060)**

Xiao, Yin An. (with Xiong, Xi Jin) A class of quaternion functions and Maxwell's equations. (Chinese. English summary) **(84i:78013)**

Xiong, Xi Jin. See Xiao, Yin An. **(84i:78013)**

08C15 Quasivarieties

Bloom, Stephen L. (with Wright, Jesse B.) Finitary quasivarieties. **84b:08012**

McKenzie, Ralph N. The number of nonisomorphic models in quasivarieties of semigroups. **84f:08008**

Mehdi Ebrahimi, M. Equational compactness of sheaves of algebras on a Noetherian locale. **84e:08010**

Wright, Jesse B. See Bloom, Stephen L. **84b:08012**

secondary classifications:

Benecke, Klaus. (with Reichel, Horst) Equational partiality. **(84g:08016)**

Budkin, A. I. Independent axiomatizability of quasivarieties of groups. (Russian) **(84b:20029)**

Markovski, S. On quasivarieties of generalized subalgebras. **(84j:08006b)**

Reichel, Horst. See Benecke, Klaus. **(84g:08016)**

08C99 None of the above, but in this section

Novotný, Miroslav. Remarks on heterogeneous algebras. (Czech summary) **84g:08028**

secondary classifications:

Németi, István. On notions of factorization systems and their applications to cone-injective subcategories. **(84a:18002)**

10-XX NUMBER THEORY [Excluding 10Axx and 10Mxx, this classification does not distinguish work in the rational number fields from that in other algebraic number fields.]

10-01 Elementary exposition, textbooks

Bel'skii, A. A. (with Kaluzhnin, L. A.) ★Division mit Rest. (German) [Division with remainder] **84e:10001**

Blokh, A. Sh. ★Числовые системы. (Russian) [Number systems] **84d:10001**

(Boll, Ludwig) See Bel'skii, A. A.; et al. **84e:10001**

(Crane, G.) See Rademacher, Hans. **84h:10001**

Davenport, Harold. ★The higher arithmetic. **84a:10001**

★The higher arithmetic. **84d:10002**

Fricker, François. ★Einführung in die Gitterpunkttheorie. (German) [Introduction to lattice point theory] **84b:10001**

(Goldfeld, Dorian) See Rademacher, Hans. **84h:10001**

Kaluzhnin, L. A. See Bel'skii, A. A. **84e:10001**

Kasatkina, V. N. ★Новое о системах числения. (Russian) [Novelty in number systems] **84a:10002**

Lowe, George P. ★The lore of prime numbers. **84c:10001**

Prasad, Manoranjan. On number-theoretic functions and connected problems. **84g:10001**

Rademacher, Hans. ★Higher mathematics from an elementary point of view. **84h:10001**

Shapiro, Harold N. ★Introduction to the theory of numbers. **84f:10001**

secondary classifications:

Cassels, J. W. S. ★Рациональные квадратичные формы. (Russian) [Rational quadratic forms] **(84d:10027)**

(Malyshev, A. V.) See Cassels, J. W. S. **(84d:10027)**

Markushevich, A. I. ★Возвратные последовательности. (Russian) [Recurrence sequences] **(84k:10008)**

Schroeder, Manfred R. Number theory in physics, engineering and art. **(84g:00025)**

Shidlovskii, A. B. ★Диофантов приближения и трансцендентные числа. (Russian) [Diophantine approximations and transcendental numbers] **(84f:10042)**

Shneperman, L. B. ★Сборник задач по алгебре и теории чисел. (Russian) [A collection of problems in algebra and number theory] **(84f:00007)**

(Venkov, B. B.) See Cassels, J. W. S. **(84d:10027)**

10-02 Advanced exposition (research surveys, monographs, etc.)

Delange, Hubert. Théorie probabiliste des nombres. [Probabilistic theory of numbers] (See **84d:10005**)

Erdős, Paul. Problems and results in number theory. **84j:10001**

Some of my favourite problems which recently have been solved. **84f:10003**

Some new problems and results in number theory. **84g:10002**

Miscellaneous problems in number theory. **84f:10002**

Tenenbaum, Gérald. ★Cours de théorie analytique des nombres. (French) [Course on analytic number theory] **84h:10002**

Vaughan, R. C. ★The Hardy-Littlewood method. **84b:10002**

secondary classifications:

Bucur, Ionel. ★Capitole speciale de algebră. (Romanian) [Special chapters of algebra] **(84c:14001)**

(Chirskii, V. G.) See Schmidt, Wolfgang M. **(84d:10038)**

Deuber, W. (with Voigt, Bernd) Der Satz von van der Waerden über arithmetische Progressionen. [The theorem of van der Waerden on arithmetic progressions] **(84j:10011)**

Erdős, Paul. Solved and unsolved problems in combinatorics and combinatorial number theory. **(84i:10011)**

(Galbură, Gh.) See Bucur, Ionel. **(84c:14001)**

(Onicescu, Octav) See Bucur, Ionel. **(84c:14001)**

Pan, Cheng Biao. See Pan, Cheng Dong. **(84h:10064)**

Pan, Cheng Dong. (with Pan, Cheng Biao) ★Gedebahe caixiang. (Chinese) [Goldbach's conjecture] **(84h:10064)**

- Schmidt, Wolfgang M. ★ Диофантов приближения. (Russian) [Diophantine approximation] (84d:10038)
 (Shidlovskii, A. B.) See Schmidt, Wolfgang M., (84d:10038)
 Stroeker, R. J. (with Tijdeman, Robert) Diophantine equations. (84i:10014)
 Tausky, Olga The many aspects of the Pythagorean triangles. (84h:10020)
 Tijdeman, Robert See Stroeker, R. J., (84i:10014)
 Voigt, Bernd See Deuber, W., (84j:10011)

10-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Baker, Alan The Fermat equation and transcendence theory. (84j:01061)
 Berndt, Bruce C. Chapter 8 of Ramanujan's second notebook. (84g:01080)
 (Brun, Viggo) See Ramachandra, K., (84f:01082)
 Dieudonné, Jean La découverte des fonctions fuchsienues. [The discovery of Fuchsian functions] (84c:01030)
 Dudley, Underwood Formulas for primes. (84g:01064)
 Friberg, Jöran ★ A historically motivated study of families of Pythagorean or Babylonian triples and their generating semigroups of P - or B -orthonormal matrices. (84c:10021)
 Kneser, Martin Aus der Zahlentheorie der quadratischen Formen. [From the number theory of quadratic forms] (84e:10030)
 Luo, Jian Jin The study of the Stirling numbers and the Euler numbers by Li Jenshou. (Chinese. English summary) (84i:01064)
 Mahler, K. Fifty years as a mathematician. (84c:01051)
 Mo, Shao Kui What do we do if we do not have the concept of prime numbers? A note on the history of mathematics in China. (Chinese) (84i:01024)
 Papadatos, Ioannes Sp. Nikomachos: "Arithmetic problems". On a logical game and its explanation in contemporary terminology. (Greek) (84h:01007)
 ★ Arithmetic polygons of the ancient Greeks and arithmetic polyhedra of Descartes. (Greek) (84c:01007)
 Picutti, Ettore Notes on an arithmetical pamphlet of Pascal. (Italian) (84c:01022)
 Pisot, Charles Souvenirs mathématiques. [Mathematical recollections] (84i:01131)
 Ramachandra, K. Some current problems in multiplicative number theory. (84i:10041)
 Viggo Brun (13.10.1885 to 15.8.1978). (84f:01082)
 Waldschmidt, Michel Les débuts de la théorie des nombres transcendants (à l'occasion du centenaire de la transcendence de π). [The beginnings of the theory of transcendental numbers (on the occasion of the centenary of the proof of the transcendence of π)] (84c:01043)
 Bibliography:
 Mahler, K. See Mahler, K., (84c:01051)
 Biography:
 Mahler, K. See Mahler, K., (84c:01051)

10-04 Explicit machine computation and programs (not the theory of computation or programming)

- Brent, R. P. (with van de Lune, J.; te Riele, H. J. J.; Winter, D. T.) The first 200,000,001 zeros of Riemann's zeta function. 84i:10003
 Coveur, C. (with Quisquater, J. J.) An introduction to fast generation of large prime numbers. 84m:10001a
 (with Quisquater, J. J.) Errata to: "An introduction to fast generation of large prime numbers". 84m:10001b
 Debnath, Lokenath Some recent results of number theory discovered with electronic computers. 84a:10003
 Glazunov, N. M. A mathematical machine that is oriented towards the study of Diophantine equations. III. (Russian) 84k:10001
 (Lenstra, H. W., Jr.) See Schnorr, C.-P., 84d:10003
 van de Lune, J. (with te Riele, H. J. J.; Winter, D. T.) ★ Rigorous high speed separation of zeros of Riemann's zeta function. 84f:10004
 See also Brent, R. P.; et al., 84h:10003
 Patterson, C. D. (with Williams, Hugh Cowie) A report on the University of Manitoba Sieve Unit. 84g:10003
 Quisquater, J. J. See Coveur, C., 84m:10001
 te Riele, H. J. J. See van de Lune, J.; et al., 84f:10004 and Brent, R. P.; et al., 84h:10003
 Sattler, J. (with Schnorr, C.-P.) Ein Effizienzvergleich der Faktorisierungsverfahren von Morrison-Brillhart und Schroeppel. (English summary) [An efficiency comparison of the integer factoring algorithms of Morrison-Brillhart and Schroeppel] 84g:10004
 Schnorr, C.-P. A Monte Carlo factoring algorithm with finite storage. 84d:10003
 See also Sattler, J., 84g:10004
 Schwindt, H. Three summation criteria for Fermat's last theorem. 84b:10003
 Semba, Ichirō Systematic method for determining the number of multiplications required to compute x^m , where m is a positive integer. 84f:10005
 Turk, J. W. M. Fast arithmetic operations on numbers and polynomials. 84f:10006
 Verhezen, Steven Approximating transcendental numbers. 84c:10002
 Williams, Hugh Cowie See Patterson, C. D., 84g:10003
 Winter, D. T. See van de Lune, J.; et al., 84f:10004 and Brent, R. P.; et al., 84h:10003
 secondary classifications:
 Adams, William W. (with Shanks, Daniel) Strong primality tests that are not sufficient. (84c:10007)
 Adleman, Leonard M. (with Pomerance, Carl; Rumely, Robert S.) On distinguishing prime numbers from composite numbers. (84c:10008)
 Anisimov, A. V. (with Ryndin, Ya. P.; Red'ko, S. E.) Inverse Fibonacci transformation. (84b:68026)
 (Armstrong, J. V.) See Conference: Arithmetic, (84c:10003)
 Atkin, A. O. L. (with Larson, Richard G.) On a primality test of Solovay and Strassen. (84d:10013)
 Bays, Carter (with Hudson, Richard H.) The cyclic behavior of primes in the arithmetic progressions modulo 11. (84d:10048)
 Borodin, Allan B. (with von zur Gathen, Joachim; Hopcroft, John E.) Fast parallel matrix and GCD computations. (84j:68019)
 Brillhart, John Fermat's factoring method and its variants. (84f:10009)
 (with Lehmer, D. H.; Selfridge, J. L.; Tuckerman, Bryant; Wagstaff, Samuel S., Jr.) ★ Factorizations of $b^n \pm 1$. (84k:10005)
 Burstall, R. M. See Pettorossi, Alberto, (84h:68032)
 Buzyskii, P. L. (with Freiman, G. A.) Integer programming and number theory. (84c:90049)
 Chou, Tsu Wu J. (with Collins, George E.) Algorithms for the solution of systems of linear Diophantine equations. (84c:10020)
 Collins, George E. See Chou, Tsu Wu J., (84c:10020)
 Feig, Ephraim Minimal algorithms for bilinear forms may have divisions. (84d:68037)
 Certain systems of bilinear forms whose minimal algorithms are all quadratic. (84g:10042)
 Fenner, Trevor I. (with Loizou, Georgios) Tree traversal related algorithms for generating integer partitions. (84h:05009)
 Finn, James (with Lieberherr, Karl J.) Primality testing and factoring. (84c:10009)
 Freiman, G. A. See Buzyskii, P. L., (84c:90049)
 von zur Gathen, Joachim See Borodin, Allan B.; et al., (84j:68019)
 Gold, R. (with Sattler, J.) Modifikationen des Pollard-Algorithmus. (English summary) [Modifications of the Pollard algorithm] (84h:10009)
 Gurari, Eitan M. (with Ibarra, Oscar H.) Two-way counter machines and Diophantine equations. (See 84c:68004)
 Guy, Richard K. Conway's prime producing machine. (84j:10008)
 Hopcroft, John E. See Borodin, Allan B.; et al., (84j:68019)
 Hudson, Richard H. See Bays, Carter, (84d:10048)
 Ibarra, Oscar H. See Gurari, Eitan M., (See 84c:68004)
 Jaeschke, G. On the smallest k such that all $k \cdot 2^n + 1$ are composite. (84k:10006)
 Knowles, Ian Eigenvalue problems and the Riemann zeta function. (See 84b:34002)
 Larson, Richard G. See Atkin, A. O. L., (84d:10013)
 Lehmer, D. H. See Brillhart, John; et al., (84k:10005)
 Lenstra, H. W., Jr. Primality testing with Artin symbols. (84h:10010)
 See also Computational methods in number theory, (84d:10004)
 Lieberherr, Karl J. See Finn, James, (84c:10009)
 Loizou, Georgios See Fenner, Trevor I., (84h:05009)
 van de Lune, J. (with te Riele, H. J. J.) Numerical computation of special zeros of partial sums of Riemann's zeta function. (84h:10058)
 Norwa, Jerzy On a certain algorithm of computing $\sqrt[k]{D}$. (Polish summary) (84k:10007)
 Pettorossi, Alberto (with Burstall, R. M.) Deriving very efficient algorithms for evaluating linear recurrence relations using the program transformation technique. (84b:68032)
 Pomerance, Carl Analysis and comparison of some integer factoring algorithms. (84i:10005)
 See also Adleman, Leonard M.; et al., (84c:10008)
 Radoux, Christian Conjecture de Fermat et informatique. [Fermat's conjecture and computer science] (84c:10018)
 Red'ko, S. E. See Anisimov, A. V.; et al., (84b:68026)
 te Riele, H. J. J. See van de Lune, J., (84h:10058)
 Rumely, Robert S. See Adleman, Leonard M.; et al., (84c:10008)
 Ryndin, Ya. P. See Anisimov, A. V.; et al., (84b:68026)
 Sattler, J. (with Schnorr, C.-P.) Ein Effizienzvergleich der Faktorisierungsverfahren von Morrison-Brillhart und Schroeppel. [An efficiency comparison between the factoring methods of Morrison-Brillhart and Schroeppel] (84i:10006)
 See also Gold, R., (84h:10009)
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 Shanks, Daniel See Adams, William W., (84c:10007)
 (Tijdeman, Robert) See Computational methods in number theory, (84d:10004)
 Tonolli, Antonella (with Zauli Potenza, Luisa) A method for approximating rational numbers. (Italian. English summary) (84h:10041)
 Tuckerman, Bryant See Brillhart, John; et al., (84k:10005)
 Wagstaff, Samuel S., Jr. Divisors of Mersenne numbers. (84j:10052)
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 Weintraub, Sol A prime gap of 682 and a prime arithmetic sequence. (84b:10014)
 Wunderlich, M. C. A performance analysis of a simple prime-testing algorithm. (84c:10011)
 Yonaga, Masataka Numerical investigations of C_4 -numbers. (84c:10018)
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 Conference:
 Arithmetic ★ Journées Arithmétiques, 1980. (French) [Arithmetic Conference, 1980] (84c:10003)
 Exeter ★ Journées Arithmétiques, 1980. (French) [Arithmetic Conference, 1980] (84c:10003)
 Tables:
 Factorizations of $b^n \pm 1$ See Brillhart, John; et al., (84k:10005)

10-06 Proceedings, conferences, etc.

- (Armstrong, J. V.) See Conference: Arithmetic, 84c:10003
 (Bertin, Marie-José) See Seminar: Number Theory, 84b:10005 and 84k:10003
 (Bertrand, Daniel) See Diophantine approximations and transcendental numbers, 84c:10003
 (Faddeev, L. D.) See Automorphic functions and number theory, 84f:10007

- (Koblitz, Neal) See Number theory related to Fermat's last theorem. 84c:10004
 (Lenstra, H. W., Jr.) See Computational methods in number theory. 84c:10002 and 84d:10004
 (Malyshev, A. V.) See Studies in number theory. 84g:10005
 (Tijdeman, Robert) See Computational methods in number theory. 84c:10002 and 84d:10004

- (Venkov, A. B.) See Automorphic functions and number theory. 84f:10007
 (Venkov, B. B.) See Integral lattices and finite linear groups. 84b:10004
 (Vinogradov, A. I.) See Automorphic functions and number theory. 84f:10007
 (Waldschmidt, Michel) See Diophantine approximations and transcendental numbers. 84c:10003

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Automorphic functions and number theory ★ Автоморфные функции и теория чисел. I. (Russian) [Automorphic functions and number theory. I] 84f:10007

Cambridge, Mass. ★ Number theory related to Fermat's last theorem. 84a:10004

Colloquium:
 Delange, Hubert ★ Colloque Hubert Delange. (French) [Hubert Delange colloquium] 84c:10002

Diophantine Problems ★ Approximations diophantiennes et nombres transcendants. (French) [Diophantine approximations and transcendental numbers] 84c:10003

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★ Computational methods in number theory. Part II. 84d:10004

Conference:
Arithmetic ★ Journées Arithmétiques, 1980. (French) [Arithmetic Conference, 1980] 84c:10003

★ Journées Arithmétiques. [Arithmetic Conference] 84d:10005

Number Theory Related to Fermat's Last Theorem ★ Number theory related to Fermat's last theorem. 84a:10004

Diophantine approximations and transcendental numbers ★ Approximations diophantiennes et nombres transcendants. (French) [Diophantine approximations and transcendental numbers] 84c:10003

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Integral lattices and finite linear groups ★ Целочисленные решетки и конечные линейные группы. (Russian) [Integral lattices and finite linear groups] 84b:10004

Luminy ★ Approximations diophantiennes et nombres transcendants. (French) [Diophantine approximations and transcendental numbers] 84c:10003

Mathematical Notes ★ Notas de Matemática. No. 43. [Mathematical Notes. No. 43] 84j:10016a

Metz ★ Journées Arithmétiques. [Arithmetic Conference] 84d:10005

Notas de Matemática ★ Notas de Matemática. No. 43. [Mathematical Notes. No. 43] 84j:10016a

Number theory related to Fermat's last theorem ★ Number theory related to Fermat's last theorem. 84a:10004

Orsay ★ Colloque Hubert Delange. (French) [Hubert Delange colloquium] 84c:10002

Paris ★ Séminaire de Théorie des Nombres, Paris 1980-81. (French) [Seminar on Number Theory, Paris 1980-81] 84b:10005

★ Séminaire de théorie des nombres, Paris 1981-82. (French) [Seminar on number theory, Paris 1981-82] 84c:10003

Seminar:

Delange-Pisot-Poitou ★ Séminaire de Théorie des Nombres, Paris 1980-81. (French) [Seminar on Number Theory, Paris 1980-81] 84b:10005

★ Séminaire de théorie des nombres, Paris 1981-82. (French) [Seminar on number theory, Paris 1981-82] 84c:10003

Number Theory ★ Séminaire de Théorie des Nombres, Paris 1980-81. (French) [Seminar on Number Theory, Paris 1980-81] 84b:10005

★ Séminaire de Théorie des Nombres, 1981-1982. (French) [Seminar on Number Theory, 1981-1982] 84c:10004

★ Séminaire de théorie des nombres, Paris 1981-82. (French) [Seminar on number theory, Paris 1981-82] 84c:10003

Studies in number theory ★ Studies in number theory. 8. (Russian) 84g:10005

Symposium:

Fourier analysis on arithmetical sequences ★ Fourier analysis on arithmetical sequences. 84m:10002

Talence ★ Séminaire de Théorie des Nombres, 1981-1982. (French) [Seminar on Number Theory, 1981-1982] 84c:10004

secondary classifications:

- (Artin, Michael) See Arithmetic and geometry. (84j:14005a)
 (Fomenko, O. M.) See Analytic number theory and the theory of functions. (84d:30001)
 (Ihara, Yasutaka) See Galois groups and their representations. (84m:12001)
 (Kuz'mina, G. V.) See Analytic number theory and the theory of functions. (84d:30001)
 (Metzger, Thomas A.) See Modular functions in analysis and number theory. (84m:30001)
 (Shafarevich, Igor R.) See Arithmetic and geometry. (84j:14005a)
 (Tate, John) See Arithmetic and geometry. (84j:14005a)

Analytic number theory and the theory of functions ★ Аналитическая теория чисел и теория функций. 5. (Russian) [Analytic number theory and the theory of functions. 5] (84d:30001)

Arithmetic and geometry ★ Arithmetic and geometry. Vol. I. (84j:14005a)
Birthday:

Shafarevich, I. R. ★ Arithmetic and geometry. Vol. I. (84j:14005a)

Galois groups and their representations ★ Galois groups and their representations. (84m:12001)

Modular functions in analysis and number theory ★ Modular functions in analysis and number theory. (84m:30001)

Nagoya ★ Galois groups and their representations. (84m:12001)

Symposium:

Galois groups and their representations ★ Galois groups and their representations. (84m:12001)

10Axx Elementary number theory (For analogues in number fields, see 12A05.)

secondary classifications:

Loweke, George P. ★ The lore of prime numbers. (84c:10001)

10A05 Multiplicative structure of the integers (GCD, etc.)

DeLeon, M. J. A generalization of Euler's theorem. 84c:10005

Fila, Eugen On the computation of sums with alternating signs of similar powers of natural numbers. (Romanian) 84a:10006

Pleasant, P. A. B. The number of prime factors of binomial coefficients. 84a:10007

Turk, J. W. M. The product of two or more neighboring integers is never a power. 84g:10006

secondary classifications:

Dudek, Józef On bisemilattices. III. (84b:06005)

Murty, G. Sri Rama Chandra A generalization of a theorem of Sierpiński. (84g:10092)

Rotkiewicz, A. (with Wasén, R.) On a number theoretical series. (84a:10050)

Schroeder, Manfred R. A simple function ... and its Fourier transform. (84c:42016)

Smarandache, Florentin Gh. A generalization of Euler's theorem concerning congruences. (Romanian. English summary) (84j:10006)

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10A10 Congruences, primitive roots

Chaléat, Raymond See Rossi, F. S.; et al., 84b:10006

Dussaud, René See Rougon, Charles, 84j:10005

Huhn, A. P. (with Megyesi, L.) On disjoint residue classes. 84j:10002

Jannelli, Virginia Liberto Considerations on the criteria of divisibility by 7 and 11. (Italian. English summary) 84j:10003

Krall, Allan M. See Rossi, F. S.; et al., 84b:10006

Li, Fu Zhong A simplified method of finding all primitive roots mod p^n and $2p^n$. (Chinese. English summary) 84d:10004

Lu, Ming Gao A note on the prime solutions of systems of linear equations—study of the conditions for solvability of a congruence. (Chinese) 84c:10001

Lüneburg, Heinz Ein einfacher Beweis für den Satz von Zsigmondy über primitive Primteiler von $A^n - 1$. [A simple proof of Zsigmondy's theorem on primitive prime divisors of $A^n - 1$] 84d:10006

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Mangeron, D. See Rossi, F. S.; et al., 84b:10006

Megyesi, L. See Huhn, A. P., 84j:10002

Rossi, F. S. (with Mangeron, D.; Krall, Allan M.; Chaléat, Raymond) Jacobi's theorem on prime numbers using binomial congruences and applications concerning the divisibility characteristics for such numbers. (Italian. English and Romanian summaries) 84b:10006

Rougon, Charles (with Dussaud, René) Sur les nombres de Carmichael. [On the Carmichael numbers] 84j:10005

Smarandache, Florentin Gh. Bases of solutions for linear congruences. (Romanian. English summary) 84i:10002

A generalization of Euler's theorem concerning congruences. (Romanian. English summary) 84j:10006

Wegmann, H. Quadratsummen in Restklassenringen. [Sums of squares in residue class rings] 84c:10003

Zlám, Stefan A survey of covering systems of congruences. (Russian and Slovak summaries) 84c:10004

secondary classifications:

Beard, Jacob T. B., Jr. (with Doyle, J. Kevin; Mandelberg, Kenneth I.) Square-separable primes and unitary perfect polynomials. (Italian summary) (84c:12022)

Cohen, Stephen D. Primitive roots in the quadratic extension of a finite field. (84j:12022)

Doyle, J. Kevin See Beard, Jacob T. B., Jr.; et al., (84c:12022)

Ecker, A. Über die mathematischen Grundlagen einiger Chiffrierverfahren. (English summary) [On the mathematical foundations of some cryptosystems] (84d:94023)

Fraginito, Nicola (with Zirilli, Francesco) On certain medial semisymmetric n -quasigroups and a class of solutions of the congruence $(-n)^x \equiv 1 \pmod{x}$. (Italian. English summary) (84h:20071)

Hitotumatu, Sin Note on the combinatorial problem of Masuyama. (84b:05026)

Mandelberg, Kenneth I. See Beard, Jacob T. B., Jr.; et al., (84c:12022)

Mimura, Yoshio Congruence properties of Apéry numbers. (84b:10016)

Morikawa, Ryozo On a method to construct covering sets. (84c:10057)

Some examples of covering sets. (84j:10064)

Patterson, C. D. (with Williams, Hugh Cowie) A report on the University of Manitoba Sieve Unit. (84g:10003)

Stevens, Harlan Arithmetic periodicities of sequences satisfying a second order difference equation. (84i:10008)

Williams, Hugh Cowie See Patterson, C. D., (84g:10003)

Yorinaga, Masataka Numerical investigations of C_1 -numbers. (84c:10018)

Zeitler, Herbert Rechnen in endlichen Körpern (Beispiele elementarer Zahlentheorie).

[Computation in finite fields (examples in elementary number theory)] (84j:12023)

Zirilli, Francesco See Fraginito, Nicola, (84h:20071)

10A15 Power residues, reciprocity

- Hudson, Richard H. A note on prime k th power nonresidues. **84g:10007**
(with Williams, Kenneth S.) Extensions of theorems of Cunningham-Aigner and Hasse-Evans. **84e:10005**
- Jannelli, Virginia Liberto On the n th power residues of a prime number $p > 2$. (Italian. English summary) **84j:10007**
- Krätzel, Ekkehard Dedekindsche Funktionen und Summen. II. [Dedekind functions and sums. II] **84m:10003**
- Williams, Kenneth S. On the quadratic residues (mod p) in the interval $(0, p/4)$. **84b:10007**
See also Hudson, Richard H., **84e:10005**
- secondary classifications:
- Barrucand, P. (with Laubie, F.) Ramification modérée dans les corps de nombres de degré premier. [Tame ramification in number fields of prime degree] **(84k:12002)**
- Delcours, Adrien Dernier théorème de Fermat et réciproque quadratique. [Fermat's last theorem and quadratic reciprocity] **(84d:10021)**
- Furuta, Yoshiomi A prime decomposition symbol and integral quadratic forms. **(84m:12011)**
- Laubie, F. See Barrucand, P., **(84k:12002)**
- Lehmer, Emma Patterns of power residues. **(84k:10059)**
- Rotkiewicz, A. Applications of Jacobi's symbol to Lehmer's numbers. **(84m:10010)**
- Suzuki, Toshiaki Some results on the coefficients of the biquadratic theta series. **(84g:10055)**

10A20 Number-theoretic functions, related numbers; inversion formulas

- Balog, Antal On a conjecture of A. Ivic and W. Schwarz. **84g:10008**
- Bedocchi, Edmondo Iteration contrôlée de la fonction σ . [Controlled iteration of the function σ] **84c:10005**
- Bencze, Mihály On perfect numbers. (Romanian summary) **84a:10008**
- Berndt, Bruce C. (with Dieter, Ulrich) Sums involving the greatest integer function and Riemann-Stieltjes integration. **84c:10006**
- Cohen, Graeme L. On primitive abundant numbers. **84d:10007**
See also Hagis, Peter, Jr., **84f:10008**
- Dieter, Ulrich See Berndt, Bruce C., **84c:10006**
- Eugeni, Franco (with Rizzi, Bruno) A class of periodic arithmetical functions. (Italian. English summary) **84m:10004**
- Faiziev, R. F. On an identity in number theory. (Russian. Tajiki summary) **84d:10008**
- Garcia, P. G. (with Ligh, Steve) A generalization of Euler's q -function. **84h:10004**
- Gold, R. (with Sattler, J.) Modifications des Pollard-Algorithmus. (English summary) [Modifications of the Pollard algorithm] **84h:10009**
- (Grytczuk, Aleksandr) See Redmond, Don, **84g:10012**
- Hagis, Peter, Jr. (with Cohen, Graeme L.) Some results concerning quasiperfect numbers. **84f:10008**
- Hansen, Rodney T. Arithmetic inversion formulas. **84g:10009**
- Hanumanthachari, J. (with Subrahmanya Sastri, V. V.) On some arithmetical identities. **84g:10010**
(with Subrahmanya Sastri, V. V.; Srinivasan, Veeravalli) On e -perfect numbers. **84h:10005**
- Hardy, G. E. (with Subbarao, M. V.) Highly powerful numbers. **84h:10006**
- Heyworth, Malcolm R. Continued fractions in a search for odd perfect numbers. **84g:10011**
- Johnson, Kenneth R. Unitary analogs of generalized Ramanujan sums. **84m:10005**
- Khalikov, A. See Mukhamadiev, E. M., **84c:10006**
- Kishore, Masao Odd perfect numbers not divisible by 3. II. **84d:10009**
- Krätzel, Ekkehard Dedekindsche Funktionen und Summen. I. [Dedekind functions and sums. I] **84d:10010**
- Ligh, Steve See Garcia, P. G., **84h:10004**
- Masai, Pierre (with Valette, Alain) A lower bound for a counterexample to Carmichael's conjecture. (Italian summary) **84b:10008**
- Mukhamadiev, E. M. (with Khalikov, A.) A method of replacement of elements in a discrete system. (Russian. Tajiki summary) **84c:10006**
- Perelli, Alberto (with Zannier, Umberto) On periodic mod p sequences. **84d:10011**
- Redmond, Don A remark on a paper: "An identity involving Ramanujan's sum" [Elem. Math. 36 (1981), no. 1, 16-17; MR 82c:10004] by A. Grytczuk. **84g:10012**
- te Riele, H. J. J. Perfect numbers and aliquot sequences. **84m:10006**
- Rizzi, Bruno See Eugeni, Franco, **84m:10004**
- Sattler, J. See Gold, R., **84h:10009**
- Siva Rama Sarma, A. On $\Delta(x, n) = q(x, n) - x(q(n)/n)$. **84h:10007**
- Srinivasan, Veeravalli See Hanumanthachari, J.; et al., **84h:10005**
- Starke, Rubens Perfect numbers. (Portuguese) **84a:10009**
- Subbarao, M. V. See Hardy, G. E., **84h:10006**
- Subrahmanyan, Ponnada (with Suryanarayana, D.) The maximal square-free, bi-unitary divisor of m which is prime to n . I, II. **84a:10010**
See also Suryanarayana, D., **84h:10009**
- Subrahmanya Sastri, V. V. See Hanumanthachari, J., **84g:10010** and **84h:10005**
- Suryanarayana, D. (with Subrahmanyan, Ponnada) The maximal k -free unitary divisor of an integer. **84h:10009**
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- Thrimurthy, P. Some identities in arithmetic functions. **84c:10007**
- Valette, Alain See Masai, Pierre, **84b:10008**
- Wall, Charles R. Unitary harmonic numbers. **84h:10008**
- Zannier, Umberto See Perelli, Alberto, **84d:10011**
- secondary classifications:
- Berndt, Bruce C. An arithmetic Poisson formula. **(84m:10035)**
- Bernstein, Leon Primitive Pythagorean triples. **(84a:10012)**

- Buell, Duncan A. On the computation of unitary hyperperfect numbers. **(84c:10010)**
- Çadogan, C. C. A particular telescoping problem—an overview. **(84f:10014)**
- Dress, F. (with Iwaniec, Henryk; Tenenbaum, Gérald) Sur une somme liée à la fonction de Möbius. [On a sum related to the Möbius function] **(84f:10058)**
- Erdős, Paul Some problems and results on additive and multiplicative number theory. **(84c:10048)**
- Hudson, Richard H. A theorem on totally multiplicative functions. **(84b:10068)**
- Iwaniec, Henryk See Dress, F.; et al., **(84f:10058)**
- Keller, J. M. See Thomas, J. J.; et al., **(84g:12026)**
- Kimura, Noriaki Über die Nullstellen der von Potenzsummen der natürlichen Zahlen definierten Polynome. [On the zeros of polynomials which are defined by power sums of natural numbers] **(84k:10043)**
- Krätzel, Ekkehard Dedekindsche Funktionen und Summen. II. [Dedekind functions and sums. II] **(84m:10003)**
- Larsen, G. N. See Thomas, J. J.; et al., **(84g:12026)**
- Mohan, A. L. (with Suryanarayana, D.) Perfect totient numbers. **(84c:10014)**
- Panaïtopol, Laurențiu Über einige arithmetische Funktionen. [On some arithmetic functions] **(84c:10043)**
- Pintz, J. Oscillatory properties of $M(x) = \sum_{n \leq x} \mu(n)$. II. **(84c:10053b)**
Oscillatory properties of $M(x) = \sum_{n \leq x} \mu(n)$. I. **(84c:10053a)**
- Prasad, Manoranjan On number-theoretic functions and connected problems. **(84g:10001)**
- Rejali, Ali On the limiting distribution of additive arithmetic functions. **(84m:10048)**
- Robbins, Neville On the number of binomial coefficients which are divisible by their row number. **(84f:05006)**
- Shao, Pin Cong A note on some properties of the arithmetic functions $\omega(n)$ and $\Omega(n)$. (Chinese) **(84f:10056)**
- Smarandache, Florentin Gh. A generalization of Euler's theorem concerning congruences. (Romanian. English summary) **(84j:10006)**
- Suryanarayana, D. See Mohan, A. L., **(84c:10014)**
- Tenenbaum, Gérald See Dress, F.; et al., **(84f:10058)**
- Thomas, J. J. (with Larsen, G. N.; Keller, J. M.) Number theoretic transforms with independent length and moduli. **(84g:12026)**

10A21 Counting functions

- Guy, Robert Sums of consecutive integers. **84d:10012**
- secondary classifications:
- Abbott, H. L. On nonaveraging sets of integers. **(84g:10090)**
- Aizenberg, L. A. Application of multidimensional logarithmic residue for representation in the form of the integral of the difference between the number of integer points in a domain and its volume. (Russian) **(84j:10044)**
- Blind, G. (with Blind, R.) Die Anzahl der primitiven Polytope im \mathbb{R}^d mit $2d-2$ Facetten. (English summary) [The number of primitive polytopes in \mathbb{R}^d with $2d-2$ facets] **(84b:52010)**
- Blind, R. See Blind, G., **(84b:52010)**
- Iommi Amunátegui, G. A nonrecursive expression for the number of irreducible representations of the symmetric group S_n . **(84a:20022)**
- Selivanov, B. I. A combinatorial proof of an enumeration theorem for exponentiation of groups. (Russian) **(84d:05017)**

10A22 Abstract theory of number-theoretic functions

- Patrizio, Serafino Additive arithmetical functions. (Italian) **84b:10010**
- Rutkowski, Jerzy A note on multiplicative functions. **84g:10013**
On recurrence characterization of rational arithmetic functions. **84i:10004**
- Ruzsa, Imre Z. Semigroup-valued multiplicative functions. **84g:10014**
- secondary classifications:
- Cerasoli, Mauro (with Eugeni, Franco) On completely multiplicative elements in some incidence algebras. (Italian. English summary) **(84g:06011)**
- Eugeni, Franco See Cerasoli, Mauro, **(84g:06011)**
- Hayashi, Mitsutoshi On convolution laws and arithmetic functions. (Japanese) **(84i:39003)**
- Mo, Shao Kui (with Shen, Bai Ying) Inverse functions of number-theoretic functions. II. (Chinese. English summary) **(84d:03053)**
- Shen, Bai Ying See Mo, Shao Kui, **(84d:03053)**
- Thrimurthy, P. Some identities in arithmetic functions. **(84c:10007)**

10A25 Elementary prime number theory, factorization

- Adams, William W. (with Shanks, Daniel) Strong primality tests that are not sufficient. **84c:10007**
- Adleman, Leonard M. (with Pomerance, Carl; Rumely, Robert S.) On distinguishing prime numbers from composite numbers. **84c:10008**
- Atkin, A. O. L. (with Larson, Richard G.) On a primality test of Solovay and Strassen. **84d:10013**
- Brillhart, John Fermat's factoring method and its variants. **84f:10009**
(with Lehmer, D. H.; Selfridge, J. L.; Tuckerman, Bryant; Wagstaff, Samuel S., Jr.) \star Factorizations of $b^n \pm 1$. **84c:10005**
- Edgar, Hugh M. See McLain, Katherine E., **84b:10012**
- Faiziev, R. F. Criteria of the theory of prime pairs, related to the generalized criterion of prime numbers. (Russian. Tajiki summary) **84d:10014**
- Finn, James (with Lieberherr, Karl J.) Primality testing and factoring. **84c:10009**
- (Golomb, Solomon W.) See McLain, Katherine E.; et al., **84b:10012**
- Guy, Richard K. Conway's prime producing machine. **84j:10008**
- Jaeschke, G. On the smallest k such that all $k \cdot 2^n + 1$ are composite. **84k:10006**

- Larson, Richard G. See Atkin, A. O. L., 84d:10013
 Lehmer, D. H. See Brillhart, John; et al., 84d:10005
 Lenstra, H. W., Jr. Primality testing with Artin symbols. 84d:10010
 Lieberherr, Karl J. See Finn, James, 84e:10009
 Mąkowski, Andrzej On a problem of Erdős and Graham. 84b:10011
 McLain, Katherine E. (with Edgar, Hugh M.) A note on S. W. Golomb's: "Cyclotomic polynomials and factorization theorems" [Amer. Math. Monthly 85 (1978), no. 9, 734-737; MR 80e:10011]. 84b:10012
 Picon, P. A. Un résultat d'intégrité. (English summary) [A result on integrality] 84e:10010
 Pomerance, Carl Analysis and comparison of some integer factoring algorithms. 84d:10005
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 Popa, Valeriu Some criteria for a natural number to be prime. (Romanian) 84a:10011
 Pritchard, Paul Explaining the wheel sieve. 84g:10015
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 Schnorr, C.-P. See Sattler, J., 84d:10006
 Schram, John Michael A string of 176 primes. 84g:10016
 Selfridge, J. L. See Brillhart, John; et al., 84d:10005
 Shanks, Daniel See Adams, William W., 84c:10007
 Snyder, William M. Factoring repunits. 84b:10011
 Stanton, Ralph G. (with Williams, Hugh Cowie) Computation of some number-theoretic coverings. 84b:10013
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 Tuckerman, Bryant See Brillhart, John; et al., 84d:10005
 Wagstaff, Samuel S., Jr. See Brillhart, John; et al., 84d:10005
 Weintraub, Sol A prime gap of 682 and a prime arithmetic sequence. 84b:10014
 Williams, Hugh Cowie The primality of certain integers of the form $2Ar^n - 1$. 84b:10012
 See also Stanton, Ralph G., 84b:10013
 Wunderlich, M. C. A performance analysis of a simple prime-testing algorithm. 84e:10011

Tables:

- Factorizations of $b^n \pm 1$ See Brillhart, John; et al., 84d:10005

secondary classifications:

- Couvreur, C. (with Quisquater, J. J.) An introduction to fast generation of large prime numbers. (84m:10001a)
 (with Quisquater, J. J.) Errata to: "An introduction to fast generation of large prime numbers". (84m:10001b)
 Dudley, Underwood Formulas for primes. (84g:01084)
 Guy, Robert Sums of consecutive integers. (84d:10012)
 Hardy, G. E. (with Subbarao, M. V.) Highly powerful numbers. (84b:10006)
 Quisquater, J. J. See Couvreur, C., (84m:10001a) and (84m:10001b)
 Siva Rama Sarma, A. On $\Delta(x, n) = \varphi(x, n) - x(\varphi(n)/n)$. (84b:10007)
 Subbarao, M. V. See Hardy, G. E., (84b:10006)
 Wagstaff, Samuel S., Jr. Divisors of Mersenne numbers. (84j:10052)

10A30 Algorithms and expansions; digital properties (For metric results, see 10K10.)

- Ferguson, Helaman R. P. (with Forcade, Rodney W.) Multidimensional Euclidean algorithms. 84d:10015
 Forcade, Rodney W. See Ferguson, Helaman R. P., 84d:10015
 Gregory, R. T. See Komerup, Peter, 84b:10015
 Komerup, Peter (with Gregory, R. T.) Mapping integers and Hensel codes onto Farey fractions. (84b:10015)
 Norwa, Jerzy On a certain algorithm of computing $\sqrt[n]{D}$. (Polish summary) 84k:10007
 Steiner, Ray On the "QX+1 problem", Q odd. 84m:10007a
 On the "QX+1 problem", Q odd. II. 84m:10007b
 Trigg, Charles W. 9 and 10 distinct digits in octagonal numbers. 84d:10016a
 9 and 10 distinct digits in nonagonal numbers. 84d:10016b
 Voicu, Ion On the transformation of some periodic decimal fractions into finite decimal fractions. (Romanian) 84g:10017

secondary classifications:

- Aprile, Giuseppe Calculation of large factorials. (Italian) (84j:65020)
 Bellavista, Luciana V. Calculation of the product of successive factorials for large values. (Italian. English summary) (84j:65021)
 Jannelli, Virginia Liberto Considerations on the criteria of divisibility by 7 and 11. (Italian. English summary) (84j:10003)
 Kaja, Janusz A certain generalization of a result of Erdős and Surányi. (84c:10027)
 Korobov, N. M. On the calculation of optimal coefficients. (Russian) (84g:65039)
 Magyar, Zoltán On recursion concerning quadruples of numbers. (Hungarian) (84f:10012)
 McCabe, J. H. The quotient-difference algorithm and the Padé table: an alternative form and a general continued fraction. (84c:30008)
 Pihko, Jukka An algorithm for additive representation of positive integers. (84b:10042)
 Schram, John Michael A string of 176 primes. (84g:10016)
 Semba, Ichirō Systematic method for determining the number of multiplications required to compute x^m , where m is a positive integer. (84f:10005)

10A32 Continued fractions (For approximation results, see 10F20; see also 30B70, 40A15.)

- Barkan, Philippe Sur des propriétés de congruence sur et entre les longueurs des développements de certains nombres rationnels en fraction continue régulière symétrique. (English summary) [Congruence properties of the lengths of symmetric continued fraction expansions of some rationals] 84g:10018
 Dussaud, René Réduites d'une base d'un corps d'extension réel. [Reduced fractions of a basis of a real extension field] 84m:10008
 Hirst, K. E. Continued fractions. 84c:10008
 Kiss, Peter On second order recurrences and continued fractions. 84e:10012
 Rieger, G. J. Continued fractions and related algorithms. 84f:10010

secondary classifications:

- Flajolet, Philippe On congruences and continued fractions for some classical combinatorial quantities. (84f:05005)
 Heyworth, Malcolm R. Continued fractions in a search for odd perfect numbers. (84g:10011)
 Kak, Subhash C. Strings of first digits of powers of a number. (84b:10028)
 Panov, A. A. The mean for a sum of elements in a class of finite continued fractions. (Russian) (84d:10053)
 Rieger, G. J. A new approach to the real numbers (motivated by continued fractions). (84j:26002)
 Series, Caroline Non-Euclidean geometry, continued fractions, and ergodic theory. (84b:58086)

10A35 Recurrence sequences

- Bicknell-Johnson, Marjorie See Hoggatt, V. E., Jr., 84c:10013
 de Bouvière, Karel L. (with Lathrop, Regina E.) Injectivity of extended generalized Fibonacci sequences. 84g:10019
 Eggen, L. C. (with Eggen, Peter C.; Selfridge, J. L.) Polygonal products of polygonal numbers and the Pell equation. 84b:10016
 Eggen, Peter C. See Eggen, L. C.; et al., 84b:10016
 Godsil, Christopher D. (with Razen, Reinhard) A property of Fibonacci and Tribonacci numbers. 84g:10020
 Grassl, Richard M. Self-generating systems. 84g:10021
 Hoggatt, V. E., Jr. (with Bicknell-Johnson, Marjorie) Sequence transforms related to representations using generalized Fibonacci numbers. 84c:10013
 Horadam, A. F. (with Shannon, A. G.) Combinatorial aspects of an infinite pattern of integers. 84d:10017
 Jakin, A. L. Anomalies in higher-order conjugate quaternions: a clarification. 84b:10013
 Kiss, Peter On common terms of linear recurrences. 84b:10014
 László, Geröcs Some properties of divisibility of higher-ordered linear recursive sequences. 84f:10011
 Lathrop, Regina E. See de Bouvière, Karel L., 84b:10019
 Magyar, Zoltán On recursion concerning quadruples of numbers. (Hungarian) 84f:10012
 Markushevich, A. I. ★ Возвратные последовательности. (Russian) [Recurrence sequences] 84c:10008
 Mohanty, S. P. On cyclic difference of pairs of integers. 84b:10009
 Neumann, B. H. (with Wilson, L. G.) Corrigenda to: "Some sequences like Fibonacci's" [Fibonacci Quart. 17 (1979), no. 1, 80-83; MR 80b:10014]. 84c:10007
 Razen, Reinhard See Godsil, Christopher D., 84g:10020
 Russell, David L. Notes on sums of products of generalized Fibonacci numbers. 84b:10015
 Selfridge, J. L. See Eggen, L. C.; et al., 84b:10016
 Shannon, A. G. Intersections of second-order linear recursive sequences. 84f:10013
 See also Horadam, A. F., 84d:10017
 Somer, Lawrence Possible periods of primary Fibonacci-like sequences with respect to a fixed odd prime. 84g:10022
 Stevens, Harlan Arithmetic periodicities of sequences satisfying a second order difference equation. 84c:10008
 Van der Poorten, A. J. Identification of rational functions: lost and regained. 84c:10009
 Wilson, L. G. See Neumann, B. H., 84c:10007
 Zannier, Umberto A note on recurrent mod p sequences. 84b:10017

secondary classifications:

- Campbell, Colin M. (with Robertson, Edmund F.) Some problems in group presentations. (84j:20030)
 Ehrhart, Eugène Associated hyperbolic and Fibonacci identities. (84g:10023)
 Finucan, H. M. Some decompositions of generalised Catalan numbers. (84f:05008)
 Gupta, Hansraj Report on the solutions of the Diophantine equation $\sum_{i=0}^n (x+i)^2 = \sum_{j=0}^{n-1} (y+j)^2$. (84c:10013)
 Hemmer, P. C. See Hemmer, S., (84m:10051)
 Hemmer, S. (with Hemmer, P. C.) Recurrences in multidimensional arithmetic sequences. (84m:10051)
 Kiss, Peter On second order recurrences and continued fractions. (84e:10012)
 Kumar, I. J. (with Kumari, Meena) Local complementation of periodic sequences over $GF(2)$. (84d:12018)
 Kumari, Meena See Kumar, I. J., (84d:12018)
 Pethő, Attila Perfect powers in second order linear recurrences. (84f:10024)
 Robertson, Edmund F. See Campbell, Colin M., (84j:20030)
 Shorey, T. N. (with Stewart, C. L.) On the Diophantine equation $ax^{2t} + bx^t y + cy^2 = d$ and pure powers in recurrence sequences. (84g:10038)
 Stewart, C. L. See Shorey, T. N., (84g:10038)
 Webb, William A. The length of the four-number game. (84c:10017)
 Zaks, Shmuel Generalized profile numbers. (84g:05015)

10A40 Special numbers, sequences and polynomials (e.g. Bernoulli)

- Bernstein, Leon Primitive Pythagorean triples. **84a:10012**
- Brillhart, John Letter to the editor: "Properties of polynomials having Fibonacci numbers for coefficients" [Fibonacci Quart. **21** (1983), no. 1, 62–64; MR **84f:10018a**] by D. H. Lehmer and E. Lehmer. **84f:10018b**
- Buell, Duncan A. On the computation of unitary hyperperfect numbers. **84c:10010**
- Cadogan, C. C. A particular telescoping problem—an overview. **84f:10014**
- Carlitz, Leonard Some inversion theorems. **84f:10015**
- Dekking, Michel (with Mendès France, Michel; Van der Poorten, A. J.) Folds. **84f:10016a**
(with Mendès France, Michel; Van der Poorten, A. J.) Folds. II. Symmetry disturbed. **84f:10016b**
(with Mendès France, Michel; Van der Poorten, A. J.) Folds. III. More morphisms. **84f:10016c**
- Ehrhart, Eugène Associated hyperbolic and Fibonacci identities. **84g:10023**
- Hayasaka, Takanori See Saito, Sadao. **84h:10017**
- Hensley, Douglas Eulerian numbers and the unit cube. **84d:10018**
- Herget, Wilfried Minimum periods modulo n for Bernoulli polynomials. **84b:10018**
- Horadam, A. F. (with Horadam, E. M.) Roots of recurrence-generated polynomials. **84i:10009**
See also Shannon, A. G.; et al. **84c:10016** and **84j:10010**
- Horadam, E. M. See Horadam, A. F. **84i:10009**
- Kimberling, Clark One-free Zeckendorf sums. **84f:10017**
- Lehmer, D. H. (with Lehmer, Emma) Properties of polynomials having Fibonacci numbers for coefficients. **84f:10018a**
See also Brillhart, John. **84f:10018b**
- Lehmer, Emma See Lehmer, D. H. **84f:10018a** and Brillhart, John. **84f:10018b**
- Loh, R. P. See Shannon, A. G.; et al. **84c:10016**
- Lorimer, Peter A method of constructing Skolem and Langford sequences. **84c:10011**
- Mendès France, Michel See Dekking, Michel; et al. **84f:10016**
- Mimura, Yoshio Congruence properties of Apéry numbers. **84c:10016**
- Mohan, A. L. (with Suryanarayana, D.) Perfect totient numbers. **84c:10014**
- Ottikar, Sham (with Wayland, Keith) Construction of Smith numbers. **84c:10015**
- Philippou, Andreas N. A note on the Fibonacci sequence of order k and the multinomial coefficients. **84g:10024**
- Robbins, Neville On Fibonacci and Lucas numbers which are sums of precisely four squares. **84g:10025**
- Saito, Sadao (with Hayasaka, Takanori) Theory of the perfect (s, n) -sequence based on $F(i, k)$. **84h:10017**
- Shannon, A. G. (with Horadam, A. F.) Some combinatorial aspects of complex logarithms. **84j:10010**
(with Horadam, A. F.; Loh, R. P.) Sloane's Fermat coefficient sequences. **84c:10016**
- Simpson, James E. Langford sequences: perfect and hooked. **84d:10019**
- Suryanarayana, D. See Mohan, A. L. **84c:10014**
- Van der Poorten, A. J. See Dekking, Michel; et al. **84f:10016**
- Warnecke, Ulrich Zur Polynomdarstellung von $\sum_{p=1}^n p^k$ für beliebiges $k \in \mathbb{N}$. [On the polynomial representation of $\sum_{p=1}^n p^k$ for arbitrary $k \in \mathbb{N}$] **84i:10010**
- Wayland, Keith See Ottikar, Sham. **84c:10015**
- Webb, William A. The length of the four-number game. **84c:10017**
- Williams, Hugh Cowie A note on the Fibonacci quotient F_{p-c}/p . **84a:10013**
- Yorinaga, Masataka Numerical investigations of C_k -numbers. **84c:10018**

secondary classifications:

- Agoh, Takashi On Fermat's last theorem and the Bernoulli numbers. **(84i:10018)**
- Allen, Tracy On the arithmetic of phase locking: coupled neurons as a lattice on \mathbb{R}^2 . **(84j:92016)**
- Ando, Shiro On a system of Diophantine equations concerning the polygonal numbers. **(84c:10012)**
- Bence, Mihály On perfect numbers. (Romanian summary) **(84a:10008)**
- Berndt, Bruce C. (with Dieter, Ulrich) Sums involving the greatest integer function and Riemann-Stieltjes integration. **(84c:10006)**
- Bicknell-Johnson, Marjorie See Hoggatt, V. E., Jr., **(84c:10013)**
- Brinkhuis, Jan Nonrepetitive sequences on three symbols. **(84c:05008)**
- Campbell, Colin M. (with Robertson, Edmund F.) Groups related to $F^{a,b,c}$ involving Fibonacci numbers. **(84f:20034)**
- Cohen, Graeme L. On primitive abundant numbers. **(84d:10007)**
- Di Cave, Annalisa (with Ricci, Paolo Emilio) On Bell polynomials and Fibonacci and Bernoulli numbers. (Italian. English summary) **(84h:05011)**
- Dieter, Ulrich See Berndt, Bruce C., **(84c:10006)**
- Egecioglu, Ömer The parity of the Catalan numbers via lattice paths. **(84g:05008)**
- Georgiou, Costas (with Philippou, Andreas N.) Harmonic sums and the zeta function. **(84f:10050)**
- Ghiatis, A. See Grant, J. A., **(84m:65064)**
- Grant, J. A. (with Ghiatis, A.) Determination of the zeros of a linear combination of Chebyshev polynomials. **(84m:65064)**
- Hoggatt, V. E., Jr. (with Bicknell-Johnson, Marjorie) Sequence transforms related to representations using generalized Fibonacci numbers. **(84c:10013)**
- Howard, F. T. A theorem relating potential and Bell polynomials. **(84c:05015)**
- Lüchli, Peter Das Gitterspiel. [The lattice game] **(84k:90127a)**
Comment: "The lattice game" [Elem. Math. **37** (1982), no. 4, 109–113]. (German) **(84k:90127b)**
- Lehmer, D. H. (with Lehmer, Emma) Cyclotomy with short periods. **(84j:10048)**
- Lehmer, Emma See Lehmer, D. H., **(84j:10048)**
- Pečarić, Josip E. Notes on two identities of D. D. Adamović. **(84a:05006)**
- Philippou, Andreas N. See Georgiou, Costas. **(84c:10013)**
- Pritchard, Paul Another look at the "longest ascending subsequence" problem. **(84f:10073)**
- Prodinger, Helmut Ordered Fibonacci partitions. **(84m:05012)**

- Radoux, Christian Quelques conséquences d'une formule de P. Delsarte. [Some consequences of a formula of P. Delsarte] **(84d:05006)**
- Ricci, Paolo Emilio See Di Cave, Annalisa. **(84h:05011)**
- Richards, Ian On the gaps between numbers which are sums of two squares. **(84d:10055)**
- Robertson, Edmund F. See Campbell, Colin M., **(84f:20034)**
- Russell, David L. Notes on sums of products of generalized Fibonacci numbers. **(84c:10015)**
- Takeuchi, Yu Limit of the series $\sum_{n=0}^{\infty} (-1)^n x^n / (p; p)_{\infty}^2$ as $p \rightarrow 1^-$. (Spanish) **(84c:33022)**
- Trigg, Charles W. 9 and 10 distinct digits in octagonal numbers. **(84d:10016a)**
9 and 10 distinct digits in nonagonal numbers. **(84d:10016b)**
- Viennot, Gérard Interprétations combinatoires des nombres d'Euler et de Genocchi. (English summary) [Combinatorial interpretations of Euler and Genocchi numbers] **(84i:10013)**

10A45 Partitions

- Beutelspacher, Albrecht (with Brestovansky, Walter) Generalized Schur numbers. **84f:10019**
- Brestovansky, Walter See Beutelspacher, Albrecht. **84f:10019**
- Burge, William H. A three-way correspondence between partitions. **84g:10026**
- Girse, Robert D. Certain identities in the theory of partitions. **84g:10027**
- Gupta, Hansraj On sums of factors of m . **84h:10018**
- Stockhofe, Dieter Bijektive Abbildungen auf der Menge der Partitionen einer natürlichen Zahl. [Bijective mappings on the set of partitions of a natural number] **84c:10019**
secondary classifications:
- Baxter, Rodney J. (with Pearce, Paul A.) Hard squares with diagonal attractions. **(84j:82096)**
- Belov, N. V. See Rau, V. G.; et al., **(84c:12026)**
- Burge, William H. A symmetrical plane partition correspondence. **(84m:05009)**
- Collatz, L. Equipartition with square numbers. **(84d:05019)**
- Fenner, Trevor L. (with Loizou, Georgios) Tree traversal related algorithms for generating integer partitions. **(84h:05009)**
- Gauthier, C. Une identité liée aux partitions. [An identity related to partitions] **(84c:05004)**
- Gessel, Ira M. (with Stanton, Dennis) Applications of q -Lagrange inversion to basic hypergeometric series. **(84f:33009)**
- Hirschhorn, M. D. A simple proof of an identity of Ramanujan. **(84h:10067)**
- Horadam, A. F. (with Shannon, A. G.) Combinatorial aspects of an infinite pattern of integers. **(84d:10017)**
- Hughes, John F. (with Shallit, J. O.) On the number of multiplicative partitions. **(84m:10040)**
- Ilyukhin, V. V. See Rau, V. G.; et al., **(84c:12026)**
- Lepowsky, James (with Wilson, Robert Lee) A Lie theoretic interpretation and proof of the Rogers-Ramanujan identities. **(84d:05021)**
- Loizou, Georgios See Fenner, Trevor L., **(84h:05009)**
- Mills, George A quintessential proof of van der Waerden's theorem on arithmetic progressions. **(84c:05014)**
- Mukherjee, Swapna Some identities on ${}_2F(n)$. **(84h:05010)**
- Parkhomov, L. G. See Rau, V. G.; et al., **(84c:12026)**
- Pearce, Paul A. See Baxter, Rodney J., **(84j:82096)**
- Rau, V. G. (with Parkhomov, L. G.; Ilyukhin, V. V.; Belov, N. V.) Some singularities of cyclotomic Patterson sets. (Russian) **(84c:12026)**
- Shallit, J. O. See Hughes, John F., **(84m:10040)**
- Shannon, A. G. See Horadam, A. F., **(84d:10017)**
- Stanton, Dennis See Gessel, Ira M., **(84f:33009)**
- Szymkat, Maciej The form of the n th iteration of the operator $q = fd/dx$. **(84i:05022)**
- Upadhyay, Manjari See Verma, Arun. **(84c:33005)**
- Verma, Arun (with Upadhyay, Manjari) On certain equivalent product relations. **(84k:33005)**
- Wilson, Robert Lee See Lepowsky, James. **(84d:05021)**

10A50 Combinatorial number theory

- Deuber, W. (with Voigt, Bernd) Der Satz von van der Waerden über arithmetische Progressionen. [The theorem of van der Waerden on arithmetic progressions] **84j:10011**
- Erdős, Paul Solved and unsolved problems in combinatorics and combinatorial number theory. **84i:10011**
- Ewell, John A. Consequences of Watson's quintuple-product identity. **84h:10019**
- Hilton, Peter J. (with Pedersen, Jean) Approximating any regular polygon by folding paper. **84i:10012**
- Pedersen, Jean See Hilton, Peter J., **84i:10012**
- Viennot, Gérard Interprétations combinatoires des nombres d'Euler et de Genocchi. (English summary) [Combinatorial interpretations of Euler and Genocchi numbers] **84i:10013**
- Voigt, Bernd See Deuber, W., **84j:10011**

secondary classifications:

- Beck, József A remark on the concentration function of combinatorial number theory. **(84g:10091)**
- Coppe, Laurent Algèbres de décompositions et précatégories. [Decomposition algebras and precategories] **(84h:18001)**
- Harary, Frank Achievement and avoidance games designed from theorems. **(84h:90092)**
- Lifschitz, Vladimir (with Pittel, B. G.) The number of increasing subsequences of the random permutation. **(84c:05012)**
- Lipatov, E. P. A classification of binary collections and properties of homogeneity classes. (Russian) **(84g:05012)**

- McKay, Michael D. (with Waterman, Michael S.) Self-descriptive strings. (84c:05013)
 Pittel, B. G. See Lifschitz, Vladimir. (84c:05012)
 Smyth, C. J. A lattice colouring problem. (84f:05003)
 Szepesvári, István On the number of uniform polyhedra. I, II. (Hungarian) (84c:51031)
 Waterman, Michael S. See McKay, Michael D., (84c:05013)
 Zeilberger, Doron A combinatorial proof of Dyson's conjecture. (84c:05010)

10A99 None of the above, but in this section

- Baptist, Peter Inkreisradius und pythagoreische Zahlentripel. [Inradius and Pythagorean number triples] 84g:10028
 Lagrange, Jean Six entiers dont les sommes deux à deux sont des carrés. [Six integers whose pairwise sums are squares] 84a:10014
 (Paasche, L.) See Baptist, Peter. 84g:10028

secondary classifications:

- Baur, Walter (with Rabin, Michael O.) Linear disjointness and algebraic complexity. (84a:68035a)
 (with Rabin, Michael O.) Linear disjointness and algebraic complexity. (84a:68035b)
 Kolyada, A. A. (with Pilipovets, F. S.) The distribution of Amerbaev corrections to the inexact rank of a number in systems of residue classes. (Russian) (84f:68005)
 Pilipovets, F. S. See Kolyada, A. A., (84f:68005)
 Rabin, Michael O. See Baur, Walter. (84a:68035a) and (84a:68035b)
 Teodorescu, Nicolae Victor La modélisation mathématique et la musique. [Mathematical modeling and music] (84i:00044a)
 La modélisation mathématique et la musique. II. [Mathematical modeling and music. II] (84i:00044b)

10Bxx Diophantine equations [See also 14Gxx.]

- Stroeker, R. J. (with Tijdeman, Robert) Diophantine equations. 84i:10014
 Tijdeman, Robert See Stroeker, R. J., 84i:10014

10B05 Linear, quadratic and bilinear equations

- Ando, Shiro On a system of Diophantine equations concerning the polygonal numbers. 84c:10012
 Chou, Tsu Wu J. (with Collins, George E.) Algorithms for the solution of systems of linear Diophantine equations. 84c:10020
 Collins, George E. See Chou, Tsu Wu J., 84c:10020
 Djawadi, Mehdi Zum linearen Diophantischen Problem von Frobenius. [On the linear Diophantine problem of Frobenius] 84g:10029
 Friberg, Jöran ★A historically motivated study of families of Pythagorean or Babylonian triples and their generating semigroups of P - or B -orthonormal matrices. 84c:10021
 Gupta, Hansraj Report on the solutions of the Diophantine equation

$$\sum_{j=0}^n (x+j)^2 = \sum_{j=0}^{n-1} (y+j)^2$$
. 84c:10013
 Hudson, Richard H. (with Williams, Kenneth S.) Congruences for representations of primes by binary quadratic forms. 84b:10019
 (with Williams, Kenneth S.) On Legendre's equation $ax^2 + by^2 + cz^2 = 0$. 84c:10022
 Kaplan, Pierre À propos des équations antipelliennes. [On anti-Pell equations] 84c:10010
 Lagrange, Jean Sets of n squares of which any $n-1$ have their sum square. 84j:10012
 Mikhailov, I. I. On the equation $t_x + y^2 = t_y + u^2$. (Russian) 84c:10015
 Owings, James C., Jr. Diophantine chains. 84f:10020
 Rødseth, Øystein J. Two remarks on linear forms in nonnegative integers. 84g:10030
 Shahu, R. P. Remarks on Pythagorean triplets. 84a:10015
 Taussky, Olga The many aspects of the Pythagorean triangles. 84b:10020
 Watabe, Mutsuo On certain Diophantine equations in algebraic number fields. 84g:10031
 Williams, Kenneth S. See Hudson, Richard H., 84b:10019 and 84c:10022

secondary classifications:

- Baptist, Peter Inkreisradius und pythagoreische Zahlentripel. [Inradius and Pythagorean number triples] (84g:10028)
 Bernstein, Leon Primitive Pythagorean triples. (84a:10012)
 Brown, Ezra The class number and fundamental unit of $\mathbb{Q}(\sqrt{2p})$ for $p \equiv 1 \pmod{4}$ a prime. (84c:12001)
 Buzitskii, P. L. An effective formula for the number of solutions of linear Boolean equations. (84b:05003)
 Heyworth, Malcolm R. Continued fractions in a search for odd perfect numbers. (84g:10011)
 Hofmeister, Gerd Eine Verallgemeinerung des Reichweitenproblems. [A generalization of the size problem] (84g:10089)
 Lagrange, Jean Six entiers dont les sommes deux à deux sont des carrés. [Six integers whose pairwise sums are squares] (84a:10014)
 Lu, Ming Gao A note on the prime solutions of systems of linear equations—study of the conditions for solvability of a congruence. (Chinese) (84i:10001)
 (Paasche, L.) See Baptist, Peter. (84g:10028)
 Piehler, Joachim Diophantine equations in integer programming. (See 84b:90007)

10B10 Cubic and quartic equations

- Bremner, Andrew (with Morton, Patrick) A new characterization of the integer 5906. 84c:10016
 Danilov, L. V. The Diophantine equation $x^3 - y^2 = k$ and a conjecture of M. Hall. (Russian) 84c:10014

- Hilliker, David Lee (with Straus, E. G.) On Puiseux series whose curves pass through an infinity of algebraic lattice points. 84a:10016
 Hossain, Md. Fazlee On sum of two integer cubes. (Bengali summary) 84g:10032
 Kang, Ji Ding (with Zhou, Guo Fu; Wan, Da Qing; Zhao, Li Ren) On the Diophantine equation $x^4 - 2Dy^2 = 1$. (Chinese) 84c:10017
 (with Wan, Da Qing; Zhou, Guo Fu) On the Diophantine equation $x^4 - Dy^2 = 1$. 84c:10011
 Ke, Zhao (with Sun, Qi) On the Diophantine equation $x^2 - Dy^4 = 1$. (Chinese. English summary) 84a:10017
 (with Sun, Qi) On the Diophantine equations $x^3 \pm 1 = 3Dy^2$. (Chinese. English summary) 84a:10018
 (with Sun, Qi) On the Diophantine equations $x^3 \pm 8 = Dy^2$ and $x^3 \pm 8 = 3Dy^2$. (Chinese. English summary) 84a:10019
 Kis, Ernő A class of Diophantine equations. (Romanian. French summary) 84c:10015
 Mann, Henry B. (with Webb, William A.) A short proof of Fermat's theorem for $n=3$. 84c:10016
 Mohanty, S. P. (with Ramasamy, A. M. S.) On the number of coprime integral solutions of $y^2 = x^3 + k$. 84c:10012
 Morton, Patrick See Bremner, Andrew. 84c:10016
 Radović, P. A note on the solution of a Diophantine equation. (Romanian) 84f:10021
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secondary classifications:

- Cassels, J. W. S. (with Schinzel, Andrzej) Selmer's conjecture and families of elliptic curves. (84d:14028)
 Glazunov, N. M. A mathematical machine that is oriented towards the study of Diophantine equations. III. (Russian) (84c:10001)
 Hadano, Toshihiro Elliptic curves with a rational point of finite order. (84c:14035)
 Schinzel, Andrzej See Cassels, J. W. S., (84d:14028)
 Small, Charles On the equation $xyz = x+y+z=1$. (84c:14038)
 Watabe, Mutsuo On certain Diophantine equations in algebraic number fields. (84g:10031)

10B15 Higher degree equations

- Agoh, Takashi On Fermat's last theorem and the Bernoulli numbers. 84i:10018
 Belkner, Horst Über Diophantische Gleichungen vom Typ

$$ap^k x^{q^k} t^{1/2} + eq^{q^k} t^{1/2} y^{q^k} p^k = D$$
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 $ap^k x^{q^k} t^{1/2} + eq^{q^k} t^{1/2} y^{q^k} p^k = D$] 84c:10023
 Chowla, S. (with Cowles, M.) Remarks on equations related to Fermat's last theorem. 84c:10017
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 Delcort, Adrien Dernier théorème de Fermat et réciproque quadratique. [Fermat's last theorem and quadratic reciprocity] 84d:10021
 Evertse, Jan-Hendrik On the equation $ax^n - by^n = c$. 84d:10022
 Fora, Ali A. On some Diophantine equations related to Fermat's last theorem. (Arabic summary) 84b:10021
 Kani, Ernst Nonstandard methods in Diophantine geometry. (See 84c:10003)
 Ke, Zhao (with Sun, Qi) A note on the Diophantine equation $\sum_{i=0}^n (x+j)^2 = (x+k+1)^n$. (Chinese. English summary) 84h:10022
 Mason, R. C. Equations over function fields. (See 84c:10003)
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 Miyoshi, Takeo Über die Lösbarkeit der verallgemeinerten Fermatschen Gleichung. [On the solvability of the generalized Fermat equation] 84g:10034
 Mohanty, S. P. (with Ramasamy, A. M. S.) A note on a paper: "A note on the number of coprime integer solutions of $y^2 = ax^3 + k$ " [Indian J. Pure Appl. Math. 12 (1981), no. 9, 1078–1079; MR 82m:10030] by J. Tong. 84g:10035
 Powell, Barry Sur l'équation diophantienne $X^4 \pm Y^4 = Z^p$. (English summary) [On the Diophantine equation $X^4 \pm Y^4 = Z^p$] 84c:10013
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 The indeterminate equation $x^n + y^m = cx^p y^q$. (Bulgarian. English and Russian summaries) 84c:10024b
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 Ramasamy, A. M. S. See Mohanty, S. P., 84g:10035
 Rotkiewicz, A. On Fermat's equation with exponent $2p$. 84h:10024
 Applications of Jacobi's symbol to Lehmer's numbers. 84m:10010
 Silverman, Joseph H. The Catalan equation over function fields. 84b:10021
 Sinha, T. N. A note on equal sums of like powers. 84c:10025
 Skula, Ladislav A remark on Mirimanoff polynomials. 84b:10022

Sum, Qi See Ke, Zhao, 84b:10022

Thaine, Francisco Polynomials that generalize binomial coefficients and their applications to Fermat's last theorem. (Portuguese) 84j:10013
Polynomials generalizing binomial coefficients and their application to the study of Fermat's last theorem. 84d:10023

(Tong, Jingcheng) See Mohanty, S. P.; et al., 84g:10035

Turk, J. W. M. A note on the Fermat equation. 84k:10014

Varshamov, R. R. A general result of the first case of Fermat's last theorem. (Russian. Armenian summary) 84g:10036

secondary classifications:

Aidarova, L. K. An equation involving prime numbers. (Russian) (84d:10052)

Fried, M. A note on principal ideals and smooth curves. (84h:14041)

Györy, K. On S -integral solutions of norm form, discriminant form and index form equations. (84g:10037)

Jones, James P. Universal Diophantine equation. (84e:10070)

McCallum, William G. The degenerate fibre of the Fermat curve. (84m:14028)

Richman, David R. Polynomial relations among the n th roots of one. (84h:10026)

Schwindt, H. Three summation criteria for Fermat's last theorem. (84b:10003)

Shioda, Tetsuji Geometry of Fermat varieties. (See 84a:10004)

Shorey, T. N. (with Stewart, C. L.) On the Diophantine equation $ax^{2t} + bx^t y + cy^{2t} = d$ and pure powers in recurrence sequences. (84g:10038)

Sprindzhuk, V. G. Diophantine equations with prime unknowns. (Russian) (84d:12001)

Stewart, C. L. See Shorey, T. N., (84g:10038)

Waldschmidt, Michel Diophantine properties of the periods of the Fermat curve. (See 84e:10004)

Wójcik, J. On the congruence $f(x^k) \equiv 0 \pmod{q}$, where q is a prime and f is a k -normal polynomial. (84g:12018)

10B16 Norm form equations

Györy, K. On S -integral solutions of norm form, discriminant form and index form equations. 84g:10037

Kotov, S. V. An effective estimate for the bounds on the number of solutions of a class of Diophantine norm form equations. (Russian) 84j:10014

secondary classifications:

Pethő, Attila Beiträge zur Theorie der S -Ordnungen. [Contributions to the theory of S -orders] (84e:12017)

10B20 Multiplicative equations

Erdős, Paul (with Guy, Richard K.; Selfridge, J. L.) Another property of 239 and some related questions. 84f:10023

Guy, Richard K. See Erdős, Paul; et al., 84f:10023

Selfridge, J. L. See Erdős, Paul; et al., 84f:10023

Yang, Xun Qian A remark on $4/n = 1/x + 1/y + 1/z$. (Chinese. English summary) 84h:10023

secondary classifications:

Turk, J. W. M. The product of two or more neighboring integers is never a power. (84g:10006)

10B25 Nonpolynomial equations

Agrawal, M. K. See Parnami, J. C.; et al., 84d:10024

Alex, Leo J. (with Foster, Lorraine L.) On Diophantine equations of the form $1 + 2^x = p^a q^b + 2^c p^d q^e$. 84j:10015

Bremner, Andrew (with Calderbank, Robert; Hanlon, P.; Morton, Patrick; Wolfskill, J.)

Two-weight ternary codes and the equation $y^2 = 4x^3 + 13$. 84m:10011

Calderbank, Robert See Bremner, Andrew; et al., 84m:10011

Foster, Lorraine L. See Alex, Leo J., 84j:10015

Hanlon, P. See Bremner, Andrew; et al., 84m:10011

Konnerth, Oliver On the equation $a^x \cdot b^{1/x} + a^{1/x} \cdot b^x = c$. (Romanian) 84e:10026

Li, De Lang Letter to the editor: "On the equation $4/n = 1/x + 1/y + 1/z$ " [J. Number Theory 13 (1981), no. 4, 485–494; MR 83c:10026]. 84h:10024

Morton, Patrick See Bremner, Andrew; et al., 84m:10011

Parnami, J. C. (with Agrawal, M. K.; Rajwade, A. R.) On expressing \sqrt{p} as a rational linear combination of cosines of angles which are rational multiples of π . 84d:10024a (with Agrawal, M. K.; Rajwade, A. R.) On expressing a quadratic irrational as a rational linear combination of roots of unity. 84d:10024b

Pethő, Attila Perfect powers in second order linear recurrences. 84f:10024

Rajwade, A. R. See Parnami, J. C.; et al., 84d:10024a and 84d:10024b

Shorey, T. N. (with Stewart, C. L.) On the Diophantine equation $ax^{2t} + bx^t y + cy^{2t} = d$ and pure powers in recurrence sequences. 84g:10038

Stewart, C. L. On some Diophantine equations and related linear recurrence sequences. (See 84h:10005)

See also Shorey, T. N., 84g:10038

Toyoizumi, Masao On the equation $a^x - b^y = (2p)^z$. 84h:10025

Wolfskill, J. See Bremner, Andrew; et al., 84m:10011

secondary classifications:

Alex, Leo J. Simple groups and a Diophantine equation. (84c:20024)

Gurari, Eitan M. (with Ibarra, Oscar H.) Two-way counter machines and Diophantine equations. (See 84a:68004)

Ibarra, Oscar H. See Gurari, Eitan M., (See 84a:68004)

Tzanakis, Nicholas The Diophantine equation $x^3 + 3y^3 = 2^n$. (84h:10020)

10B30 Equations in sufficiently many variables [See also 10J10.]

Richman, David R. Polynomial relations among the n th roots of one. 84h:10026

secondary classifications:

Schmidt, Wolfgang M. Systems of homogeneous equations. (See 84c:10004)

Simultaneous rational zeros of quadratic forms. (84g:10041)

10B35 Representation problems [See also 10J10.]

Fomenko, O. M. Sums of squares in imaginary quadratic fields. (Russian) 84g:10039

Halter-Koch, Franz Darstellung natürlicher Zahlen als Summe von Quadraten.

[Representation of natural numbers as a sum of squares] 84b:10025

Kaja, Janusz A certain generalization of a result of Erdős and Surányi. 84e:10027

Koval'chik, F. B. Analogues of the Hardy-Littlewood equation. (Russian) 84f:10025

Li, De Lang Indefinite binary forms representing the same numbers. 84b:10026

Plaksin, V. A. An asymptotic formula for the number of solutions of a Diophantine equation. (Russian) 84f:10026

Rødseth, Øystein J. On h -bases for n . II. 84c:10019

secondary classifications:

Cassels, J. W. S. Rational quadratic forms. (84d:10025)

Deshouillers, Jean-Marc Majorations en moyenne de sommes de Kloosterman. [Upper bounds in mean of Kloosterman sums] (84g:10068)

Furuta, Yoshiomi A prime decomposition symbol and integral quadratic forms.

(84m:12011)

Györy, K. On S -integral solutions of norm form, discriminant form and index form equations. (84g:10037)

Hookey, C. On a new approach to various problems of Waring's type. (84j:10056)

Kimberling, Clark One-free Zeckendorf sums. (84f:10017)

10B40 p -adic and power series fields

Schmidt, Wolfgang M. Cubic congruences and equations. (See 84d:10005)

secondary classifications:

Lewis, D. J. (with Montgomery, Hugh L.) On zeros of p -adic forms. (84f:10029)

Montgomery, Hugh L. See Lewis, D. J., (84f:10029)

10B45 Diophantine inequalities

secondary classifications:

Harman, Glyn Trigonometric sums over primes. II. (84g:10069)

Nguyen Ngoc Tu Method for finding a general expression for the integer-valued solutions of a system of linear inequalities. (84h:90042)

Schmidt, Wolfgang M. Systems of homogeneous equations. (See 84c:10004)

10B99 None of the above, but in this section

Stepanov, S. A. Diophantine equations over function fields. (Russian) 84i:10019

secondary classifications:

Buzytskii, P. L. (with Freiman, G. A.) Integer programming and number theory. (84k:90049)

Freiman, G. A. See Buzytskii, P. L., (84k:90049)

Riebeschl, Dieter Hyperbolische komplexe Räume und die Vermutung von Mordell. [Hyperbolic complex spaces and Mordell's conjecture] (84b:32035)

Robin, Guy Sur un problème d'optimisation en nombres entiers. (English and German summaries) [An optimization problem in integers] (84f:90062)

Schinzel, Andrzej Diophantine equations with parameters. (See 84c:10003)

10Cxx Forms (especially quadratic) (For quadratic forms in linear algebra, see 15A63.)

10C01 Forms over general fields (especially quadratic)

Kijima, Daiji (with Nishi, Mico) A note on excellent forms. 84g:10040

Nishi, Mico See Kijima, Daiji, 84g:10040

Pfister, Albrecht Über einige neuere Ergebnisse aus der algebraischen Theorie der quadratischen Formen. [On some recent results from the algebraic theory of quadratic forms] 84e:10028

secondary classifications:

Boja, N. (with Brăiloiu, G.) On the conjugation of K -spaces by means of sesquilinear forms. (Romanian. English summary) (84g:15002)

Brăiloiu, G. See Boja, N., (84g:15002)

Deheuvels, René ★ Formes quadratiques et groupes classiques. (French) [Quadratic forms and classical groups] (84j:15026)

Fischer, Pal (with Mokanski, J. P.) A class of symmetric biadditive functionals. (84d:15025)

Gross, Herbert (with Keller, Hans A.) On the problem of classifying infinite chains in projective and orthogonal geometry. (84k:51010)

Keller, Hans A. See Gross, Herbert, (84k:51010)

Kneser, Martin Composition of binary quadratic forms. (84b:10031)

McCrimmon, Kevin Composition triples. (84f:17002)

- Mokanski, J. P. See Fischer, Pal, (84d:15025)
 Platonov, V. P. Birational properties of spinor varieties. (Russian) (84b:14008)
 Saarimäki, Mikko ★ Dense subspaces in Hermitian spaces of uncountable dimensions. (84c:15020)
 Scharlau, Winfried (with Tschimmel, Angelika) On the level of skew-fields. (84i:16016)
 Suslin, A. A. Quaternion homomorphism for the field of functions on a conic. (Russian) (84c:12030)
 Tschimmel, Angelika See Scharlau, Winfried, (84i:16016)

10C02 Forms over global rings and fields (especially quadratic)

- Cassels, J. W. S. Rational quadratic forms. 84d:10025
 Estes, Dennis R. (with Hsia, J. S.) Exceptional integers of some ternary quadratic forms. 84c:10029
 Hsia, J. S. See Estes, Dennis R., 84c:10029
 Kneser, Martin Aus der Zahlentheorie der quadratischen Formen. [From the number theory of quadratic forms] 84c:10030
 Kolster, Manfred Quadratic forms and Artin's reciprocity law. 84c:10020
 Parimala, Raman Quadratic forms over polynomial rings over global fields. 84c:10015
 Santodomingo, José Quasiquadratic mappings. (Spanish) 84j:10016b
 Schmidt, Wolfgang M. Simultaneous rational zeros of quadratic forms. 84g:10041

secondary classifications:

- Allan, Nelo Hyperbolic geometry. (Portuguese) (See 84b:00011)
 Benham, J. W. (with Hsia, J. S.) On spinor exceptional representations. (84b:10029)
 Conway, John Horton (with Sloane, N. J. A.) On the enumeration of lattices of determinant one. (84b:10047)
 Coray, Daniel F. The Hasse principle for pairs of quadratic forms. (See 84c:10003)
 Fernández Bermejo, Emiliano ★ Espacios simplecticos sobre β -anillos y anillos de Hermite, trasvesciones simplecticas. (Spanish) [Symplectic spaces over β -rings and Hermitian rings, symplectic transvections] (84i:15019)
 Gerstein, Larry J. A remark on the quadratic analogue of the Quillen-Suslin theorem. (84h:13028)
 Gogishvili, G. P. On the representation of numbers by positive binary quadratic forms. (Russian. English and Georgian summaries) (84i:10022)
 Hiramatsu, Toyokazu (with Mimura, Yoshio) On automorphic forms of weight one. II. The Artin invariant and $d_0 \bmod 2$. (84m:10016a)
 Hsia, J. S. See Benham, J. W., (84b:10029)
 Kearton, C. (with Wilson, S. M. J.) Cyclic group actions on odd-dimensional spheres. (84c:57040)
 Kis, Ernő A class of Diophantine equations. (Romanian. French summary) (84c:10015)
 Kneser, Martin Komposition binärer quadratischer Formen. [Composition of binary quadratic forms] (84i:10028)
 Einheitsgruppen indefiniter quadratischer Formen. [Groups of units of indefinite quadratic forms] (84g:10049)
 Knus, Max-Albert Quaternionen über Polynomringen, quadratischen Formen über $\mathbb{R}[x, y]$ und Vektorbündel über $\mathbb{P}^2(\mathbb{C})$. [Quaternions over polynomial rings, quadratic forms over $\mathbb{R}[x, y]$ and vector bundles over $\mathbb{P}^2(\mathbb{C})$] (84m:13012)
 Mimura, Yoshio See Hiramatsu, Toyokazu, (84m:10016a)
 Nikulin, V. V. Involutions of integer quadratic forms and their applications to real algebraic geometry. (Russian) (84b:14032)
 Sansuc, Jean-Jacques Descente et principe de Hasse pour certaines variétés rationnelles. [Descent and Hasse principle for certain rational varieties] (84h:14026)
 Santodomingo, José ★ La loi du parallélogramme et le théorème de Gleason. (French) [The parallelogram law and the Gleason theorem] (84h:13016)
 Sloane, N. J. A. See Conway, John Horton, (84b:10047)
 Tuler, Randy Detecting products of elementary matrices in $GL_2(\mathbb{Z}[\sqrt{d}])$. (84i:10027)
 Wilson, S. M. J. See Kearton, C., (84c:57040)

10C03 Forms over local rings and fields (especially quadratic)

- Baeza, R. Comparing u -invariants of fields of characteristic 2. 84f:10027
 Craven, Thomas C. On the prime ideal of an ordering of higher level. 84a:10020
 Ojanguren, Manuel Unités représentées par des formes quadratiques ou par des normes réduites. [Units represented by quadratic forms or by reduced norms] 84c:10031
 Parimala, Raman Quadratic spaces over polynomial extensions of regular rings of dimension 2. 84d:10026

secondary classifications:

- Arkhipov, G. I. (with Karatsuba, A. A.) A problem of comparison theory. (Russian) (84g:10046)
 Karatsuba, A. A. See Arkhipov, G. I., (84g:10046)

10C04 Forms over real fields

- Arason, J. K. (with Pfister, Albrecht) Supplement to the work: "Quadratic forms over affine algebras and an algebraic proof of the Borsuk-Ulam theorem" [J. Reine Angew. Math. 331 (1982), 181-184; MR 83d:10023]. (German) 84h:10027
 Choi, Man Duen (with Knebusch, Manfred; Lam, Tsit Yuen; Reznick, Bruce) Transversal zeros and positive semidefinite forms. 84b:10027
 Knebusch, Manfred See Choi, Man Duen; et al., 84b:10027
 Lam, Tsit Yuen See Choi, Man Duen; et al., 84b:10027
 Meißner, Wilfried Quadratische Räume unendlicher Dimension und partielle Isomorphismen. [Quadratic spaces of infinite dimension and partial isomorphisms] 84i:10020
 Pfister, Albrecht See Arason, J. K., 84h:10027
 Reznick, Bruce See Choi, Man Duen; et al., 84b:10027
 Waterhouse, William C. Real classification of complex quadrics. 84b:10028

secondary classifications:

- Afflerbach, Lothar Minkowskische Reduktionsbedingungen für positiv definite quadratische Formen in 5 Variablen. (English summary) [Minkowski's reduction conditions for positive definite quadratic forms in 5 variables] (84c:10032)
 Bröcker, Ludwig Real spectra and distributions of signatures. (84d:14014)
 Greub, W. H. The signature of a real Clifford algebra. (84d:15027)
 Kijima, Daiji (with Nishi, Mico) On the space of orderings and the group H . (84c:10032)
 Nishi, Mico See Kijima, Daiji, (84c:10032)

10C05 Quadratic, bilinear and Hermitian forms [See also 10E25.], general theory (including Witt rings of quadratic forms)

- Bak, Anthony ★ K -theory of forms. 84m:10012
 Bani, Werner Subspaces in Hermitian spaces of countable dimension. 84j:10017
 Benham, J. W. (with Hsia, J. S.) On spinor exceptional representations. 84b:10029
 Carson, Andrew B. (with Marshall, Murray A.) Decomposition of Witt rings. 84b:10030
 Cassels, J. W. S. ★ Рациональные квадратичные формы. (Russian) [Rational quadratic forms] 84d:10027
 Dai, Zong Duo Quadratic forms over fields of characteristic 2. (Chinese) 84j:10018
 Feig, Ephraim Certain systems of bilinear forms whose minimal algorithms are all quadratic. 84g:10042
 Hsia, J. S. See Benham, J. W., 84b:10029
 Kijima, Daiji (with Nishi, Mico) On the space of orderings and the group H . 84c:10032
 (with Nishi, Mico) Kaplansky's radical and Hilbert Theorem 90. II. 84g:10043
 Kneser, Martin Komposition binärer quadratischer Formen. [Composition of binary quadratic forms] 84i:10028
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 (Malyshev, A. V.) See Cassels, J. W. S., 84d:10027
 Marshall, Murray A. ★ Abstract Witt rings. 84b:10032
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 Quebbemann, Heinz-Georg Gitter ohne Automorphismen der Determinante -1 . (English summary) [Lattices without automorphisms of determinant -1] 84i:10021
 Schultze-Pillot, Rainer Remark on a note of Hsia about classification of unimodular lattices. 84g:10044
 Shapiro, Daniel B. (with Leep, David) Piecewise equivalence of quadratic forms. 84c:10033
 Suzuki, Hiroshi Automorphism groups of multilinear maps. 84c:10016
 Szymiczek, Kazimierz (with Yucas, Joseph) Quadratic forms, rigid elements and nonreal preorders. 84g:10045
 Teterin, Yu. G. On the representation of numbers that are divisible into large squares by a positive ternary quadratic form. (Russian) 84c:10019
 (Venkov, B. B.) See Cassels, J. W. S., 84d:10027
 Warshauer, Max L. ★ The Witt group of degree k maps and asymmetric inner product spaces. 84c:10017
 Watson, G. L. Existence of an indecomposable positive quadratic form in a given genus of rank at least 14. 84c:10021
 Yucas, Joseph See Szymiczek, Kazimierz, 84g:10045

secondary classifications:

- Becker, Eberhard Valuations and real places in the theory of formally real fields. (84f:12011)
 Bertuccioni, Inta A short proof of a theorem of Suslin-Kopelko. (84f:13016)
 Choi, Man Duen (with Dai, Zong Duo; Lam, Tsit Yuen; Reznick, Bruce) The Pythagoras number of some affine algebras and local algebras. (84f:12012)
 Dai, Zong Duo See Choi, Man Duen; et al., (84f:12012)
 Estes, Dennis R. (with Guralnick, Robert M.) Module equivalences: local to global when primitive polynomials represent units. (84c:13005)
 Feig, Ephraim Minimal algorithms for bilinear forms may have divisions. (84d:68037)
 Guralnick, Robert M. See Estes, Dennis R., (84c:13005)
 Haapasalo, Lenni (with Niemistö, Pekka) Lattice generation program for computing a vector space lattice. (84g:06012)
 Houdebine, Jean (with Mahé, Louis) Séparation des composantes connexes réelles dans le cas des variétés projectives. [Separation of the real connected components in the case of projective varieties] (84m:14030)
 Knus, Max-Albert (with Ojanguren, Manuel; Parimala, Raman) Positive-definite quadratic bundles over the plane. (84b:14022)
 Lam, Tsit Yuen See Choi, Man Duen; et al., (84f:12012)
 Mahé, Louis Signatures et composantes connexes. [Signatures and connected components] (84c:14011)
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 Mimura, Yoshio On 2-lattices in an Hermitian space. (84c:10026)
 Niemistö, Pekka See Haapasalo, Lenni, (84g:06012)
 Ojanguren, Manuel See Knus, Max-Albert; et al., (84b:14022)
 Pardon, William A "Gersten conjecture" for Witt groups. (84c:13016)
 The exact sequence of a localization for Witt groups. II. Numerical invariants of odd-dimensional surgery obstructions. (84f:57027)
 Parimala, Raman See Knus, Max-Albert; et al., (84b:14022)
 Pfister, Albrecht Über einige neuere Ergebnisse aus der algebraischen Theorie der quadratischen Formen. [On some recent results from the algebraic theory of quadratic forms] (84c:10028)
 Reznick, Bruce See Choi, Man Duen; et al., (84f:12012)
 Seligman, George B. Variations on even Clifford algebras. (See 84a:00007)
 Vogel, Pierre Localisation non commutative de formes quadratiques. [Noncommutative localization of quadratic forms] (84b:18016)
 Watson, G. L. One-class genera of positive quadratic forms in eight variables. (84c:10024)

10C07 Class numbers of quadratic and Hermitian forms

- Gogishvili, G. P. On the representation of numbers by positive binary quadratic forms. (Russian. English and Georgian summaries) **84i:10022**
 Sarnak, Peter Class numbers of indefinite binary quadratic forms. **84i:10023a**
 Corrigenda: "Class numbers of indefinite binary quadratic forms". **84i:10023b**
 Watson, G. L. One-class genera of positive quadratic forms in eight variables. **84i:10024**

secondary classifications:

- Quebbemann, Heinz-Georg Gitter ohne Automorphismen der Determinante -1 . (English summary) [Lattices without automorphisms of determinant -1] **(84i:10021)**
 Teterin, Yu. G. On the representation of numbers that are divisible into large squares by a positive ternary quadratic form. (Russian) **(84j:10019)**
 Walker, Peter L. On certain Dirichlet series whose coefficients are related to class numbers. **(84i:10054)**

10C10 Higher degree forms

- Arkhipov, G. I. (with Karatsuba, A. A.) A problem of comparison theory. (Russian) **84j:10046**
 Beklemishev, N. D. Classification of quaternary cubic forms in nongeneral position. (Russian) **84i:10028**
 Karatsuba, A. A. See Arkhipov, G. I. **84j:10046**
 Kharitonova, O. I. Study of the fixed sign property of fourth-order forms. (Russian) **84j:10020**
 Schmidt, Wolfgang M. Systems of homogeneous equations. (See **84c:10004**)
 Wolfskill, J. On equivalence of binary forms. **84i:10025**

secondary classifications:

- Denef, Jan (with Jarden, Moshe; Lewis, D. J.) On A_x -fields which are C_x . **(84j:12028)**
 Jarden, Moshe See Denef, Jan; et al., **(84j:12028)**
 Lewis, D. J. See Denef, Jan; et al., **(84j:12028)**
 Ward, Harold N. Multilinear forms and divisors of codeword weights. **(84h:94013)**

10C15 Analytic theory (Epstein's zeta function; relations with automorphic forms and functions)

- Baranovskii, E. P. (with Ryskov, S. S.; Shushbaev, S. Sh.) A geometric estimate of the number of representations of a real number by a positive quadratic form and an estimate of the remainder term of the multidimensional zeta function. (Russian) **84j:10021**
 Eichler, Martin Theta series of inhomogeneous quadratic forms. **84m:10013**
 Fomenko, O. M. See Golubeva, E. P., **84j:10022**
 Golubeva, E. P. (with Fomenko, O. M.) On theta series associated with indefinite ternary quadratic forms and Dirichlet series connected with them. (Russian) **84j:10022**
 Kitaoka, Yoshiyuki Modular forms of degree n and representation by quadratic forms. III. Kloosterman's method. **84j:10047b**
 Modular forms of degree n and representation by quadratic forms. II. **84j:10047a**
 Kurihara, Akira On the values at nonpositive integers of Siegel's zeta functions of Q -anisotropic quadratic forms with signature $(1, n-1)$. **84a:10021**
 Ryskov, S. S. See Baranovskii, E. P.; et al., **84j:10021**
 Shushbaev, S. Sh. See Baranovskii, E. P.; et al., **84j:10021**

secondary classifications:

- van Asch, A. G. Modular forms of half integral weight, some explicit arithmetic. **(84i:10031)**
 Imai, Kaori (with Terras, Audrey) The Fourier expansion of Eisenstein series for $GL(3, \mathbb{Z})$. **(84d:10033)**
 Kudla, Stephen S. On the integrals of certain singular theta-functions. **(84h:10039)**
 Maaß, Hans Über eine Kennzeichnung der Koecherschen "Dirichlet-Reihen mit Funktionalgleichung". [On a characterization of Koecher's "Dirichlet series with functional equation"] **(84f:10037)**
 Petrov, E. E. The principal series of representations of the group $SL(2, A)$ over a finite local commutative principal ideal ring A . (Russian) **(84j:20049)**
 Sarnak, Peter Class numbers of indefinite binary quadratic forms. **(84i:10023a)**
 Corrigenda: "Class numbers of indefinite binary quadratic forms". **(84i:10023b)**
 Satō, Fumihito Zeta functions in several variables associated with prehomogeneous vector spaces. III. Eisenstein series for indefinite quadratic forms. **(84c:12015c)**
 Zeta functions in several variables associated with prehomogeneous vector spaces. I. Functional equations. **(84c:12015a)**
 Zeta functions in several variables associated with prehomogeneous vector spaces. II. A convergence criterion. **(84c:12015b)**
 Terras, Audrey See Imai, Kaori, **(84d:10033)**
 Walker, Peter L. On certain Dirichlet series whose coefficients are related to class numbers. **(84i:10054)**

10C20 p -adic theory

- Appelgate, H. (with Onishi, Hironori) Similarity problem over $SL(n, \mathbb{Z}_p)$. **84d:10028**
 Körner, Otto Ordnungen von Quaternionenalgebren über lokalen Körpern. [Orders of quaternion algebras over local fields] **84c:10022**
 Lewis, D. J. (with Montgomery, Hugh L.) On zeros of p -adic forms. **84f:10029**
 Montgomery, Hugh L. See Lewis, D. J., **84f:10029**
 Onishi, Hironori See Appelgate, H., **84d:10028**

10C25 Minima of forms [See also 10E20.]

- Feng, Ke Qin On positive semidefinite forms which are not sums of squares of polynomials. (Chinese) **84j:10023**
 Nicholls, Peter J. The minima of indefinite binary quadratic forms. **84i:10026**

secondary classifications:

- Cusick, T. W. Finding fundamental units in cubic fields. **(84a:12010)**
 Diaz y Diaz, Francisco Valeurs minima du discriminant des corps de degré 7 ayant une seule place réelle. (English summary) [Minimal values of the discriminant of algebraic number fields of degree 7 having only one real place] **(84i:12004)**
 Kiss, Peter On second order recurrences and continued fractions. **(84c:10012)**
 Reznick, Bruce Some inequalities for products of power sums. **(84g:26015)**
 Schmidt, Asmus L. Diophantine approximation in the Eisensteinian field. **(84m:10024)**
 Tanimura, Yosikatu Non-Euclidean point in field $\mathbb{Q}(\sqrt[7]{97})$. **(84j:10043)**

10C30 Arithmetic properties of classical groups [See also 20Gxx.]

- Iyanaga, Kenichi Cusps associated to lattices in Hermitian vector spaces of dimension 2. **84j:10048**
 Kneser, Martin Einheitsgruppen indefiniter quadratischer Formen. [Groups of units of indefinite quadratic forms] **84j:10049**
 Tuler, Randy Detecting products of elementary matrices in $GL_2(\mathbb{Z}[\sqrt{d}])$. **84i:10027**
 Zhuk, I. K. The rationality of some homogeneous spaces of the group $SO(q)$. (Russian. English summary) **84j:10050**

secondary classifications:

- Almkvist, Gert Some formulas in invariant theory. **(84i:14030)**
 Bak, Anthony Subgroups of the general linear group normalized by relative elementary groups. **(84f:20049)**
 Bartels, Hans-Jochen Zur Arithmetik von Niedergruppenweiterungen. [On the arithmetic of extensions of dihedral groups] **(84c:12009)**
 Beklemishev, N. D. Classification of quaternary cubic forms in nongeneral position. (Russian) **(84h:10028)**
 Borevich, Z. I. (with Vavilov, N. A.) Determinants in net subgroups. (Russian) **(84d:20043)**
 De Concini, Corrado Characteristic free "decomposition" of the coordinate ring of the symplectic group. (Italian summary) **(84j:20041)**
 Dixmier, Jacques Série de Poincaré et systèmes de paramètres pour les invariants des formes binaires de degré 7. (English summary) [Poincaré series and systems of parameters for invariants of binary forms of degree 7] **(84f:15035)**
 Ellers, Erich W. (with Nolte, Wolfgang) Bireflectionality of orthogonal and symplectic groups. **(84a:51009)**
 Elstrodt, J. (with Grunewald, Fritz J.; Mennicke, J.) $PSL(2)$ over imaginary quadratic integers. **(84j:10051)**
 Grunewald, Fritz J. See Elstrodt, J.; et al., **(84j:10051)**
 Haile, Darrell E. Balanced spaces of forms and skew cyclic transformations. **(84m:16032)**
 King, Oliver Imprimitivity maximal subgroups of the general linear, special linear, symplectic and general symplectic groups. **(84c:20041)**
 Kolster, Manfred On injective stability for K_2 . **(84f:18019)**
 Krupetskii, S. L. Intermediate subgroups in the unitary group over the quaternion algebra. (Russian) **(84i:20051)**
 Li, Fu An The automorphisms of the projective orthogonal groups $P\Omega_n(V)$ ($n \geq 5$) with $(n \neq 8)$. **(84c:20051)**
 Li, Shang Zhi (with Zha, Jian Guo) On certain classes of maximal subgroups in projective special unitary groups over finite fields. **(84h:20056)**
 Lü, Qing Zhu Automorphisms of SL_2 and PSL_2 over some Euclidean rings. (Chinese) **(84g:20082)**
 Mennicke, J. See Elstrodt, J.; et al., **(84j:10051)**
 Nolte, Wolfgang See Ellers, Erich W., **(84a:51009)**
 Platonov, V. P. (with Rapinchuk, A. S.) Multiplicative structure of division algebras over number fields and the Hasse principle. (Russian) **(84h:12021)**
 Arithmetic theory of algebraic groups. (Russian) **(84c:12001)**
 Prasad, Gopal (with Raghunathan, M. S.) On the congruence subgroup problem: determination of the "metaplectic kernel". **(84f:20051)**
 Raghunathan, M. S. See Prasad, Gopal, **(84f:20051)**
 Rapinchuk, A. S. See Platonov, V. P., **(84h:12021)**
 Rehmann, U. A survey of the congruence subgroup problem. **(84c:12018)**
 Ren, Hong Shuo (with Wan, Zhe Xian) Automorphisms of $PGL_2(K)$ over any skew field K . **(84b:20052a)**
 (with Wan, Zhe Xian) Automorphisms of $PSL_2(K)$ over any skew field K . **(84b:20052b)**
 Stuhler, Ulrich On the cohomology of SL_n over rings of algebraic functions. **(84h:22021)**
 Vavilov, N. A. See Borevich, Z. I., **(84d:20043)**
 Wan, Zhe Xian See Ren, Hong Shuo, **(84b:20052a)** and **(84b:20052b)**
 Wang, Yang Xian On the minimal length problem in orthogonal groups. (Chinese) **(84h:20035)**
 Weston, K. W. The commutator equation problem for $SL(3, \mathbb{Z})$. **(84d:20034)**
 Wong, W. J. Abelian unipotent subgroups of finite orthogonal groups. **(84h:20041)**
 Wu, Xiao Long Two-dimensional linear groups over Gaussian domain. **(84h:20053)**
 Zha, Jian Guo See Li, Shang Zhi, **(84b:20056)**

10C99 None of the above, but in this section

secondary classifications:

- De Smet, H. J. P. See van Maaren, H., **(84m:08003a)**
 van Maaren, H. A degree theorem and decision methods for algebras of affine forms. **(84m:08002)**
 (with De Smet, H. J. P.) Polynomials in algebras of linear forms. **(84m:08003a)**

10Dxx Theory of automorphic and modular functions and forms [See also 12A67, 12B27, 14Gxx, 14Kxx, 22E50, 22E55, 30F35, 32Nxx; for relations with quadratic forms, see 10C15.]

(Gelfand, S. I.) See Lang, Serge, 84b:10033

Lang, Serge ★ Введение в теорию модулярных форм. (Russian) [Introduction to modular forms] 84b:10033

Panchishkin, A. A. Modular forms. (Russian) 84a:10022

Terras, Audrey Non-Euclidean harmonic analysis. 84b:10034

secondary classifications:

(Faddeev, L. D.) See Automorphic functions and number theory, (84f:10007)

(Venkov, A. B.) See Automorphic functions and number theory, (84f:10007)

(Vinogradov, A. I.) See Automorphic functions and number theory, (84f:10007)

Automorphic functions and number theory ★ Автоморфные функции в теории чисел. I. (Russian) [Automorphic functions and number theory. I.] (84f:10007)

10D05 Modular and automorphic functions

Balasubramanian, R. (with Murty, M. Ram) An Ω -theorem for Ramanujan's τ -function. 84a:10023a

Berndt, Rolf Zur Arithmetik der elliptischen Funktionenkörper höherer Stufe. [On the arithmetic of elliptic function fields of higher level] 84b:10029a

Meromorphic Funktionen auf Mumfords Kompaktifizierung der universellen elliptischen Kurve N -ter Stufe. [Meromorphic functions on Mumford's compactification of the universal level N elliptic curve] 84b:10029b

Boon, M. H. (with Glasser, M. L.; Zak, Joshua; Zucker, I. J.) Additive decompositions of θ -functions of multiple arguments. 84b:10035

Glasser, M. L. See Boon, M. H.; et al., 84b:10035

Kubert, Daniel S. The square root of the Siegel group. 84b:10034

Lin, Ts'ung Yuan An elementary proof of the identity $\theta_{00}^4 = \theta_{10}^4 + \theta_{01}^4$. 84b:10036

Murty, M. Ram Some Ω -results for Ramanujan's τ -function. 84a:10023b

See also Balasubramanian, R., 84a:10023a

Newman, Morris Modular functions revisited. 84b:10037

Patterson, S. J. The constant term of the cubic theta series. 84b:10024

Zak, Joshua See Boon, M. H.; et al., 84b:10035

Zucker, I. J. See Boon, M. H.; et al., 84b:10035

secondary classifications:

Arakawa, Tsuneo Generalized eta-functions and certain ray class invariants of real quadratic fields. (84b:12016)

Cohn, Harvey Introductory remarks on complex multiplication. (84g:10056)

Krätzel, Ekkehard Dedekindsche Funktionen und Summen. I. [Dedekind functions and sums. I.] (84d:10010)

Dedekindsche Funktionen und Summen. II. [Dedekind functions and sums. II.] (84d:10003)

Kubert, Daniel S. (with Lang, Serge) ★ Modular units. (84b:12009)

Lang, Serge See Kubert, Daniel S., (84b:12009)

Lin, Ts'ung Yuan On the norm of double Gaussian sums. (84b:10056)

Parson, L. A. (with Sheingorn, Mark) Exponential sums connected with Ramanujan's function $\tau(n)$. (84f:10048)

Sheingorn, Mark See Parson, L. A., (84f:10048)

Sil'vestrov, V. V. Solution in closed form of a complete singular integral equation. (Russian) (84g:45004)

10D07 Structure of modular groups and generalizations, arithmetic groups [See also 20H05, 20H10, 22E40.]

Allan, Nelo Hyperbolic geometry. (Portuguese) (See 84b:00011)

Brenner, J. L. (with Lyndon, Roger C.) Maximal nonparabolic subgroups of the modular group. 84f:10030

Cohn, Harvey Remarks on the cyclotomic Fricke groups. 84b:10030

Elstrodt, J. (with Grunewald, Fritz J.; Mennicke, J.) $\mathrm{PSL}(2)$ over imaginary quadratic integers. 84g:10051

(with Grunewald, Fritz J.; Mennicke, J.) On the group $\mathrm{PSL}_2(\mathbb{Z}[i])$. 84j:10024

Grunewald, Fritz J. See Elstrodt, J.; et al., 84g:10051 and 84j:10024

Kulkarni, Ravi S. An extension of a theorem of Kurosh and applications to Fuchsian groups. 84b:10018

Lubotzky, Alexander Free quotients and the congruence kernel of SL_2 . 84b:10028

Lyndon, Roger C. See Brenner, J. L., 84f:10030

MacLachlan, C. (with Rosenberger, G.) Two-generator arithmetic Fuchsian groups. 84b:10014

Matejski, J. Peter The classification of discrete 2-generator subgroups of $\mathrm{PSL}(2, \mathbb{R})$. 84d:10029

Mennicke, J. See Elstrodt, J.; et al., 84g:10051 and 84j:10024

Midorikawa, Hisaichi On the number of regular elliptic conjugacy classes in the Siegel modular group of degree $2n$. 84b:10029

Rosenberger, G. See MacLachlan, C., 84b:10014

Takeuchi, Kisao Arithmetic Fuchsian groups with signature $(1; e)$. 84b:10031

secondary classifications:

Ash, Avner On the top Betti number of subgroups of $\mathrm{SL}(n, \mathbb{Z})$. (84b:10023)

Beardon, A. F. (with Nicholls, Peter J.) Ford and Dirichlet regions for Fuchsian groups. (84b:30072)

Coxeter, Harold S. M. My graph. (84e:05059)

Đoković, Dragomir Ž. Relations between the half turns of the hyperbolic plane. (84e:53058)

Gray, Jeremy From the history of a simple group. (84c:01035)

Hatcher, Allen Hyperbolic structures of arithmetic type on some link complements. (84m:57005)

Jones, Vaughan F. R. Index for subfactors. (84d:46097)

Jørgensen, Troels (with Näätänen, Marjatta) Surfaces of genus 2: generic fundamental polygons. (84c:51029)

Kulkarni, Ravi S. Surface-symmetries, holomorphic maps, and tessellations. (See 84d:53002)

Meurman, Arne An embedding of $\mathrm{PSL}(2, 13)$ in $G_2(\mathbb{C})$. (84b:20046)

Moëckel, Richard Geodesics on modular surfaces and continued fractions. (84b:58176)

Näätänen, Marjatta See Jørgensen, Troels, (84c:51029)

Nicholls, Peter J. See Beardon, A. F., (84b:30072)

Pommerenke, Christian On Fuchsian groups of accessible type. (84g:30046)

Series, Caroline Non-Euclidean geometry, continued fractions, and ergodic theory. (84b:58086)

Stuhler, Ulrich On the cohomology of SL_n over rings of algebraic functions. (84b:22021)

Sullivan, Dennis Disjoint spheres, approximation by imaginary quadratic numbers, and the logarithm law for geodesics. (84j:58097)

Tetenov, A. V. Locally finite fundamental domains of discrete groups in a space. (Russian) (84c:30058)

10D12 Modular forms, one variable

Beukers, F. Irrationality of π^2 , periods of an elliptic curve and $\Gamma_1(5)$. 84j:10025

Deshouillers, Jean-Marc (with Iwaniec, Henryk) Kloosterman sums and Fourier coefficients of cusp forms. 84m:10015

Good, Anton New results on Ramanujan's function. (See 84c:10004)

On various means involving the Fourier coefficients of cusp forms. 84g:10052

Harris, Bruno Triple products, modular forms, and harmonic volumes. 84j:10026

A triple product for automorphic forms. 84j:10027

Iwaniec, Henryk Mean values for Fourier coefficients of cusp forms and sums of Kloosterman sums. 84b:10032

See also Deshouillers, Jean-Marc, 84m:10015

Kohnen, Winfried Newforms of half-integral weight. 84b:10038

Miyawaki, Isao On the partial sums of the Fourier coefficients of cuspforms. 84c:10035

Mizumoto, Shin-ichiro Integrality of certain algebraic values attached to modular forms. 84j:10028

Momose, Fumiyuki On the l -adic representations attached to modular forms. 84b:10025

Murty, M. Ram Oscillations of Fourier coefficients of modular forms. 84g:10053

Rankin, R. A. Sums of powers of cusp form coefficients. 84b:10033

secondary classifications:

Cohn, Harvey Introductory remarks on complex multiplication. (84g:10056)

Good, Anton The square mean of Dirichlet series associated with cusp forms. (84f:10036)

Grupp, F. On the Mertens conjecture for cusp forms. (84b:10021)

Hatada, Kazuyuki On the systems of eigenvalues (mod \mathfrak{P}) of Hecke operators. (84b:10043)

Hiramatsu, Toyokazu Higher reciprocity laws and modular forms of weight one. (84g:12014)

Kanienny, S. (with Stevens, G.) Special values of L -functions attached to $X_1(N)$. (84g:14021)

Kolke, Masao A note on modular forms mod p . (84g:10057)

Kojima, Hisashi An arithmetic of Hermitian modular forms of degree two. (84f:10034)

Moreno, Carlos J. The spectral decomposition of a product of automorphic forms. (84k:10022)

Ribet, Kenneth A. Mod p Hecke operators and congruences between modular forms. (84j:10040)

Rohrich, David E. Some remarks on Weierstrass points. (84d:14008)

Stevens, G. See Kanienny, S., (84g:14021)

Suzuki, Toshiaki Some results on the coefficients of the biquadratic theta series. (84g:10055)

Zograf, P. G. Fuchsian groups and small eigenvalues of the Laplace operator. (Russian. English summary) (84a:58090)

10D15 Automorphic forms, one variable

van Asch, A. G. Modular forms of half integral weight, some explicit arithmetic. 84f:10031

Bruggeman, Roelof W. ★ Fourier coefficients of automorphic forms. 84b:10034

Gelbart, S. (with Piatetski-Shapiro, Ilya Iosifovitch) Some remarks on metaplectic cusp forms and the correspondences of Shimura and Waldspurger. 84g:10054

Hiramatsu, Toyokazu (with Mimura, Yoshio) On automorphic forms of weight one. II. The Art invariant and $d_n \bmod 2$. 84m:10016a

On automorphic forms of weight one. III. The Selberg eigenspace for

discontinuous groups of finite type. 84m:10016b

Kalinin, V. L. Trace formula for Hecke operators. (Russian) 84d:10030

Kra, Irwin On the vanishing of Poincaré series of rational functions. 84j:10029

Mimura, Yoshio See Hiramatsu, Toyokazu, 84m:10016a

Nagasaka, Chiaki Eichler integrals and generalized Dedekind sums. 84f:10032

Piatetski-Shapiro, Ilya Iosifovitch See Gelbart, S., 84g:10054

Ryavec, C. A nonlinear interpolation formula. 84c:10023

Wolfart, J. Eine arithmetische Eigenschaft automorpher Formen zu gewissen nicht-arithmetischen Gruppen. (English summary) [An arithmetic property of automorphic forms for certain nonarithmetic groups] 84d:10031

secondary classifications:

Eichler, Martin Theta series of inhomogeneous quadratic forms. (84m:10013)

Goldfeld, Dorian (with Hoffstein, J.; Patterson, S. J.) On automorphic functions of half-integral weight with applications to elliptic curves. (84i:10031)

(with Sarnak, P.) Sums of Kloosterman sums. (84e:10037)

- Hoffstein, J. See Goldfeld, Dorian; et al., (84i:10031)
 Maeda, Yoshitaka A congruence between modular forms of half-integral weight. (84c:10036)
 Moreno, Carlos J. ★ Advanced analytic number theory. Part I. (84j:12015)
 Patterson, S. J. See Goldfeld, Dorian; et al., (84i:10031)
 Sarnak, P. See Goldfeld, Dorian, (84c:10037)
 Shimura, Goro The periods of certain automorphic forms of arithmetic type. (84f:10040)
 Takhtayan, L. A. (with Vinogradov, A. I.) The Gauss-Hasse hypothesis on real quadratic fields with class number one. (84g:12010)
 Venkov, A. B. An automorphic scattering matrix for the Hecke group $\Gamma(2\cos(\pi/q))$. (Russian. English summary) (84f:10038)
 Vinogradov, A. I. See Takhtayan, L. A., (84g:12010)

10D20 Modular and automorphic forms, several variables

- Arakawa, Tsunao Vector-valued Siegel's modular forms of degree two and the associated Andrianov L -functions. 84j:10030
 Böcherer, Siegfried Über gewisse Siegelsche Modulformen zweiten Grades. [On certain Siegel modular forms of degree two] 84j:10031
 Endres, R. Multiplikatorsysteme der symplektischen Thetagruppe. (English summary) [Multiplier systems of the symplectic theta group] 84d:10032
 Freitag, Eberhard (with Pommerening, Klaus) Reguläre Differentialformen des Körpers der Siegelschen Modulformen. [Regular differential forms of the field of Siegel modular functions] 84a:10026
 Garrett, Paul B. Modular curves on arithmetic quotients. 84a:10027
 van der Geer, G. On the geometry of a Siegel modular threefold. 84a:10028
 Gritsenko, V. A. The effect of modular operators on the Fourier-Jacobi coefficients of modular forms. (Russian) 84j:10032
 Recursive relations in the theory of Hecke operators. (Russian) 84j:10033
 Imai, Kaori (with Terras, Audrey) The Fourier expansion of Eisenstein series for $GL(3, \mathbb{Z})$. 84d:10033
 Kalinin, V. L. Analytic properties of the convolution of Siegel modular forms of genus n . (Russian) 84c:10035
 Karel, Martin L. Values of certain Whittaker functions on a p -adic reductive group. 84f:10033
 Kojima, Hisashi An arithmetic of Hermitian modular forms of degree two. 84f:10034
 Siegel modular forms of degree two. 84a:10029
 Kudla, Stephen S. On the integrals of certain singular theta-functions. 84b:10039
 Ozeki, M. (with Washio, Tadashi) An extended table of the Fourier coefficients of Eisenstein series of degree two. 84j:10034
 Pommerening, Klaus See Freitag, Eberhard, 84a:10026
 Shimura, Goro On Eisenstein series. 84c:10019
 Tai, Yung-Sheng On the Kodaira dimension of the moduli space of abelian varieties. 84b:10040
 Terras, Audrey See Imai, Kaori, 84d:10033
 Tsushima, Ryuji On the spaces of Siegel cusp forms of degree two. 84b:10036
 Washio, Tadashi See Ozeki, M., 84j:10034
 Yoshida, Hiroyuki Weil's representations and Siegel's modular forms. 84j:10035
 Zhuravlev, V. G. Euler products for Hilbert-Siegel modular forms of genus two. (Russian) 84f:10030

secondary classifications:

- Freitag, Eberhard Die Irreduzibilität der Schottkyrelation (Bemerkung zu einem Satz von J. Igusa). [The irreducibility of the Schottky relation (remarks on a theorem of J. Igusa)] (84m:14034)
 Harris, Michael (with Jakobsen, Hans Plesner) Singular holomorphic representations and singular modular forms. (84b:22023)
 Igusa, Jun-ichi On the variety associated with the ring of thetannullwerte. (84b:14023)
 Multiplicity one theorem and problems related to Jacobi's formula. (84b:14052)
 Jakobsen, Hans Plesner See Harris, Michael, (84b:22023)
 (Kirillov, A. A.) See Lion, Gérard; et al., (84m:58145)
 Kitaoka, Yoshiyuki Modular forms of degree n and representation by quadratic forms. III. Kloosterman's method. (84g:10047b)
 Modular forms of degree n and representation by quadratic forms. II. (84g:10047a)
 Kuga, Michio Algebraic cycles in gtfabv. (84g:14042)
 Lee, Ronnie (with Weintraub, Steven H.) On a generalization of a theorem of Erich Hecke. (84f:32041)
 (with Schwermer, J.) The Lefschetz number of an involution on the space of harmonic cusp forms of SL_3 . (84b:22016)
 Lin, Ts'ung Yuan On the norm of double Gaussian sums. (84b:10056)
 Lion, Gérard (with Vergne, Michèle) ★ Представление Вейля, индекс Маслова и theta-ряды. (Russian) [The Weil representation, Maslov index and theta series] (84m:58145)
 Maaß, Hans Über eine Kennzeichnung der Koecherschen "Dirichlet-Reihen mit Funktionalgleichung". [On a characterization of Koecher's "Dirichlet series with functional equation"] (84f:10037)
 Macdonald, I. G. Affine Lie algebras and modular forms. (84f:17014)
 Midorikawa, Hisaichi On the number of regular elliptic conjugacy classes in the Siegel modular group of degree $2n$. (84c:10029)
 Mizumoto, Shin-ichiro Integrality of certain algebraic values attached to modular forms. (84j:10028)
 Quebbemann, Heinz-Georg Gitter ohne Automorphismen der Determinante -1 . (English summary) [Lattices without automorphisms of determinant -1] (84i:10021)
 Rumely, Robert S. On the grössencharacter of an abelian variety in a parametrized family. (84i:14028)
 Schwermer, J. See Lee, Ronnie, (84b:22016)
 Shimura, Goro Confluent hypergeometric functions on tube domains. (84f:32040)
 Tong, Yue Lin Lawrence (with Wang, S. P.) Harmonic forms dual to geodesic cycles in quotients of $SU(p, 1)$. (84m:32046)
 Vergne, Michèle See Lion, Gérard, (84m:58145)
 Wang, S. P. See Tong, Yue Lin Lawrence, (84m:32046)
 Weintraub, Steven H. See Lee, Ronnie, (84f:32041)
 10D21 Hilbert modular forms and surfaces [See also 14J20.]
 Hausmann, Wilfried The fixed points of the symmetric Hilbert modular group of a real quadratic field with arbitrary discriminant. 84j:10036
 Hermann, Carl Friedrich Thetafunktionen und symmetrische Hilbertsche Modulformen zu $Q(\sqrt{65})$. [Theta functions and symmetric Hilbert modular forms attached to $Q(\sqrt{65})$] 84f:10035
 Müller, Werner ★ Signature defects of cusps of Hilbert modular varieties and values of L -series at $s=1$. 84j:10037
 Nagaoka, Shōyū On the ring of Hilbert modular forms over \mathbb{Z} . 84c:10020
 Saito, Hiroshi (with Yamauchi, Masatoshi) Congruences between Hilbert cusp forms and units in quartic fields. 84d:10034
 Shimura, Goro Algebraic relations between critical values of zeta functions and inner products. 84j:10038
 Thomas, Emery (with Vasquez, A. T.) Rings of Hilbert modular forms. 84j:10039
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 secondary classifications:
 Feustel, Jan-Michael Die negative K^2 -Kontribution der Picardschen Modulflächen. [The negative K^2 -contribution of Picard modular surfaces] (84j:14041)
 van der Geer, G. (with Ueno, Kenji) Families of abelian surfaces with real multiplication over Hilbert modular surfaces. (84g:14045)
 Goldfeld, Dorian (with Hoffstein, J.; Patterson, S. J.) On automorphic functions of half-integral weight with applications to elliptic curves. (84i:10031)
 Hoffstein, J. See Goldfeld, Dorian; et al., (84i:10031)
 Holzapfel, R.-P. Invariants of arithmetic ball quotient surfaces. (84i:14025)
 Patterson, S. J. See Goldfeld, Dorian; et al., (84i:10031)
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 10D23 Congruence properties
 Gordon, Basil Ramanujan congruences for $p_{-4} \pmod{11'}$. 84m:10017
 Maeda, Yoshitaka A congruence between modular forms of half-integral weight. 84c:10036
 Ribet, Kenneth A. Mod p Hecke operators and congruences between modular forms. 84j:10040
 Rosen, Kenneth H. (with Snyder, William M.) A Kummer congruence for the Hurwitz-Herglotz function. 84m:10018
 Snyder, William M. See Rosen, Kenneth H., 84m:10018
 secondary classifications:
 Böcherer, Siegfried Über gewisse Siegelsche Modulformen zweiten Grades. [On certain Siegel modular forms of degree two] (84j:10031)
 Mizumoto, Shin-ichiro Integrality of certain algebraic values attached to modular forms. (84j:10028)
 Morita, Yasuo Reduction modulo \mathfrak{P} of Shimura curves. (84b:10039)
 10D24 Relations with Dirichlet series
 Goldfeld, Dorian (with Hoffstein, J.; Patterson, S. J.) On automorphic functions of half-integral weight with applications to elliptic curves. 84i:10031
 (with Sarnak, P.) Sums of Kloosterman sums. 84c:10037
 Good, Anton The square mean of Dirichlet series associated with cusp forms. 84f:10036
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 Maaß, Hans Über eine Kennzeichnung der Koecherschen "Dirichlet-Reihen mit Funktionalgleichung". [On a characterization of Koecher's "Dirichlet series with functional equation"] 84f:10037
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 Monasse, Denis Théorie de Hecke pour $GL(3)$. [Hecke theory for $GL(3)$] 84b:10038
 Panchishkin, A. A. Le prolongement p -adique analytique des fonctions L de Rankin. II. Algèbre et estimation des dénominateurs. (English summary) [The p -adic analytic continuation of L -series of Rankin type. II. Algebraicity and estimation of denominators] 84b:10041
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 Sarnak, P. See Goldfeld, Dorian, 84c:10037
 Suzuki, Toshiaki Some results on the coefficients of the biquadratic theta series. 84g:10055
 Venkov, A. B. Artin-Takagi formula for the Selberg zeta function and the Roelcke hypothesis. (Russian) 84b:10042
 An automorphic scattering matrix for the Hecke group $\Gamma(2\cos(\pi/q))$. (Russian. English summary) 84f:10038
 secondary classifications:
 Arakawa, Tsunao Vector-valued Siegel's modular forms of degree two and the associated Andrianov L -functions. (84j:10030)
 Atiyah, Michael (with Donnelly, Harold; Singer, I. M.) Geometry and analysis of Shimizu L -functions. (84c:12013)
 Donnelly, Harold See Atiyah, Michael; et al., (84c:12013)

Good, Anton New results on Ramanujan's function. (See 84c:10004)

On various means involving the Fourier coefficients of cusp forms. (84g:10052)

Kamienny, S. On $J(p)$ and the conjecture of Birch and Swinnerton-Dyer. (84j:14030)

Miyawaki, Isao On the partial sums of the Fourier coefficients of cuspforms. (84c:10035)

Montgomery, Hugh L. (with Rohrlich, David E.) On the L -functions of canonical Hecke characters of imaginary quadratic fields. II. (84c:12014)

Murty, M. Ram Oscillations of Fourier coefficients of modular forms. (84g:10053)

Panchishkin, A. A. Higher level Rankin p -adic L -functions. (Russian) (84d:12014)

Parson, L. A. (with Sheingorn, Mark) Exponential sums connected with Ramanujan's function $\tau(n)$. (84f:10048)

Proskurin, N. V. See Venkov, A. B., (84h:10051)

Rohrlich, David E. See Montgomery, Hugh L., (84c:12014)

Rosen, Kenneth H. (with Snyder, William M.) A Kummer congruence for the Hurwitz-Herglotz function. (84m:10018)

Sato, Fumihito Zeta functions in several variables associated with prehomogeneous vector spaces. III. Eisenstein series for indefinite quadratic forms. (84c:12015c)

Zeta functions in several variables associated with prehomogeneous vector spaces.

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Zeta functions in several variables associated with prehomogeneous vector spaces. II. A convergence criterion. (84c:12015b)

Schappacher, Norbert Une classe de courbes elliptiques à multiplication complexe. [A class of elliptic curves with complex multiplication] (See 84h:10005)

Sheingorn, Mark See Parson, L. A., (84f:10048)

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Singer, I. M. See Atiyah, Michael; et al., (84c:12013)

Snyder, William M. See Rosen, Kenneth H., (84m:10018)

Takhtadzhyan, L. A. See Vinogradov, A. I., (84c:10043)

Venkov, A. B. (with Proskurin, N. V.) Automorphic functions and the Kummer problem. (Russian) (84h:10051)

Vinogradov, A. I. (with Takhtadzhyan, L. A.) Estimation of the residue of the Rankin L -series. (Russian) (84c:10043)

Zhuravlev, V. G. Euler products for Hilbert-Siegel modular forms of genus two. (Russian) (84c:10030)

10D25 Complex multiplication [See also 14K22.]

Anderson, Greg W. Logarithmic derivatives of Dirichlet L -functions and the periods of abelian varieties. 84j:10041

Cohn, Harvey Introductory remarks on complex multiplication. 84g:10056

Morita, Yasuo Reduction modulo \mathfrak{p} of Shimura curves. 84h:10039

Schappacher, Norbert Rationalité de valeurs spéciales de certaines fonctions L . [Rationality of special values of certain L -functions] 84j:10042

secondary classifications:

Boutot, Jean-François (with Breen, Lawrence; Gérardin, Paul; Giraud, Jean; Labesse, Jean-Pierre; Milne, James Stuart; Soule, Christophe) ★ Variétés de Shimura et fonctions L . (French) [Shimura varieties and L -functions] (84m:14025)

Breen, Lawrence See Boutot, Jean-François; et al., (84m:14025)

Deligne, Pierre (with Milne, James Stuart; Ogus, Arthur; Shih, Kuang-yeen) ★ Hodge cycles, motives, and Shimura varieties. (84m:14046)

Gekeler, Ernst-Ulrich Zur Arithmetik von Drinfel'd-Moduln. [On the arithmetic of Drinfel'd modules] (84j:12010)

Gérardin, Paul See Boutot, Jean-François; et al., (84m:14025)

Giraud, Jean See Boutot, Jean-François; et al., (84m:14025)

Goldstein, Catherine Un théorème à la manière de Damerell. [A theorem of Damerell type] (See 84c:10004)

Labesse, Jean-Pierre See Boutot, Jean-François; et al., (84m:14025)

Milne, James Stuart See Boutot, Jean-François; et al., (84m:14025) and Deligne, Pierre; et al., (84m:14046)

Ogus, Arthur See Deligne, Pierre; et al., (84m:14046)

Ribet, Kenneth A. Generalization of a theorem of Tankeev. (84h:14051)

Rubin, Karl (with Wiles, Andrew) Mordell-Weil groups of elliptic curves over cyclotomic fields. (84h:12017)

Congruences for special values of L -functions of elliptic curves with complex multiplication. (84h:12018)

Rumely, Robert S. On the grössencharacter of an abelian variety in a parametrized family. (84i:14028)

Shih, Kuang-yeen See Deligne, Pierre; et al., (84m:14046)

Shimura, Goro Algebraic relations between critical values of zeta functions and inner products. (84j:10038)

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Stark, H. M. The Coates-Wiles theorem revisited. (84c:14039)

Wiles, Andrew See Rubin, Karl, (84h:12017)

Zink, Thomas The local L -factor of a Shimura variety at a bad prime. (84c:14018)

10D30 p -adic theory, local fields [See also 14G20, 22E50.]

Van Steen, Guido Galois coverings of the non-Archimedean projective line. 84c:10024

secondary classifications:

Blanchard, André (with Mendes France, Michel) Symétrie et transcendance. (English summary) [Symmetry and transcendence] (84d:10041)

Gerritzen, L. Die Jacobi-Abbildung über dem Raum der Mumfordkurven. [The Jacobi mapping over the space of Mumford curves] (84f:14021)

Herzlich, Frank p -adisch diskontinuierlich einbettbare Graphen von Gruppen. [p -adic discontinuously embeddable graphs of groups] (84d:14013)

Hina, Tatsuo (with Sugano, Takashi) On the local Hecke series of some classical groups over p -adic fields. (84g:22027)

Karel, Martin L. Values of certain Whittaker functions on a p -adic reductive group. (84f:10033)

Mendes France, Michel See Blanchard, André, (84d:10041)

Morita, Yasuo (with Murase, Atsushi) Analytic representations of SL_2 over a p -adic number field. (84c:22019)

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Higher level Rankin p -adic L -functions. (Russian) (84d:12014)

Piatetski-Shapiro, Ilya Iosifovitch (with Soudry, David) L and ϵ factors for $GSp(4)$. (84m:22029)

Soudry, David See Piatetski-Shapiro, Ilya Iosifovitch, (84m:22029)

Sugano, Takashi See Hina, Tatsuo, (84g:22027)

Van Steen, Guido Non-Archimedean Schottky groups and hyperelliptic curves. (84h:14030)

10D35 Galois properties

Koike, Masao A note on modular forms mod p . 84g:10057

secondary classifications:

Rapoport, M. (with Zink, Thomas) Über die lokale Zetafunktion von Shimuravarietäten. Monodromiefiltration und verschwindende Zyklen in ungleicher Charakteristik. [On the local zeta function of Shimura varieties. Monodromy filtration and vanishing cycles in unequal characteristic] (84i:14016)

Zink, Thomas See Rapoport, M., (84i:14016)

10D40 Representation-theoretic methods, trace formulas

Arakawa, Tsuneo On automorphic forms of a quaternion unitary group of degree two. 84c:10030

Arthur, James The trace formula in invariant form. 84c:10031

Flicker, Yuval Z. ★ The trace formula and base change for $GL(3)$. 84d:10035

Howe, Roger (with Piatetski-Shapiro, Ilya Iosifovitch) Some examples of automorphic forms on Sp_n . 84m:10019

Moreno, Carlos J. The spectral decomposition of a product of automorphic forms. 84c:10022

Piatetski-Shapiro, Ilya Iosifovitch Cuspidal automorphic representations associated to parabolic subgroups and Ramanujan conjecture. (See 84c:10004)

On the Saito-Kurokawa lifting. 84c:10038

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Proskurin, N. V. Expansion of automorphic functions. (Russian) 84f:10039

Rallis, Stephen Langlands' functoriality and the Weil representation. 84c:10025

Vignéras, Marie-France $\lambda_1 \geq 1/4$. (French) (See 84c:10004)

secondary classifications:

Arthur, James Automorphic representations and number theory. (84c:12012)

Colin de Verdière, Yves Pseudo-laplaciens. I. (English summary) [Pseudo-Laplacians. I] (84c:58221)

Pseudo-laplaciens. II. [Pseudo-Laplacians. II] (84c:58222)

DeGeorge, David Lee On a theorem of Osborne and Warner. Multiplicities in the cuspidal spectrum. (84h:22027)

Drinfel'd, V. G. Two-dimensional l -adic representations of the fundamental group of a curve over a finite field and automorphic forms on $GL(2)$. (84i:12011)

Flicker, Yuval Z. Outer automorphisms and instability: the adjoint lifting from $SL(2)$ to $PGL(3)$. (See 84b:10005)

Stable and labile base change for $U(2)$. (84i:22016)

Frenkel, I. B. Representations of affine Lie algebras, Hecke modular forms and Korteweg-de Vries type equations. (84f:17006)

Gelbart, S. (with Piatetski-Shapiro, Ilya Iosifovitch) Some remarks on metaplectic cusp forms and the correspondences of Shimura and Waldspurger. (84g:10054)

Harris, Michael (with Jakobsen, Hans Plesner) Singular holomorphic representations and singular modular forms. (84b:22023)

Henniart, Guy Les conjectures de Langlands locales pour $GL(n)$. (English summary) [The local Langlands conjectures for $GL(n)$] (See 84d:10005)

Hiramatsu, Toyokazu On automorphic forms of weight one. III. The Selberg eigenspace for discontinuous groups of finite type. (84m:10016b)

Igusa, Jun-ichi Some observations on metaplectic groups. (84c:22015)

Jakobsen, Hans Plesner See Harris, Michael, (84b:22023)

Kalinin, V. L. Trace formula for Hecke operators. (Russian) (84d:10030)

Kirillov, A. A. See Lion, Gérard; et al., (84m:58145)

Lachaud, Gilles Scattering theory and automorphic functions. (See 84j:81006)

Lion, Gérard (with Vergne, Michèle) ★ Представление Вейля, индекс Маслова и θ -ряды. (Russian) [The Weil representation, Maslov index and theta series] (84m:58145)

Marbes, Heinz On the spectra of compact locally symmetric Riemannian manifolds. (84d:22025)

On the spectra of $\Gamma \backslash SL(2, \mathbb{R})/SO(2)$ and $\Gamma \backslash SL(2, \mathbb{C})/SU(2)$. (84d:22026)

Monasse, Denis Théorie de Hecke pour $GL(3)$. [Hecke theory for $GL(3)$] (84h:10038)

Morris, L. E. Eisenstein series for reductive groups over global function fields. I. The cusp form case. (84j:22024a)

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Piatetski-Shapiro, Ilya Iosifovitch (with Soudry, David) L and ϵ factors for $GSp(4)$. (84m:22029)

★ Complex representations of $GL(2, K)$ for finite fields K . (84m:20046)

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Rapoport, M. (with Zink, Thomas) Über die lokale Zetafunktion von Shimuravarietäten. Monodromiefiltration und verschwindende Zyklen in ungleicher Charakteristik. [On the local zeta function of Shimura varieties. Monodromy filtration and vanishing cycles in unequal characteristic] (84i:14016)

Rogawski, Jonathan D. Representations of $GL(n)$ and division algebras over a p -adic field. (84j:12018)

Ryavec, C. A nonlinear interpolation formula. (84c:10023)

Soudry, David See **Piatetski-Shapiro, Ilya Iosifovitch**, (84m:22029)

Terras, Audrey Analysis on positive matrices as it might have occurred to Fourier. (84b:22025)

Vergne, Michèle See **Lion, Gérard**, (84m:58145)

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Conference:

Automorphic theory ★ Journées automorphes. (French) [Conference on automorphic theory] (84j:22001)

Dijon ★ Journées automorphes. (French) [Conference on automorphic theory] (84j:22001)

10D45 Uniformization, periods and cohomology

Ash, Avner On the top Betti number of subgroups of $SL(n, \mathbb{Z})$. (84c:10023)

Hatada, Kazuyuki On the rationality of periods of primitive forms. (84c:10024)

Shimura, Goro The periods of certain automorphic forms of arithmetic type. (84f:10040)

secondary classifications:

Borovoi, M. V. The Hodge group and the algebra of endomorphisms of an abelian variety. (Russian) (84m:14047)

Kra, Irwin On the vanishing of Poincaré series of rational functions. (84j:10029)

Ribet, Kenneth A. Mod p Hecke operators and congruences between modular forms. (84j:10040)

10D99 None of the above, but in this section

secondary classifications:

Krätzel, Ekkehard Dedekindsche Funktionen und Summen. I. [Dedekind functions and sums. I] (84d:10010)

10Exx Geometry of numbers

10E05 Lattices and convex bodies [See also 10J25.]

Abbott, H. L. (with Katchalski, Meir) On a set of lattice points not containing the vertices of a square. (84b:10044)

Conway, John Horton (with Sloane, N. J. A.) Lorentzian forms for the Leech lattice. (84d:10036)

(with Sloane, N. J. A.) The unimodular lattices of dimension up to 23 and the Minkowski-Siegel mass constants. (84b:10045)

(with Sloane, N. J. A.) Twenty-three constructions for the Leech lattice. (84m:10020)

(with Sloane, N. J. A.) The Coxeter-Todd lattice, the Mitchell group, and related sphere packings. (84i:10032)

Katchalski, Meir See **Abbott, H. L.**, (84b:10044)

Mimura, Yoshio On 2-lattices in a Hermitian space. (84c:10026)

Sloane, N. J. A. See **Conway, John Horton**, (84b:10045); (84d:10036); (84i:10032) and (84m:10020)

Venkov, B. B. Even unimodular Euclidean lattices of dimension 32. (Russian) (84g:10058)

Zhu, Yao Chen A note on Lekkerkerker's theorem concerning lattices. (Chinese) (84c:10040)

secondary classifications:

Bambah, R. P. (with Sloane, N. J. A.) On a problem of Ryskov concerning lattice coverings. (84b:52018)

Beck, József Irregularities of two-colourings of the $N \times N$ square lattice. (84m:10049)

Chaba, A. N. See **de Freitas, U.**, (84j:10058)

Conway, John Horton (with Sloane, N. J. A.) On the enumeration of lattices of determinant one. (84b:10047)

de Freitas, U. (with Chaba, A. N.) The Walfisz-like formula from Poisson's summation formula and some applications. (84j:10058)

Hensley, Douglas Lattice vertex polytopes with interior lattice points. (84c:52016)

Iyanaga, Kenichi Cusps associated to lattices in Hermitian vector spaces of dimension 2. (84j:10048)

Quebbemann, Heinz-Georg Gitter ohne Automorphismen der Determinante -1 . (English summary) [Lattices without automorphisms of determinant -1] (84i:10021)

Sloane, N. J. A. See **Conway, John Horton**, (84b:10047) and **Bambah, R. P.**, (84b:52018)

10E10 Nonconvex bodies

10E15 Products of linear forms

Skubenko, B. F. The product of n linear forms in n variables. (Russian) (84k:10025)

secondary classifications:

Mukhsinov, Kh. Kh. On the inhomogeneous Minkowski conjecture. (Russian) (84m:10021)

10E20 Minima of forms [See also 10C25.]

Baker, R. C. (with Harman, Glyn) Small fractional parts of quadratic forms. (84b:10046)

Harman, Glyn See **Baker, R. C.**, (84b:10046)

Mukhsinov, Kh. Kh. On the inhomogeneous Minkowski conjecture. (Russian) (84m:10021)

Tanimura, Yosikatu Non-Euclidean point in field $\mathbb{Q}(\sqrt{97})$. (84j:10043)

secondary classifications:

Nicholls, Peter J. The minima of indefinite binary quadratic forms. (84i:10026)

10E25 Quadratic forms (reduction, extreme forms, etc.) [See also 10C05.]

Afflerbach, Lothar Minkowskische Reduktionsbedingungen für positiv definite quadratische Formen in 5 Variablen. (English summary) [Minkowski's reduction conditions for positive definite quadratic forms in 5 variables] (84a:10032)

Conway, John Horton (with Sloane, N. J. A.) On the enumeration of lattices of determinant one. (84b:10047)

Erdahl, Robert M. See **Ryshkov, S. S.**, (84c:10027)

Monson, B. R. Simplicial quadratic forms. (84d:10037)

Pandu Rangan, C. On the minimum number of additions required to compute a quadratic form. (84i:10033)

Ryshkov, S. S. (with Erdahl, Robert M.) Geometry of integral roots of some quadratic equations with several unknowns. (Russian) (84c:10027)

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secondary classifications:

Conway, John Horton (with Sloane, N. J. A.) Lorentzian forms for the Leech lattice. (84d:10036)

Schulze-Pillot, Rainer Remark on a note of Hsia about classification of unimodular lattices. (84g:10044)

Sloane, N. J. A. See **Conway, John Horton**, (84d:10036)

Venkov, B. B. Even unimodular Euclidean lattices of dimension 32. (Russian) (84g:10058)

10E30 Lattice packing and covering [See also 05B40, 52A45.]

Conway, John Horton (with Parker, R. A.; Sloane, N. J. A.) The covering radius of the Leech lattice. (84m:10022b)

Lepowsky, James (with Meurman, Arne) An E_7 -approach to the Leech lattice and the Conway group. (84c:10033)

Meurman, Arne See **Lepowsky, James**, (84c:10033)

Norton, S. A bound for the covering radius of the Leech lattice. (84m:10022a)

Odlyzko, Andrew M. (with Sloane, N. J. A.) A theta-function identity for nonlattice packings. (84c:10039)

Parker, R. A. See **Conway, John Horton**; et al., (84m:10022b)

Sloane, N. J. A. See **Odlyzko, Andrew M.**, (84c:10039) and **Conway, John Horton**; et al., (84m:10022b)

Tasaka, Takashi On even lattices of 2-square type and self-dual codes. (84g:10059)

secondary classifications:

Baranovskii, E. P. (with Ryshkov, S. S.; Shushbaev, S. Sh.) A geometric estimate of the number of representations of a real number by a positive quadratic form and an estimate of the remainder term of the multidimensional zeta function. (Russian) (84j:10021)

Barnes, E. S. (with Sloane, N. J. A.) New lattice packings of spheres. (84f:52010)

Conway, John Horton (with Sloane, N. J. A.) The Coxeter-Todd lattice, the Mitchell group, and related sphere packings. (84i:10032)

Griggs, Jerrold R. (with Lagarias, Jeffrey C.; Odlyzko, Andrew M.; Shearer, James B.) On the tightest packing of sums of vectors. (84m:52021)

Lagarias, Jeffrey C. See **Griggs, Jerrold R.**; et al., (84m:52021)

Odlyzko, Andrew M. See **Griggs, Jerrold R.**; et al., (84m:52021)

Ryshkov, S. S. See **Baranovskii, E. P.**; et al., (84j:10021)

Shearer, James B. See **Griggs, Jerrold R.**; et al., (84m:52021)

Shushbaev, S. Sh. See **Baranovskii, E. P.**; et al., (84j:10021)

Sloane, N. J. A. See **Barnes, E. S.**, (84f:52010) and **Conway, John Horton**, (84i:10032)

Szabó, Sándor Rational lattice tilings of n -dimensional Euclidean space by crosses. (84c:52022)

Rational tilings by n -dimensional crosses. (84c:05034)

10E35 Mean value theorems

10E40 Transfer theorems

10E45 Automorphism groups of lattices [See also 10C30.]

Conway, John Horton (with Sloane, N. J. A.) Leech roots and Vinberg groups. (84b:10048)

Erokhin, V. A. Groups of automorphisms of 24-dimensional even unimodular lattices. (Russian) (84f:10041)

Sloane, N. J. A. See **Conway, John Horton**, (84b:10048)

secondary classifications:

Conway, John Horton (with Sloane, N. J. A.) On the enumeration of lattices of determinant one. (84b:10047)

Kneser, Martin Einheitengruppen indefiniter quadratischer Formen. [Groups of units of indefinite quadratic forms] (84g:10049)

Nikulin, V. V. Involutions of integer quadratic forms and their applications to real algebraic geometry. (Russian) (84b:10032)

Sloane, N. J. A. See Conway, John Horton, (84b:10047)

Vorontsov, S. P. Automorphisms of even lattices arising in connection with automorphisms of algebraic $K3$ -surfaces. (Russian. English summary) (84g:14038)

10E99 None of the above, but in this section

Aizenberg, L. A. Application of multidimensional logarithmic residue for representation in the form of the integral of the difference between the number of integer points in a domain and its volume. (Russian) (84j:10044)

secondary classifications:

Richmond, L. B. (with Wormald, Nicholas C.) The asymptotic number of convex polyhedra. (84d:52010)

Wormald, Nicholas C. See Richmond, L. B., (84d:52010)

Yu, Jing Irrationality of lattices in finite characteristic. (84g:12019)

10Fxx Diophantine approximation [See also 10K15.]

(Chirskii, V. G.) See Schmidt, Wolfgang M., (84d:10038)

Schmidt, Wolfgang M. ★Диофантовы приближения. (Russian) [Diophantine approximation] (84d:10038)

Shidlovskii, A. B. ★Диофантовы приближения и трансцендентные числа. (Russian) [Diophantine approximations and transcendental numbers] (84f:10042)

See also Schmidt, Wolfgang M., (84d:10038)

secondary classifications:

(Bertrand, Daniel) See Diophantine approximations and transcendental numbers. (84e:10003)

(Waldschmidt, Michel) See Diophantine approximations and transcendental numbers. (84e:10003)

Approximations diophantiennes et nombres transcendants ★Approximations diophantiennes et nombres transcendants. (French) [Diophantine approximations and transcendental numbers] (84e:10003)

Colloquium:

Diophantine Problems ★Approximations diophantiennes et nombres transcendants. (French) [Diophantine approximations and transcendental numbers] (84e:10003)

Diophantine approximations and transcendental numbers ★Approximations diophantiennes et nombres transcendants. (French) [Diophantine approximations and transcendental numbers] (84e:10003)

Laminy ★Approximations diophantiennes et nombres transcendants. (French) [Diophantine approximations and transcendental numbers] (84e:10003)

10F05 Approximation to one number

Tonolli, Antonella (with Zauli Potenza, Luisa) A method for approximating rational numbers. (Italian. English summary) (84e:10041)

Zauli Potenza, Luisa See Tonolli, Antonella, (84e:10041)

secondary classifications:

Kak, Subhash C. Strings of first digits of powers of a number. (84k:10028)

Li, Fu Zhong A generalization of the Hurwitz theorem. (Chinese. English summary) (84d:10040)

Novikova, L. V. An infinite-dimensional analogue of Siegel's theorem. (Russian) (84e:58057)

Parasyuk, I. O. Conservation of quasiperiodic motions of reversible multifrequency systems. (Russian. English summary) (84e:34055)

Sullivan, Dennis Disjoint spheres, approximation by imaginary quadratic numbers, and the logarithm law for geodesics. (84j:58097)

Verhezen, Steven Approximating transcendental numbers. (84e:10002)

10F10 Simultaneous approximation

Baker, R. C. On the fractional parts of $an^3, \beta n^2$ and γn . (84h:10042)

Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Rational approximations to solutions of linear differential equations. (84k:10026)

Chudnovsky, Gregory V. See Chudnovsky, D. V., (84k:10026)

Cusick, T. W. The two-dimensional Diophantine approximation constant. II. (84g:10060)

Dubois, Eugène Algorithme d'approximation diophantienne. (English summary)

[Algorithm for Diophantine approximation] (84h:10043)

Hlawka, Edmund Lineare Differenzengleichungen in mehreren Variablen. [Linear difference equations of several variables] (84f:10043)

Lagarias, Jeffrey C. Best simultaneous Diophantine approximations. II. Behavior of consecutive best approximations. (84d:10039b)

Best simultaneous Diophantine approximations. I. Growth rates of best approximation denominators. (84d:10039a)

Best Diophantine approximations to a set of linear forms. (84e:10040)

Rhin, Georges Sur l'approximation diophantienne simultanée de deux logarithmes de nombres rationnels. [On the simultaneous Diophantine approximation of two logarithms of rational numbers] (84h:10044)

Saradha, K. Simultaneous approximation over a field of finite transcendence type. (84h:10045)

Simultaneous approximation of e^t and $\wp(t)$. (84h:10049)

Schmidt, Wolfgang M. Diophantine approximation properties of certain infinite sets. (84g:10061)

Skubenko, B. F. On simultaneous approximations of algebraic irrationalities. (Russian) (84g:10062)

Simultaneous approximations of cubic irrationalities by rational numbers. (Russian) (84k:10027)

Thurber, Peter Eine Verschärfung des Satzes von Dirichlet über diophantische Approximation. [A sharpening of Dirichlet's theorem on Diophantine approximation] (84b:10050)

Wang, Yuan (with Yu, Kun Rui) A note on some metrical theorems in Diophantine approximation. (Chinese summary) (84f:10044)

Yu, Kun Rui See Wang, Yuan, (84f:10044)

secondary classifications:

Ferguson, Helaman R. P. (with Forcade, Rodney W.) Multidimensional Euclidean algorithms. (84d:10015)

Forcade, Rodney W. See Ferguson, Helaman R. P., (84d:10015)

Pisot, Charles Développement en algorithme de Jacobi de certains couples d'irrationnelles. [Expansion of certain pairs of irrational numbers via the Jacobi algorithm] (84g:10063)

Srinivasan, Seshadri On algebraic approximations to 2^{2^k} ($k=1, 2, 3, \dots$). II. (84c:10029)

Stewart, C. L. On some Diophantine equations and related linear recurrence sequences. (See 84b:10005)

Xu, Guang Shan A note on linear forms in a class of E -functions and G -functions. (84g:10034)

10F15 Nonhomogeneous approximation

secondary classifications:

Baker, R. C. (with Harman, Glyn) Diophantine approximation by prime numbers. (84g:10067)

Harman, Glyn See Baker, R. C., (84g:10067)

10F20 Continued fractions and generalizations [See also 10A32, 10K10.]

Almici, Kamil On U_n -numbers. (84a:10034)

Kak, Subhash C. Strings of first digits of powers of a number. (84k:10028)

Li, Fu Zhong A generalization of the Hurwitz theorem. (Chinese. English summary) (84d:10040)

Pisot, Charles Développement en algorithme de Jacobi de certains couples d'irrationnelles. [Expansion of certain pairs of irrational numbers via the Jacobi algorithm] (84g:10063)

Shallit, J. O. Simple continued fractions for some irrational numbers. II. (84a:10035)

secondary classifications:

Alemu, Yismaw On continued fractions in local fields. (84g:10066)

Blanchard, André (with Mendès France, Michel) Symétrie et transcendance. (English summary) [Symmetry and transcendence] (84d:10041)

Coquet, Jean Répartition de la somme des chiffres associée à une fraction continue. (English summary) [Distribution of the sum of digits associated with a continued fraction] (84e:10060)

Dubois, Eugène Algorithme d'approximation diophantienne. (English summary) [Algorithm for Diophantine approximation] (84h:10043)

Gonchar, A. A. (with Rakhmanov, E. A.) On the convergence of simultaneous Padé approximants for systems of functions of Markov type. (Russian) (84d:41028)

Lagarias, Jeffrey C. Best simultaneous Diophantine approximations. II. Behavior of consecutive best approximations. (84d:10039b)

Best simultaneous Diophantine approximations. I. Growth rates of best approximation denominators. (84d:10039a)

van de Lune, J. (with de Riele, H. J. J.) Numerical computation of special zeros of partial sums of Riemann's zeta function. (84h:10058)

McCabe, J. H. The quotient-difference algorithm and the Padé table: an alternative form and a general continued fraction. (84k:30008)

Mendès France, Michel See Blanchard, André, (84d:10041)

Moeckel, Richard Geodesics on modular surfaces and continued fractions. (84k:58176)

Perelli, Alberto (with Zannier, Umberto) On the parity of $\{n\sqrt{2}\}$. (Italian. English summary) (84h:10070)

Rakhmanov, E. A. See Gonchar, A. A., (84d:41028)

Rhin, Georges Sur l'approximation diophantienne simultanée de deux logarithmes de nombres rationnels. [On the simultaneous Diophantine approximation of two logarithms of rational numbers] (84h:10044)

de Riele, H. J. J. See van de Lune, J., (84h:10058)

Schmidt, Asmus L. Diophantine approximation in the Eisensteinian field. (84m:10024)

Szűcs, Péter (with Volkmann, Bodo) On numbers containing each block infinitely often. (84h:10072)

Volkmann, Bodo See Szűcs, Péter, (84h:10072)

Zannier, Umberto See Perelli, Alberto, (84h:10070)

10F25 Approximation to algebraic numbers

Bombieri, Enrico (with Mueller, Julia) On effective measures of irrationality for $\sqrt[n]{a/b}$ and related numbers. (84m:10023)

Mueller, Julia See Bombieri, Enrico, (84m:10023)

secondary classifications:

Cantor, David G. (with Straus, E. G.) On a conjecture of D. H. Lehmer. (84a:12004)

Osgood, Charles F. A fully general Nevanlinna n -small function theorem and a sometimes effective Thue-Siegel-Roth-Schmidt theorem for solutions to linear differential equation. (See 84m:30003)

Rauzy, G. Nombres algébriques et substitutions. (English summary) [Algebraic numbers and substitutions] (84h:10074)

Skubenko, B. F. On simultaneous approximations of algebraic irrationalities. (Russian) (84g:10062)

Straus, E. G. See Cantor, David G., (84a:12004)

10F30 Approximation by numbers from a fixed field

Schmidt, Asmus L. Diophantine approximation in the Eisensteinian field. **84m:10024**

secondary classifications:

- Bombieri, Enrico (with Mueller, Julia) On effective measures of irrationality for $\sqrt[n]{a/b}$ and related numbers. **(84m:10023)**
 Langer, Joel (with Singer, David A.) Diffeomorphisms of the circle and geodesic fields on Riemann surfaces of genus one. **(84h:58115)**
 Mueller, Julia See Bombieri, Enrico, **(84m:10023)**
 Singer, David A. See Langer, Joel, **(84h:58115)**

10F35 Irrationality and transcendence

Allouche, Jean-Paul Somme des chiffres et transcendence. (English summary) [Sum of digits, and transcendence] **84f:10045**

Alniaçik, Kamil On Mahler's U -numbers. **84k:10029**

Bertrand, Daniel Valeurs de fonctions thêta et hauteurs p -adiques. [Values of theta functions and p -adic heights] (See **84h:10005**)

Bijlsma, Alex Algebraic points of abelian functions in two variables. (French summary) **84g:10064**

Blanchard, André (with Mendès France, Michel) Symétrie et transcendence. (English summary) [Symmetry and transcendence] **84d:10041**

Chisrskii, V. G. Estimate of a linear form in the values of some functions. (Russian. English summary) **84c:10041**

Chudnovsky, Gregory V. Measures of irrationality, transcendence and algebraic independence. Recent progress. **84h:10046**

Recurrences defining rational approximations to irrational numbers. **84b:10051**

Cohen, Henri Généralisation d'une construction de R. Apéry. [Generalization of a construction of R. Apéry] **84a:10036**

Laurent, Michel Transcendence de périodes d'intégrales elliptiques. II. [Transcendence of the periods of elliptic integrals. II] **84f:10046**

Lewin, L. The dilogarithm in algebraic fields. **84i:10035**

Lin, Feng Ch'ing Schanuel's conjecture implies Ritt's conjectures. **84j:10045**

Masser, D. W. A vanishing theorem for power series. **84f:10047**

Mendès France, Michel See Blanchard, André, **84d:10041**

Moge, Rudolf e is a transcendental number. (Slovenian) **84a:10037**

Molchanov, S. M. On the p -adic transcendence measure for the values of functions which satisfy some functional equations. (Russian. English summary) **84m:10025**

Moreau, Jean-Charles Lemmes de Schwarz en plusieurs variables et applications arithmétiques. [Schwarz lemmas in several variables and arithmetical applications] **84c:10038**

Nguyen T'en Tai Estimates for the zeros of polynomials in analytic functions and their application to estimating the relative transcendence measure of values of E -functions. (Russian) **84h:10047**

Nikishin, E. M. Arithmetic properties of the Markov function for the Jacobi weight. (Russian summary) **84b:10052**

Nishioka, Kumiko On a problem of Mahler for transcendence of function values. **84c:10028**

Nurmamedov, M. S. Lower bound for a polynomial from the values of some class of analytic functions related by algebraic equations of a special type. (Russian) **84c:10042**

Reyssat, Eric Propriétés d'indépendance algébrique de nombres liés aux fonctions de Weierstrass. [Properties of algebraic independence of numbers related to the Weierstrass functions] **84b:10053**

Shmelev, A. A. Analogue of the Brownell-Waldschmidt theorem on transcendental numbers. (Russian) **84g:10065**

Srinivasan, Seshadri On algebraic approximations to 2^{k^2} ($k=1, 2, 3, \dots$). II. **84c:10029**
 Stihl, Th. (with Wallisser, R.) Zur Irrationalität und linearen Unabhängigkeit der Werte der Lösungen einer Funktionalgleichung von Poincaré. [On irrationality and linear independence of the values of solutions for a functional equation of Poincaré] **84m:10026**

Waldschmidt, Michel Nombres transcendants: quelques résultats récents.

[Transcendental numbers: some recent results] (See **84d:10005**)

Diophantine properties of the periods of the Fermat curve. (See **84a:10004**)

Wallisser, R. See Stihl, Th., **84m:10026**

Wilker, J. B. Transcendents galore. **84d:10042**

Wüstholz, G. Nullstellenabschätzungen auf Varietäten. [Zero estimates on varieties] (See **84h:10005**)

Xu, Guang Shan A note on linear forms in a class of E -functions and G -functions. **84c:10034**

Yu, Jing Transcendental numbers arising from Drinfel'd modules. **84k:10030**

Zhu, Yao Chen On a problem of Mahler concerning the transcendence of a decimal fraction. (Chinese) **84b:10054**

secondary classifications:

Alniaçik, Kamil On U_n -numbers. **(84a:10034)**

Bertrand, Daniel Abelian functions and transcendence. (See **84c:10003**)

Beukers, F. Irrationality of π^2 , periods of an elliptic curve and $\Gamma_1(5)$. **(84j:10025)**

Bombieri, Enrico (with Mueller, Julia) On effective measures of irrationality for $\sqrt[n]{a/b}$ and related numbers. **(84m:10023)**

Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Multidimensional Hermite

interpolation and Padé approximation. **(84h:14013)**

Chudnovsky, Gregory V. See Chudnovsky, D. V., **(84h:14013)**

Demailly, Jean-Pierre Formules de Jensen en plusieurs variables et applications arithmétiques. (English summary) [Jensen formulas in several variables and arithmetic applications] **(84d:32014)**

Esnault, Hélène (with Viehweg, Eckart) Sur une minoration du degré d'hypersurfaces s -annulées en certains points. [A lower bound of the degree of hypersurfaces vanishing at certain points] **(84m:14023)**

Hoffman, Jerome William The Hodge theory of flat vector bundles on a complex torus. **(84j:32038)**

Masser, D. W. Interpolation on group varieties. **(84m:14054)**

Mimura, Yoshio Congruence properties of Apéry numbers. **(84h:10016)**

Mueller, Julia See Bombieri, Enrico, **(84m:10023)**

Saradha, K. Simultaneous approximation of e^t and $p(t)$. **(84h:10049)**

Shidlovskii, A. B. ★Диофантовы приближения и трансцендентные числа. (Russian) [Diophantine approximations and transcendental numbers] **(84f:10042)**

Viehweg, Eckart See Esnault, Hélène, **(84m:14023)**

Wollart, J. Eine arithmetische Eigenschaft automorpher Formen zu gewissen nicht-arithmetischen Gruppen. (English summary) [An arithmetic property of automorphic forms for certain nonarithmetic groups] **(84d:10031)**

Yu, Jing Irrationality of lattices in finite characteristic. **(84g:12019)**

10F37 Independence results

Bertrand, Daniel Abelian functions and transcendence. (See **84c:10003**)

Feldman, N. I. Algebraic independence of some numbers. II. **84d:10043**

Galochkin, A. I. Sur des estimations précises par rapport à la hauteur de certaines formes linéaires. [On sharp estimates with respect to the height of certain linear forms] (See **84c:10003**)

Gutnik, L. A. Linear independence over \mathbb{Q} of dilogarithms at rational points. (Russian) **84a:10039**

Masser, D. W. (with Wüstholz, G.) Algebraic independence properties of values of elliptic functions. (See **84c:10003**)

Nesterenko, Yu. V. On the algebraic independence of algebraic numbers to algebraic powers. **84m:10027**

Estimates of orders of zeros of functions of a certain class. (Russian) **84h:10048**

Philippon, Patrice Interpolation dans les espaces affines. [Interpolation in affine spaces] **84c:10031**

Sous-groupes à n paramètres et indépendance algébrique. [n -parameter subgroups and algebraic independence] (See **84c:10003**)

Shiokawa, Iekata Algebraic independence of certain gap series. **84i:10036**

Waldschmidt, Michel Groupes algébriques et indépendance linéaire. [Algebraic groups and linear independence] (See **84c:10004**)

Dépendance de logarithmes dans les groupes algébriques. [Dependence of logarithms in algebraic groups] **84c:10032**

Sous-groupes analytiques de groupes algébriques. [Analytic subgroups of algebraic groups] **84j:10046**

Wüstholz, G. See Masser, D. W., (See **84c:10003**)

secondary classifications:

Chudnovsky, Gregory V. Measures of irrationality, transcendence and algebraic independence. Recent progress. **(84h:10046)**

Girstmair, Kurt Linear dependence of zeros of polynomials and construction of primitive elements. **(84d:12008)**

Masser, D. W. A vanishing theorem for power series. **(84f:10047)**

Nguyen T'en Tai Estimates for the zeros of polynomials in analytic functions and their application to estimating the relative transcendence measure of values of E -functions. (Russian) **(84h:10047)**

Nurmamedov, M. S. Lower bound for a polynomial from the values of some class of analytic functions related by algebraic equations of a special type. (Russian) **(84c:10042)**

Oren, Ishai Ergodicity of cylinder flows arising from irregularities of distribution. **(84i:10055)**

Reich, Axel Zur Universalität und Hypertranszendenz der Dedekindschen Zetafunktion. [On the universality and hypertranscendence of the Dedekind zeta function] **(84h:12016)**

Shmelev, A. A. Analogue of the Brownell-Waldschmidt theorem on transcendental numbers. (Russian) **(84g:10065)**

Stihl, Th. (with Wallisser, R.) Zur Irrationalität und linearen Unabhängigkeit der Werte der Lösungen einer Funktionalgleichung von Poincaré. [On irrationality and linear independence of the values of solutions for a functional equation of Poincaré] **(84m:10026)**

Wallisser, R. See Stihl, Th., **(84m:10026)**

Wang, Kai On the dimensions of certain subspaces of an abelian extension field. **(84h:12008)**

10F40 Distribution modulo one [See also 10K05.]

Beukers, F. Fractional parts of powers of $3/2$. **84h:10049**

Harman, Glyn On the distribution of ap modulo one. **84d:10044**

Ostrowski, Alexander M. On the error term in multidimensional Diophantine approximation. **84c:10030**

secondary classifications:

Baker, R. C. On the fractional parts of $an^3, \beta n^2$ and γn . **(84h:10042)**

(with Harman, Glyn) Small fractional parts of quadratic forms. **(84h:10046)**

Coquet, Jean Répartition de suites polynomiales. (English summary) [Distribution of polynomial sequences] **(84h:10069)**

Harman, Glyn See Baker, R. C., **(84h:10046)**

Hlawka, Edmund Lineare Differenzengleichungen in mehreren Variablen. [Linear difference equations of several variables] **(84f:10043)**

Oren, Ishai Ergodicity of cylinder flows arising from irregularities of distribution. **(84i:10055)**

10F45 Approximation in non-Archimedean valuations

- Alemu, Yismaw On continued fractions in local fields. **84g:10066**
 Escassut, Alain Transcendence order over \mathbb{Q}_p in \mathbb{C}_p . **84j:10047**

secondary classifications:

- Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Rational approximations to solutions of linear differential equations. **(84k:10026)**
 Chudnovsky, Gregory V. See Chudnovsky, D. V., **(84k:10026)**
 Goppa, V. D. Algebraic-geometric codes. (Russian) **(84g:94011)**
 Labeyrie, Jacques Les zéros des sommes exponentielles $\sum_{i,j \leq N} a_{ij} \exp(i + aj)x$. (English summary) [The zeros of the exponential sums $\sum_{i,j \leq N} a_{ij} \exp(i + aj)x$] **(84e:12021)**
 Molchanov, S. M. On the p -adic transcendence measure for the values of functions which satisfy some functional equations. (Russian. English summary) **(84m:10025)**

10F99 None of the above, but in this section

- Baker, R. C. (with Harman, Glyn) Diophantine approximation by prime numbers. **84g:10067**
 Harman, Glyn See Baker, R. C., **84g:10067**

secondary classifications:

- Bushnell, Colin J. Diophantine approximation and norm distribution in Galois orbits. **(84c:12007)**
 Danilov, L. V. The Diophantine equation $x^2 - y^2 = k$ and a conjecture of M. Hall. (Russian) **(84c:10014)**
 Harman, Glyn Trigonometric sums over primes. II. **(84g:10069)**
 Pannikov, B. V. Convergence of Riemann sums of monotone functions and Diophantine approximations. (Russian) **(84b:26008)**

10Gxx Trigonometric sums, exponential sums and character sums

10G05 Exponential sums

- Bourgain, Jean On trigonometric sums with prime frequencies. **84c:10031**
 Evans, Ronald J. The octic periodic polynomial. **84b:10055**
 Gurak, S. Minimal polynomials for Gauss circulants and cyclotomic units. **84c:10032**
 Lehmer, D. H. (with Lehmer, Emma) Cyclotomy for nonsquarefree moduli. **84b:10050**
 (with Lehmer, Emma) Cyclotomy with short periods. **84j:10048**
 Lehmer, Emma See Lehmer, D. H., **84b:10050** and **84j:10048**
 Lin, Ts'ung Yüan On the norm of double Gaussian sums. **84b:10056**
 Proskurin, N. V. See Venkov, A. B., **84h:10051**
 Sitaramachandra Rao, R. (with Sita Ramaiah, V.) Remarks on Ramanujan's sum. **84e:10043**
 Sita Ramaiah, V. See Sitaramachandra Rao, R., **84e:10043**
 Sivaramakrishnan, R. (with Vijayan, B. K.) On certain exponential and character sums. **84b:10057**
 Stepanov, S. A. Rational trigonometric sums and Artin L -functions. (Russian) **84a:10040**
 Venkov, A. B. (with Proskurin, N. V.) Automorphic functions and the Kummer problem. (Russian) **84h:10051**
 Vijayan, B. K. See Sivaramakrishnan, R., **84b:10057**

secondary classifications:

- Agrawal, M. K. See Parnami, J. C.; et al., **(84d:10024a)** and **(84d:10024b)**
 Evans, Ronald J. Period polynomials for generalized cyclotomic periods. **(84d:12004)**
 Twenty-fourth power residue difference sets. **(84c:12024)**
 Grytczuk, Aleksandr See Redmond, Don, **(84g:10012)**
 Hooley, C. On exponential sums and certain of their applications. **(84h:10053)**
 Jagannathan, R. (with Santhanam, T. S.) On a number of theoretical problems involved in the study of the physics of spin-systems. **(84j:82097)**
 Labeyrie, Jacques Les zéros des sommes exponentielles $\sum_{i,j \leq N} a_{ij} \exp(i + aj)x$. (English summary) [The zeros of the exponential sums $\sum_{i,j \leq N} a_{ij} \exp(i + aj)x$] **(84e:12021)**
 Lehmer, D. H. (with Lehmer, Emma) Multiple sums of cyclotomic numbers. **(84m:12019)**
 Lehmer, Emma See Lehmer, D. H., **(84m:12019)**
 Parnami, J. C. (with Agrawal, M. K.; Rajwade, A. R.) On expressing \sqrt{p} as a rational linear combination of cosines of angles which are rational multiples of π . **(84d:10024a)**
 (with Agrawal, M. K.; Rajwade, A. R.) On expressing a quadratic irrational as a rational linear combination of roots of unity. **(84d:10024b)**
 Rajwade, A. R. See Parnami, J. C.; et al., **(84d:10024a)** and **(84d:10024b)**
 Redmond, Don A remark on a paper: "An identity involving Ramanujan's sum" [Elem. Math. 36 (1981), no. 1, 16-17; MR 82c:10004] by A. Grytczuk. **(84g:10012)**
 Santhanam, T. S. See Jagannathan, R., **(84j:82097)**
 Wang, Kai Ning An elementary proof of the problem of Fermat points in a convex n -gon. (Chinese) **(84j:52002)**

10G10 Estimates on exponential sums

- Deshouillers, Jean-Marc Majorations en moyenne de sommes de Kloosterman. [Upper bounds in mean of Kloosterman sums] **84g:10068**
 Glazounov, N. M. Equidistribution of values of Kloosterman sums. (Russian. English summary) **84h:10052**
 Golubeva, E. P. The relation between the sum of Salé sums and the distribution of lattice points of hyperboloids. (Russian) **84e:10044**
 Harman, Glyn Trigonometric sums over primes. II. **84g:10069**
 Hooley, C. On exponential sums and certain of their applications. **84h:10053**
 Loxton, John H. (with Smith, Robert Arnold) On Hua's estimate for exponential sums. **84c:10033**

- Moser, Ján An Ω -theorem for a short trigonometric sum. (Russian) **84c:10033**
 Parson, L. A. (with Sheingorn, Mark) Exponential sums connected with Ramanujan's function $\tau(n)$. **84f:10048**
 Pichorides, S. Une inégalité de H. Montgomery sur les sommes d'exponentielles. [An inequality of H. Montgomery on sums of exponentials] **84f:10037**
 Potekhninskaya, N. N. Multiple trigonometric sums. (Russian. English summary) **84c:10045**
 Sheingorn, Mark See Parson, L. A., **84f:10048**
 Smith, Robert Arnold See Loxton, John H., **84c:10033**

secondary classifications:

- Baker, R. C. (with Harman, Glyn) Small fractional parts of quadratic forms. **(84b:10046)**
 Deshouillers, Jean-Marc (with Iwaniec, Henryk) Kloosterman sums and Fourier coefficients of cusp forms. **(84m:10015)**
 (with Iwaniec, Henryk) An additive divisor problem. **(84h:10067)**
 Goldfeld, Dorian (with Sarnak, P.) Sums of Kloosterman sums. **(84e:10037)**
 Harman, Glyn See Baker, R. C., **(84b:10046)**
 Iwaniec, Henryk Mean values for Fourier coefficients of cusp forms and sums of Kloosterman sums. **(84h:10032)**
 See also Deshouillers, Jean-Marc, **(84b:10067)** and **(84m:10015)**
 Murty, M. Ram Oscillations of Fourier coefficients of modular forms. **(84g:10053)**
 Odlyzko, Andrew M. Minima of cosine sums and maxima of polynomials on the unit circle. **(84c:42001)**
 Pisier, Gilles Arithmetic characterizations of Sidon sets. **(84h:43015)**
 Sarnak, P. See Goldfeld, Dorian, **(84e:10037)**

10G15 Character sums

- Hudson, Richard H. (with Williams, Kenneth S.) An application of a formula of Western to the evaluation of certain Jacobsthal sums. **84a:10041**
 Williams, Kenneth S. See Hudson, Richard H., **84a:10041**

secondary classifications:

- Brattström, Gudrum Jacobi-sum Hecke characters of a totally real abelian field. **(84m:12014)**
 Hudson, Richard H. (with Williams, Kenneth S.) Extensions of theorems of Cunningham-Aigner and Hasse-Evans. **(84e:10005)**
 Nagasaka, Chiaki Eichler integrals and generalized Dedekind sums. **(84f:10032)**
 Sivaramakrishnan, R. (with Vijayan, B. K.) On certain exponential and character sums. **(84b:10057)**
 Vijayan, B. K. See Sivaramakrishnan, R., **(84b:10057)**
 Williams, Kenneth S. See Hudson, Richard H., **(84e:10005)**
 Yabuta, Kōzō A remark on the Littlewood conjecture. **(84h:42001)**

10G20 Estimates on character sums

- Hinz, Jürgen G. Character sums in algebraic number fields. **84c:10038**
 Sokolovskii, A. V. On a theorem of A. Sárközy. (Russian) **84c:10046**

secondary classifications:

- Hudson, Richard H. A note on prime k th power nonresidues. **(84g:10007)**
 Redmond, Don A generalization of a theorem of Ayoub and Chowla. **(84j:10054a)**
 Corrections and additions to: "A generalization of a theorem of Ayoub and Chowla". **(84j:10054b)**

10G99 None of the above, but in this section

secondary classifications:

- Berndt, Bruce C. An arithmetic Poisson formula. **(84m:10035)**

10Hxx Multiplicative theory

secondary classifications:

- Erdős, Paul Some new problems and results in number theory. **(84g:10002)**

10H05 Riemann's zeta function, functional equation

- Balakrishnan, U. On the mean value of $\zeta^{2k}(s)$ on the critical line. **84c:10034**
 Conrey, J. Brian Zeros of derivatives of Riemann's ξ -function on the critical line. **84g:10070**
 Deshouillers, Jean-Marc (with Iwaniec, Henryk) Power mean values of the Riemann zeta function. **84f:10049**
 Fujii, Akio The zeros of the Riemann zeta function and Gibbs's phenomenon. **84h:10034**
 Georghiou, Costas (with Philippou, Andreas N.) Harmonic sums and the zeta function. **84f:10050**
 Heath-Brown, D. R. The Riemann zeta function. (See **84c:10003**)
 Ivić, Aleksandar Exponent pairs and the zeta function of Riemann. **84c:10035**
 Iwaniec, Henryk See Deshouillers, Jean-Marc, **84f:10049**
 Jutila, Matti Riemann's zeta function and the divisor problem. **84m:10028**
 On the value distribution of the zeta function on the critical line. **84j:10049**
 Kaur, A. See Verma, D. P., **84g:10073** and **84c:10042**
 Klemm, Heinz-Jürgen ★Asymptotische Entwicklungen für kanonische Weierstraßprodukte und Riemanns Überlegungen zur Nullstellenanzahl der Zetafunktion. (German) [Asymptotic expansions for canonical Weierstrass products and Riemann's reflections on the number of zeros of the zeta function] **84a:10042**
 Knowles, Ian Eigenvalue problems and the Riemann zeta function. (See **84b:34002**)

- Koebe, J. A note on $\zeta'(0)$. **84f:10051**
- Montgomery, Hugh L. On a question of Ramachandra. **84h:10054**
- Moser, Jan On a self-correlated sum in the theory of the Riemann zeta function. (Russian. English and Slovak summaries) **84g:10071**
- On an integral in the theory of the Riemann zeta function. (Russian. English and Slovak summaries) **84i:10039**
- On the roots of the equation $Z'(t)=0$. (Russian) **84i:10040**
- On a quasiorthogonal system of vectors in the theory of the Riemann zeta function. (Russian. English and Slovak summaries) **84g:10072**
- New consequences of the Riemann-Siegel formula. (Russian) **84c:10036**
- Small value of the modulus of the Riemann zeta function. (Russian. English and Slovak summaries) **84d:10045**
- Mueller, Julia On the Riemann zeta function $\zeta(s)$ -gaps between sign changes of $S(t)$. **84i:10052**
- Arithmetic equivalent of essential simplicity of zeta zeros. **84h:10055**
- Philippou, Andreas N. See Georgiou, Costas. **84f:10050**
- Ramachandra, K. Some current problems in multiplicative number theory. **84i:10041**
- Toyozumi, Masao Correction to: "Ramanujan's formulae for certain Dirichlet series" [Comment. Math. Univ. St. Paul. **30** (1981), no. 2, 149–173; MR 83c:10058]. **84h:10058**
- Verma, D. P. (with Kaur, A.) Zero-free regions of derivatives of Riemann zeta function. **84i:10042**
- (with Kaur, A.) Asymptotic estimation of some alternating series of Riemann zeta function. **84g:10073**
- Wolke, Dieter On the explicit formula of Riemann-von Mangoldt. **84h:10059**
- Zhang, Nan Yue On the Stieltjes constants of the zeta function. (Chinese. English summary) **84h:10056**
- A representation of the Riemann zeta function. (Chinese) **84c:10037**
- Ramanujan's formulas and the values of the Riemann zeta function at odd positive integers. (Chinese) **84g:10074**

secondary classifications:

- Brent, R. P. (with van de Lune, J.; te Riele, H. J. J.; Winter, D. T.) The first 200,000,001 zeros of Riemann's zeta function. (**84h:10003**)
- Cohen, Henri Généralisation d'une construction de R. Apéry. [Generalization of a construction of R. Apéry] (**84a:10036**)
- Ehrenpreis, Leon (with Kawai, Takahiro) Poisson's summation formula and Hamburger's theorem. (**84h:46049**)
- Fujii, Akio On the uniformity of the distribution of the zeros of the Riemann zeta function. II. (**84j:10060**)
- Ivić, Aleksandar Large values of the error term in the divisor problem. (**84i:10046**)
- Kawai, Takahiro See Ehrenpreis, Leon. (**84h:46049**)
- Kölbig, K. S. On the integral $\int_0^{2\pi} \log^2 \cos x \log^2 \sin x dx$. (**84d:33004**)
- Kulkarni, Ravi S. Surface-symmetries, holomorphic maps, and tessellations. (See **84d:53002**)
- van de Lune, J. (with te Riele, H. J. J.; Winter, D. T.) ★Rigorous high speed separation of zeros of Riemann's zeta function. (**84f:10004**)
- See also Brent, R. P.; et al. (**84h:10003**)
- Nagasaka, Chiaki Eichler integrals and generalized Dedekind sums. (**84f:10032**)
- Ramachandra, K. Progress towards a conjecture on the mean-value of Titchmarsh series. II. (**84c:10047b**)
- Progress towards a conjecture on the mean-value of Titchmarsh series. II. (**84c:10047b**)
- te Riele, H. J. J. See van de Lune, J.; et al. (**84f:10004**) and Brent, R. P.; et al. (**84h:10003**)
- Winter, D. T. See van de Lune, J.; et al. (**84f:10004**) and Brent, R. P.; et al. (**84h:10003**)

10H08 Dirichlet L -function, functional equation

- Bagchi, Bhaskar A joint universality theorem for Dirichlet L -functions. **84c:10038**
- Heath-Brown, D. R. Prime twins and Siegel zeros. **84m:10029**
- Matsumoto, Kohji The mean square of Dirichlet L -functions. **84f:10053**
- Meurman, Tom On the zeros of the Dirichlet L -functions near the critical line. **84h:10057**
- Perelli, Alberto General L -functions. **84c:10039**
- Stankus, E. The mean value of $L(1/2, \chi_d)$ for $d \equiv 1 \pmod{D}$. (Russian. English and Lithuanian summaries) **84m:10030**
- Takhtadzhyan, L. A. See Vinogradov, A. I. **84a:10043**
- Turganaliyev, R. T. Asymptotic formula for the integral of the modulus of a Dirichlet L -function. (Russian. Kazakh summary) **84m:10031**
- Vinogradov, A. I. (with Takhtadzhyan, L. A.) Estimation of the residue of the Rankin L -series. (Russian) **84a:10043**
- Wang, Kai A proof of an identity of the Dirichlet L -function. **84c:10040**

secondary classifications:

- Srinivasan, Bhama Characters of finite groups: some uses and mathematical applications. (**84d:20013**)
- Toyozumi, Masao Correction to: "Ramanujan's formulae for certain Dirichlet series" [Comment. Math. Univ. St. Paul. **30** (1981), no. 2, 149–173; MR 83c:10058]. (**84h:10058**)
- 10H10 Other zeta functions [For local and global ground fields, see 12A70, 12A80, 12B30, 12B35; for algebro-geometric methods, see 14G10; see also 10C15, 10D40.]
- Braune, Erhard On a sum connected with the Hurwitz zeta function. **84h:10060**
- van de Lune, J. (with te Riele, H. J. J.) Numerical computation of special zeros of partial sums of Riemann's zeta function. **84h:10058**

- Matsuoka, Yasushi On the values of a certain Dirichlet series at rational integers. **84d:10046**
- Mauchaire, J.-L. (with Murata, Leo) On q -additive functions. I. **84j:10050**
- Murata, Leo See Mauchaire, J.-L. **84j:10050**
- Ramachandra, K. Progress towards a conjecture on the mean-value of Titchmarsh series. **84c:10047a**
- Progress towards a conjecture on the mean-value of Titchmarsh series. II. **84c:10047b**
- Redmond, Don Explicit formulae for a class of Dirichlet series. **84c:10048**
- te Riele, H. J. J. See van de Lune, J. **84h:10058**
- Walker, Peter L. On certain Dirichlet series whose coefficients are related to class numbers. **84f:10054**

secondary classifications:

- Berndt, Bruce C. Chapter 8 of Ramanujan's second notebook. (**84g:01080**)
- Cassou-Nogues, Pierrette Séries de Dirichlet. [Dirichlet series] (See **84d:10005**)
- Chinburg, T. Stark's conjecture for L -functions with first-order zeroes at $s=0$. (**84g:12016**)
- Fujii, Akio The zeros of the Riemann zeta function and Gibbs's phenomenon. (**84h:10034**)
- Goldfeld, Dorian (with Viola, C.) Some conjectures on elliptic curves over cyclotomic fields. (**84h:12018**)
- Good, Anton The square mean of Dirichlet series associated with cusp forms. (**84f:10036**)
- Hina, Tatsuo (with Sugano, Takashi) On the local Hecke series of some classical groups over p -adic fields. (**84g:22027**)
- Kurihara, Akira On the values at nonpositive integers of Siegel's zeta functions of Q -anisotropic quadratic forms with signature $(1, n-1)$. (**84a:10021**)
- Müller, Helmut Über eine Klasse modifizierter ζ - und L -Funktionen. [On a class of modified ζ - and L -functions] (**84d:10051**)
- Naito, Hirotada The p -adic Hurwitz L -functions. (**84d:12013**)
- Perelli, Alberto General L -functions. (**84c:10039**)
- Redmond, Don A generalization of a theorem of Ayoub and Chowla. (**84j:10054a**)
- Corrections and additions to: "A generalization of a theorem of Ayoub and Chowla". (**84j:10054b**)
- Rosen, Kenneth H. (with Snyder, William M.) A Kummer congruence for the Hurwitz-Herglotz function. (**84m:10018**)
- Sato, Fumihito Zeta functions in several variables associated with prehomogeneous vector spaces. III. Eisenstein series for indefinite quadratic forms. (**84c:12015c**)
- Zeta functions in several variables associated with prehomogeneous vector spaces. I. Functional equations. (**84c:12015a**)
- Zeta functions in several variables associated with prehomogeneous vector spaces. II. A convergence criterion. (**84c:12015b**)
- Szezech, Robert ★Zur Summation von L -Reihen. (German) [On the summation of L -series] (**84m:12015**)
- Snyder, William M. See Rosen, Kenneth H. (**84m:10018**)
- Sugano, Takashi See Hina, Tatsuo. (**84g:22027**)
- Toyozumi, Masao Correction to: "Ramanujan's formulae for certain Dirichlet series" [Comment. Math. Univ. St. Paul. **30** (1981), no. 2, 149–173; MR 83c:10058]. (**84h:10058**)
- Venkov, A. B. Artin-Takagi formula for the Selberg zeta function and the Roelcke hypothesis. (Russian) (**84h:10042**)
- Viola, C. See Goldfeld, Dorian. (**84h:12018**)
- Voros, André Zeta functions of the quartic (and homogeneous anharmonic) oscillators. (**84i:81027**)

10H15 Distribution of primes and of integers with specified multiplicative properties

- Balog, Antal Numbers with a large prime factor. **84c:10049**
- Diamond, Harold G. (with McCurley, Kevin S.) Constructive elementary estimates for $M(x)$. **84h:10061**
- Elliott, P. D. T. A. Representing integers as products of integers of a specified type. (See **84c:10004**)
- Fouvry, Étienne (with Iwaniec, Henryk) Primes in arithmetic progressions. **84h:10035**
- Harman, Glyn Primes in short intervals. **84f:10055**
- Heath-Brown, D. R. Prime numbers in short intervals and a generalized Vaughan identity. **84g:10075**
- Primes in "almost all" short intervals. **84h:10062**
- Iwaniec, Henryk See Fouvry, Étienne. **84h:10035**
- Korevaar, J. On Newman's quick way to the prime number theorem. **84h:10063**
- Leitmann, Dieter Durchschnitt von Pjateckij-Shapiro-Folgen. (English summary) [Intersections of Pjateckij-Shapiro sequences] **84d:10047**
- Lucht, Lutz (with Tüttas, Friedemann) Aufeinanderfolgende Elemente in multiplikativen Zahlenmengen. (English summary) [Successive elements in multiplicative number sets] **84i:10043**
- McCurley, Kevin S. See Diamond, Harold G. **84h:10061**
- Meyer, Jacques Représentation multiplicative des entiers et fonctions multiplicatives. [Multiplicative representation of integers and multiplicative functions] (See **84c:10004**)
- Orazov, M. On Wirsing semigroups. (Russian) **84i:10044**
- Perelli, Alberto (with Salerno, S.) On an average of primes in short intervals. **84h:10064**
- Pintz, J. On the remainder term of the prime number formula. III. Sign changes of $\pi(x) - \text{li } x$. **84j:10051c**
- On the remainder term of the prime number formula. IV. Sign changes of $\pi(x) - \text{li } x$. **84j:10051d**
- On the remainder term of the prime number formula. I. On a problem of Littlewood. **84j:10051a**
- On the remainder term of the prime number formula. II. On a theorem of Ingham. **84j:10051b**

On the remainder term of the prime number formula. V. Effective mean value theorems. **84j:10051e**

On the remainder term of the prime number formula. VI. Ineffective mean value theorems. **84j:10051f**

On primes in short intervals. I. **84m:10032**

Salerno, S. See Perelli, Alberto, **84b:10064**

Shao, Pin Cong A note on some properties of the arithmetic functions $\omega(n)$ and $\Omega(n)$. (Chinese) **84i:10056**

Tuttas, Friedemann See Lucht, Lutz, **84i:10043**

Vaughan, R. C. Identities in prime number theory. (See **84c:10004**)

Wagstaff, Samuel S., Jr. Divisors of Mersenne numbers. **84j:10052**

Wiertelak, Kazimierz On the density of some sets of primes. III. **84i:10045**

secondary classifications:

Aidarova, L. K. An equation involving prime numbers. (Russian) **(84d:10052)**

Bourgain, Jean On trigonometric sums with prime frequencies. **(84c:10031)**

Couvreur, C. (with Quisquater, J. J.) An introduction to fast generation of large prime numbers. **(84m:1001a)**

(with Quisquater, J. J.) Errata to: "An introduction to fast generation of large prime numbers". **(84m:10001b)**

Erdős, Paul (with Sárközy, A.) Some asymptotic formulas on generalized divisor functions. IV. **(84m:10038c)**

(with Sárközy, A.) Some asymptotic formulas on generalized divisor functions. III. **(84m:10038b)**

(with Sárközy, A.) Some asymptotic formulas on generalized divisor functions. II. **(84m:10038a)**

Friedlander, John B. Sifting short intervals. II. **(84i:10051)**

Heath-Brown, D. R. Sieve identities and gaps between primes. (See **84d:10005**)

Krishnaiah, P. V. See Sitaramachandra Rao, R., **(84c:10044)**

Mueller, Julia Arithmetic equivalent of essential simplicity of zeta zeros. **(84b:10055)**

Narkiewicz, W. (with Rayner, F.) Distribution of values of $\alpha_2(n)$ in residue classes. **(84b:10070)**

Norton, Karl K. On the number of restricted prime factors of an integer. III. **(84i:10054)**

Quisquater, J. J. See Couvreur, C., **(84m:10001a)** and **(84m:10001b)**

Rayner, F. See Narkiewicz, W., **(84b:10070)**

Sárközy, A. See Erdős, Paul, **(84m:10038a)**; **(84m:10038b)** and **(84m:10038c)**

Sitaramachandra Rao, R. (with Krishnaiah, P. V.) Restricted sums of reciprocal values of additive functions. **(84c:10044)**

10H20 Distribution in progressions and other sequences [See also 10L20.]

Bateman, Paul T. On the size of the coefficients of the cyclotomic polynomial. (See **84c:10004**)

Bays, Carter (with Hudson, Richard H.) The cyclic behavior of primes in the arithmetic progressions modulo 11. **84d:10048**

Deshouillers, Jean-Marc (with Iwaniec, Henryk) On the greatest prime factor of $n^2 + 1$. (French summary) **84m:10033**

Fouvry, Etienne Répartition des suites dans les progressions arithmétiques. [Distribution of sequences in arithmetical progressions] **84b:10065**

Fujii, Akio Zeros, primes and rationals. **84m:10034**

Grosswald, Emil On the number of quadruples of primes in arithmetic progression, below a given bound. **84f:10057**

Heath-Brown, D. R. The Pjateckiĭ-Šapiro prime number theorem. **84j:10053**

Hudson, Richard H. See Bays, Carter, **84d:10048**

Iwaniec, Henryk See Deshouillers, Jean-Marc, **84m:10033**

Narkiewicz, W. Uniform distribution of sequences of integers. (See **84c:10003**)

Orazov, M. Analogue of the Brun-Titchmarsh inequality. (Russian) **84a:10044**

Révész, Sz. Gy. On the least prime in an arithmetic progression. **84d:10049**

secondary classifications:

Delange, Hubert Sur les fonctions arithmétiques multiplicatives de module ≤ 1 . [Multiplicative arithmetical functions with modulus ≤ 1] **(84m:10037)**

Fluch, Wolfgang Über ein Theorem der linearen Progressionen. (English summary) [On a theorem of linear progressions] **(84k:10036)**

Fouvry, Etienne (with Iwaniec, Henryk) Primes in arithmetic progressions. **(84k:10035)**

Gerver, Joseph L. Irregular sets of integers generated by the greedy algorithm. **(84d:10056)**

Heath-Brown, D. R. Primes in "almost all" short intervals. **(84b:10062)**

Iwaniec, Henryk See Fouvry, Etienne, **(84k:10035)**

Kostyrko, Pavel On f -thin sets. (Slovak summary) **(84f:10075)**

Weiss, Alfred The least prime ideal. **(84d:12011)**

10H22 Turán theory

Alladi, Krishnaswami The Turán-Kubilius inequality for integers without large prime factors. **84a:10045**

secondary classifications:

Erdős, Paul (with Sós, Vera T.) On Turán-Ramsey type theorems. II. **(84j:05081)**

Pintz, J. On the remainder term of the prime number formula. III. Sign changes of $\pi(x) - li.x$. **(84j:10051e)**

On the remainder term of the prime number formula. IV. Sign changes of $\pi(x) - li.x$. **(84j:10051d)**

On the remainder term of the prime number formula. I. On a problem of Littlewood. **(84j:10051a)**

On the remainder term of the prime number formula. II. On a theorem of Ingham. **(84j:10051b)**

On the remainder term of the prime number formula. V. Effective mean value theorems. **(84j:10051e)**

On the remainder term of the prime number formula. VI. Ineffective mean value theorems. **(84j:10051f)**

Sós, Vera T. See Erdős, Paul, **(84j:05081)**

Stolarsky, Kenneth B. Zeros of smallest modulus of functions resembling $\exp(z)$. **(84c:30008)**

10H25 Asymptotic results on arithmetic functions

Abyalimov, S. B. Two sums which involve the divisor function $\tau(n)$. (Russian) **84e:10050**

Bateman, Paul T. (with Erdős, Paul; Pomerance, Carl; Straus, E. G.) The arithmetic mean of the divisors of an integer. **84b:10066**

Berndt, Bruce C. An arithmetic Poisson formula. **84m:10035**

Codecà, Paolo Some properties of the local discrepancy of Farey sequences. (Italian. English summary) **84m:10036**

Delange, Hubert Sur les fonctions arithmétiques multiplicatives de module ≤ 1 . [Multiplicative arithmetical functions with modulus ≤ 1] **84m:10037**

Deshouillers, Jean-Marc (with Iwaniec, Henryk) An additive divisor problem. **84b:10067**

Dress, F. (with Iwaniec, Henryk; Tenenbaum, Gérard) Sur une somme liée à la fonction de Möbius. [On a sum related to the Möbius function] **84f:10058**

Erdős, Paul (with Ivic, Aleksandar) Estimates for sums involving the largest prime factor of an integer and certain related additive functions. **84a:10046**

(with Sárközy, A.) Some asymptotic formulas on generalized divisor functions. IV. **84m:10038c**

(with Sárközy, A.) Some asymptotic formulas on generalized divisor functions. III. **84m:10038b**

(with Sárközy, A.) Some asymptotic formulas on generalized divisor functions. II. **84m:10038a**

See also Bateman, Paul T.; et al., **84b:10066**

Gafurov, N. On the sum of products of divisor functions. (Russian. Tajiki summary) **84c:10041**

Geluk, J. L. (with de Haan, L.) On functions with small differences. **84m:10039**

de Haan, L. See Geluk, J. L., **84m:10039**

Hall, R. R. (with Tenenbaum, Gérard) On the average and normal orders of Hooley's Δ -function. **84c:10042**

Hensley, Douglas The number of factorizations of numbers less than x into factors less than y . **84g:10076**

Hudson, Richard H. A theorem on totally multiplicative functions. **84b:10068**

Hughes, John F. (with Shallit, J. O.) On the number of multiplicative partitions. **84m:10040**

Ismoilov, D. An asymptotic formula in number theory. (Russian. Tajiki summary) **84f:10059**

Ivic, Aleksandar (with Shiu, P.) The distribution of powerful integers. **84a:10047**

Large values of the error term in the divisor problem. **84i:10046**

See also Erdős, Paul, **84c:10046**

Iwaniec, Henryk See Deshouillers, Jean-Marc, **84b:10067** and Dress, F.; et al., **84f:10058**

Kanemitsu, S. (with Sitaramachandra Rao, R.; Siva Rama Sarma, A.) Some sums involving Farey fractions. I. **84f:10060**

Kátai, I. Additive functions with regularity properties. **84a:10048**

Krishnaiah, P. V. See Sitaramachandra Rao, R., **84c:10044**

Levin, B. V. (with Timofeev, N. M.) Comparison theorems for multiplicative functions. (Russian) **84c:10051**

Lu, Hong Wen A divisor problem. (Chinese) **84i:10047**

Maculis, A. An integral theorem on large deviations of integer-valued additive functions. (Russian. English and Lithuanian summaries) **84i:10049**

Nicolas, J.-L. Grandes valeurs d'une certaine classe de fonctions arithmétiques. (English summary) [Large values of a certain class of arithmetical functions] **84c:10052**

Panaïtopol, Laurențiu Über einige arithmetische Funktionen. [On some arithmetic functions] **84c:10043**

Pintz, J. Oscillatory properties of $M(x) = \sum_{n \leq x} \mu(n)$. II. **84c:10053b**

Oscillatory properties of $M(x) = \sum_{n \leq x} \mu(n)$. I. **84c:10053a**

Pomerance, Carl See Bateman, Paul T.; et al., **84b:10066**

Ramachandran, P. N. On a theorem of Suryanarayana. **84g:10077**

Redmond, Don A generalization of a theorem of Ayoub and Chowla. **84j:10054a**

Corrections and additions to: "A generalization of a theorem of Ayoub and Chowla". **84j:10054b**

Sárközy, A. See Erdős, Paul, **84m:10038a**; **84m:10038b** and **84m:10038c**

Scourfield, E. J. On the coprimality of values of Euler's function at consecutive integers. **84c:10054**

Shallit, J. O. See Hughes, John F., **84m:10040**

Shiu, P. See Ivic, Aleksandar, **84a:10047**

Sitaramachandra Rao, R. (with Krishnaiah, P. V.) Restricted sums of reciprocal values of additive functions. **84c:10044**

On an error term of Landau. **84b:10069**

See also Kanemitsu, S.; et al., **84f:10060**

Sita Ramaiah, V. On certain multiplicative functions related to the Möbius function. **84c:10045**

(with Suryanarayana, D.) On a method of Eckford Cohen. (Italian summary) **84c:10046**

(with Suryanarayana, D.) Asymptotic results on sums of some multiplicative functions. **84a:10049**

Siva Rama Sarma, A. See Kanemitsu, S.; et al., **84f:10060**

Stepanaukas, G. A local theorem on large deviations for additive functions. (Russian. German and Lithuanian summaries) **84i:10048**

Straus, E. G. See Bateman, Paul T.; et al., **84b:10066**

Suryanarayana, D. See Sita Ramaiah, V., **84a:10049** and **84c:10046**

Tenenbaum, Gérard See Hall, R. R., **84c:10042** and Dress, F.; et al., **84f:10058**

Timofeev, N. M. See Levin, B. V., **84c:10051**

secondary classifications:

- Abbott, H. L. (with Katchalski, Meir) On a set of lattice points not containing the vertices of a square. (84b:10044)
- Babu, Gutti Jogesh On the mean values and distributions of arithmetic functions. (84c:10054)
- Balasubramanian, R. (with Murty, M. Ram) An Q -theorem for Ramanujan's τ -function. (84c:10023a)
- Heath-Brown, D. R. Prime numbers in short intervals and a generalized Vaughan identity. (84g:10075)
- Heppner, E. Über Mittelwerte multiplikativer zahlentheoretischer Funktionen. [On mean values of multiplicative number-theoretic functions] (84g:10085)
- Ivić, Aleksandar Exponent pairs and the zeta function of Riemann. (84c:10035)
- On the number of abelian groups of a given order and on certain related multiplicative functions. (84f:10061)
- Jutila, Matti Riemann's zeta function and the divisor problem. (84m:10028)
- Katchalski, Meir See Abbott, H. L., (84b:10044)
- Krätzel, Ekkehard Squarefree numbers as sums of two squares. (84c:10057)
- Montgomery, Hugh L. On a question of Ramachandra. (84h:10054)
- Murty, M. Ram Some Q -results for Ramanujan's τ -function. (84c:10023b)
- See also Balasubramanian, R., (84c:10023a)
- Narkiewicz, W. On a kind of uniform distribution for systems of multiplicative functions. (Russian and Lithuanian summaries) (84c:10056)
- Schnabel, Lothar Über eine Verallgemeinerung des Kreisproblems. (English and Russian summaries) [On a generalization of the circle problem] (84c:10059)
- Subrahmanyam, Ponnada See Suryanarayana, D., (84h:10009)
- Suryanarayana, D. (with Subrahmanyam, Ponnada) The maximal k -free unitary divisor of an integer. (84b:10009)
- Timofeev, N. M. (with Usmanov, Kh. Kh.) Arithmetic modeling of Brownian motion. (Russian Tajiki summary) (84c:10063)
- (with Tulyaganov, S. T.) Distribution of values of additive functions with the weight $1/n$. I. (Russian) (84h:10077)
- Tulyaganov, S. T. See Timofeev, N. M., (84h:10077)
- Usmanov, Kh. Kh. See Timofeev, N. M., (84c:10063)

10H26 Asymptotic results on counting functions for algebraic and topological structures

- Balog, Antal Statistical theorems about the embeddings of abelian groups into symmetrical ones. 84c:10047
- Ivić, Aleksandar On the number of abelian groups of a given order and on certain related multiplicative functions. 84f:10061
- Kaczorowski, Jerzy Completely irreducible numbers in algebraic number fields. 84c:10050
- Rotkiewicz, A. (with Wasén, R.) On a number theoretical series. 84a:10050
- Wasén, R. See Rotkiewicz, A., 84a:10050

secondary classifications:

- Buzyt'skii, P. L. (with Freiman, G. A.) An effective formula for the number of solutions of a system of two 0, 1-equations. (84m:90087)
- Chandrasekharan, K. (with Good, Anton) On the number of integral ideals in Galois extensions. (84c:12008)
- Freiman, G. A. See Buzyt'skii, P. L., (84m:90087)
- Good, Anton See Chandrasekharan, K., (84c:12008)
- Istamov, A. M. Asymptotic distribution of integral matrices of n th order that belong to a given residue class. (Russian) (84c:10055)
- Mignotte, M. (with Nicolas, J.-L.) Statistiques sur $F_q[X]$. (English summary) [Statistics on $F_q[X]$] (84m:12018)
- Narkiewicz, W. (with Śliwa, Jan) Finite abelian groups and factorization problems. II. (84a:20058)
- Nicolas, J.-L. See Mignotte, M., (84m:12018)
- Palfy, P. P. (with Szalay, M.) The distribution of the character degrees of the symmetric p -groups. (84h:20073)
- Śliwa, Jan See Narkiewicz, W., (84a:20058)
- Szalay, M. See Palfy, P. P., (84h:20073)

10H30 Sieves, upper and lower estimates

- Fluch, Wolfgang Über ein Theorem der linearen Progressionen. (English summary) [On a theorem of linear progressions] 84c:10036
- Heath-Brown, D. R. Sieve identities and gaps between primes. (See 84d:10005)
- Motohashi, Yoichi On the linear sieve. I. 84c:10037a
- On the linear sieve. II. 84c:10037b
- Sieburg, Hans-Bernd Siebmethoden bei dünnverteilten Primzahlfolgen. [Sieve methods in sparsely distributed sequences of primes] 84g:10078

secondary classifications:

- Friedlander, John B. Sifting short intervals. II. (84c:10051)

10H32 Applications of sieve methods

- Friedlander, John B. Sifting short intervals. II. 84c:10051
- Hinz, Jürgen G. Eine Anwendung der Selbergschen Siebmethode in algebraischen Zahlkörpern. [An application of Selberg's sieve method in algebraic number fields] 84d:10050
- Sárközy, A. On squares in arithmetic progressions. 84j:10055

secondary classifications:

- Balog, Antal Numbers with a large prime factor. (84c:10049)
- Erdős, Paul (with Straus, E. G.) Remarks on the differences between consecutive primes. (84a:10052)
- (with Ivić, Aleksandar) Estimates for sums involving the largest prime factor of an integer and certain related additive functions. (84a:10046)
- Harman, Glyn Primes in short intervals. (84f:10055)
- On the distribution of ap modulo one. (84d:10044)
- Heath-Brown, D. R. Prime twins and Siegel zeros. (84m:10029)
- Ivić, Aleksandar See Erdős, Paul, (84a:10046)
- Kryžius, Z. The distribution of additive arithmetic functions with shifted arguments. II. (Russian. English and Lithuanian summaries) (84f:10069)
- Patterson, C. D. (with Williams, Hugh Cowie) A report on the University of Manitoba Sieve Unit. (84g:10003)
- Pritchard, Paul Explaining the wheel sieve. (84g:10015)
- Ramachandra, K. Some current problems in multiplicative number theory. (84i:10041)
- Riesel, H. (with Vaughan, R. C.) On sums of primes. (84m:10042)
- Scourfield, E. J. On the coprimality of values of Euler's function at consecutive integers. (84c:10054)
- Shimojo, Tetsuji Transposable pairs—two-dimensional prime numbers. (84i:10058)
- Straus, E. G. See Erdős, Paul, (84a:10052)
- Vaughan, R. C. See Riesel, H., (84m:10042)
- Webb, William A. Sieve methods for polynomial rings over finite fields. (84j:12021)
- Weiss, Alfred The least prime ideal. (84d:12011)
- Williams, Hugh Cowie See Patterson, C. D., (84g:10003)

10H35 Distribution of residue classes (primitive roots, power residues, etc.)

- Istamov, A. M. Asymptotic distribution of integral matrices of n th order that belong to a given residue class. (Russian) 84c:10055
- Lehmer, Emma Patterns of power residues. 84h:10059
- Narkiewicz, W. On a kind of uniform distribution for systems of multiplicative functions. (Russian and Lithuanian summaries) 84c:10056
- (with Rayner, F.) Distribution of values of $\sigma_2(n)$ in residue classes. 84h:10070
- Rayner, F. See Narkiewicz, W., 84h:10070

secondary classifications:

- Ruzsa, Imre Z. Semigroup-valued multiplicative functions. (84g:10014)

10H40 Generalized primes and integers

- Müller, Helmut Über eine Klasse modifizierter ξ - und L -Funktionen. [On a class of modified ξ - and L -functions] 84d:10051

secondary classifications:

- Bagchi, Bhaskar A joint universality theorem for Dirichlet L -functions. (84c:10038)
- Orazov, M. On Wirsing semigroups. (Russian) (84c:10044)

10H45 Almost-periodic number-theoretic functions [See also 10K35.]

10H99 None of the above, but in this section

- Tenenbaum, Gérald Sur la proximité des diviseurs. [On the proximity of divisors] (See 84c:10003)

secondary classifications:

- Lu, Ming Gao A note on the prime solutions of systems of linear equations—study of the conditions for solvability of a congruence. (Chinese) (84c:10001)
- Plaksin, V. A. An asymptotic formula for the number of solutions of a Diophantine equation. (Russian) (84f:10026)
- Tenenbaum, Gérald Sur la probabilité qu'un entier possède un diviseur dans un intervalle donné. [On the probability that an integer possesses a divisor in a given interval] (84f:10070)

10Jxx Additive theory

secondary classifications:

- Erdős, Paul Miscellaneous problems in number theory. (84f:10002)
- Vaughan, R. C. ★The Hardy-Littlewood method. (84b:10002)

10J05 Sums of squares

- Ewell, John A. A simple proof of Fermat's two-square theorem. 84m:10041
- Greenfield, Gary R. Sums of three and four integer squares. 84f:10062
- Krätzel, Ekkehard Squarefree numbers as sums of two squares. 84c:10057

secondary classifications:

- Ewell, John A. Consequences of Watson's quintuple-product identity. (84h:10019)
- Fomenko, O. M. Sums of squares in imaginary quadratic fields. (Russian) (84g:10039)
- Halter-Koch, Franz Darstellung natürlicher Zahlen als Summe von Quadraten. [Representation of natural numbers as a sum of squares] (84b:10025)
- Lagrange, Jean Sets of n squares of which any $n-1$ have their sum square. (84j:10012)
- Robbins, Neville On Fibonacci and Lucas numbers which are sums of precisely four squares. (84g:10025)

Wegmann, H. Quadratsummen in Restklassenringen. [Sums of squares in residue class rings] (84i:10003)

10J06 Sums of higher powers

Agrawal, M. K. See Parnami, J. C.; et al., 84b:10071

Hooley, C. On a new approach to various problems of Waring's type. 84j:10056

Parnami, J. C. (with Agrawal, M. K.; Rajwade, A. R.) On the 4-power Stufe of a field. 84b:10071

Rajwade, A. R. See Parnami, J. C.; et al., 84b:10071

Shan, Zun A question on sums of powers of integers. (Chinese. English summary) 84b:10060

Thanigasalam, K. Some new estimates for $G(k)$ in Waring's problem. 84j:10079

Zenkin, A. A. Generalization of the Wierferich theorem to the case of natural summands. (Russian) 84a:10051

A generalization of the Hilbert-Waring theorem. (Russian. English summary) 84b:10061

secondary classifications:

Hossain, Md. Fazlee On sum of two integer cubes. (Bengali summary) (84g:10032)

Ke, Zhao (with Sun, Qi) A note on the Diophantine equation $\sum_{j=0}^n (x+j)^2 = (x+h+1)^2$. (Chinese. English summary) (84b:10022)

Silverman, Joseph H. Integer points on curves of genus 1. (84g:10033)

Sinha, T. N. A note on equal sums of like powers. (84c:10025)

Sun, Qi See Ke, Zhao, (84b:10022)

10J10 Applications of Hardy-Littlewood method [See also 10B35.]

Fujii, Akio An additive problem in the theory of numbers. 84b:10062

Lachaud, Gilles An adelic proof of the Hardy-Littlewood theorem on Waring's problem. (See 84c:10003)

Une présentation adélique de la série singulière et du problème de Waring. [An adelic presentation of the singular series and the Waring problem] 84b:10072

Sarközy, A. On additive representations of integers. III. 84b:10063

secondary classifications:

Gogishvili, G. P. On the representation of numbers by positive binary quadratic forms. (Russian. English and Georgian summaries) (84i:10022)

Grosswald, Emil On the number of quadruples of primes in arithmetic progression, below a given bound. (84f:10057)

Koval'chik, F. B. Analogues of the Hardy-Littlewood equation. (Russian) (84f:10025)

Pan, Cheng Dong A new attempt on Goldbach conjecture. (Chinese summary) (84b:10073)

Schmidt, Wolfgang M. Cubic congruences and equations. (See 84d:10005)

Simultaneous rational zeros of quadratic forms. (84g:10041)

Shan, Zun A question on sums of powers of integers. (Chinese. English summary) (84b:10060)

10J15 Additive questions involving primes

Aidarova, L. K. An equation involving prime numbers. (Russian) 84d:10052

Balasubramanian, R. (with Mozzochi, C. J.) Siegel zeros and the Goldbach problem. 84j:10057

Erdős, Paul (with Straus, E. G.) Remarks on the differences between consecutive primes. 84a:10052

Some problems and results on additive and multiplicative number theory. 84c:10048

Mozzochi, C. J. See Balasubramanian, R., 84j:10057

Pan, Cheng Biao See Fan, Cheng Dong, 84b:10064

Pan, Cheng Dong (with Pan, Cheng Biao) ★Gedeba caixiang. (Chinese) [Goldbach's conjecture] 84b:10064

A new attempt on Goldbach conjecture. (Chinese summary) 84b:10073

Riesel, H. (with Vaughan, R. C.) On sums of primes. 84m:10042

Shan, Zun On a problem of the sums of powers of primes. (Chinese summary) 84b:10065

Straus, E. G. See Erdős, Paul, 84a:10052

Vaughan, R. C. See Riesel, H., 84m:10042

Wang, Yuan The Goldbach conjecture. 84a:10053

Zhang, De Xin Goldbach's conjecture is correct. (Chinese. English summary) 84g:10080

secondary classifications:

Fujii, Akio An additive problem in the theory of numbers. (84b:10062)

Heath-Brown, D. R. Prime twins and Siegel zeros. (84m:10029)

Pogorzelski, H. A. (with Ryan, W. J.) ★Foundations of semiological theory of numbers. Vol. 1. (84g:03019)

Ryan, W. J. See Pogorzelski, H. A., (84g:03019)

10J20 Analytic work on partitions [See also 10A45.]

Bressoud, D. M. An easy proof of the Rogers-Ramanujan identities. 84b:10066

Hirschhorn, M. D. A simple proof of an identity of Ramanujan. 84b:10067

Riddell, J. Partitions into distinct small primes. 84b:10074

Vangipuram, S. Partitions with congruence conditions and color restrictions. 84b:10075

secondary classifications:

Baxter, Rodney J. Rogers-Ramanujan identities in the hard hexagon model. (84m:82104)

Cohen, Paula (with Regev, Amitai) Asymptotic estimates of some S_n characters and the identities of the 2×2 matrices. (84c:05016)

Ewell, John A. A simple proof of Fermat's two-square theorem. (84m:10041)

Garsia, Adriano M. (with Milne, S. C.) A Rogers-Ramanujan bijection. (84g:05018)

Milne, S. C. See Garsia, Adriano M., (84g:05018)

Regev, Amitai See Cohen, Paula, (84c:05016)

10J25 Lattice points in large regions

Babaeva, R. Estimation of the number of lattice points on certain second-order surfaces. (Russian) 84c:10058

Chaba, A. N. See de Freitas, U., 84j:10058

de Freitas, U. (with Chaba, A. N.) The Walfisz-like formula from Poisson's summation formula and some applications. 84j:10058

Golubeva, E. P. Distribution of lattice points on surfaces of second order and some surfaces of third order. (Russian) 84c:10038

Kuratsubo, Shigehiko On a theorem of B. Novák on lattice-point problem. 84g:10081

Nowak, Werner-Georg Ein n -dimensionales Gitterpunktproblem. [An n -dimensional lattice point problem] 84j:10059

Eine Ω -Abschätzung zu einem zweidimensionalen Gitterpunktproblem. (English summary) [An Ω -estimate for a two-dimensional lattice point problem] 84f:10063

Eine Bemerkung zum Kreisproblem in der p -Norm. [A comment on the circle problem in the p -norm] 84i:10052

Ein nicht-konvexes Analogon zum mehrdimensionalen Kugelproblem. [A nonconvex analogue to the higher-dimensional ball problem] 84b:10068

Schnabel, Lothar Über eine Verallgemeinerung des Kreisproblems. (English and Russian summaries) [On a generalization of the circle problem] 84c:10059

secondary classifications:

Alzenberg, L. A. Application of multidimensional logarithmic residue for representation in the form of the integral of the difference between the number of integer points in a domain and its volume. (Russian) (84j:10044)

Bartels, Hans-Jochen Nicht-euklidische Gitterpunktprobleme und Gleichverteilung in linearen algebraischen Gruppen. [Non-Euclidean lattice point problems and uniform distribution in linear algebraic groups] (84c:22013)

Fricker, François ★Einführung in die Gitterpunkttheorie. (German) [Introduction to lattice point theory] (84b:10001)

Golubeva, E. P. The relation between the sum of Salé sums and the distribution of lattice points of hyperboloids. (Russian) (84c:10044)

10J99 None of the above, but in this section

secondary classifications:

Ismoilov, D. An asymptotic formula in number theory. (Russian. Tajiki summary) (84f:10059)

10Kxx Probabilistic theory; measure, dimension, etc.

10K05 Distribution modulo one [See also 10F40.]

Coquet, Jean Répartition de la somme des chiffres associée à une fraction continue. (English summary) [Distribution of the sum of digits associated with a continued fraction] 84c:10060

Graphes connexes, représentation des entiers et équirépartition. (English summary) [Connected graphs, integer representation and uniform distribution] 84i:10053

Répartition de suites polynomiales. (English summary) [Distribution of polynomial sequences] 84b:10069

Diamond, Harold G. (with Vaaler, Jeffrey D.) Metric theorems on the estimation of integrals by sums. (See 84c:10004)

Faure, Henri Étude des restes pour les suites de van der Corput généralisées. (English summary) [Study of remainders for generalized van der Corput sequences] 84g:10082

Fujii, Akio On the uniformity of the distribution of the zeros of the Riemann zeta function. II. 84j:10060

Hellegouarch, Y. Errata: "Scales" [C. R. Math. Rep. Acad. Sci. Canada 4 (1982), no. 5, 277-281; MR 83k:10092]. 84f:10064

Hlawka, Edmund Über einige Sätze, Begriffe und Probleme in der Theorie der Gleichverteilung. II. [On some theorems, concepts and problems in the theory of uniform distribution. II] 84j:10061

Niederreiter, Harald (with Tichy, Robert Franz) Beiträge zur Diskrepanz bezüglich gewichteter Mittel. (English summary) [Contributions to discrepancy with respect to weighted means] 84m:10043

Nowak, Werner-Georg (with Tichy, Robert Franz) Über die Verteilung mod 1 der Potenzen reeller (2×2) -Matrizen. [On the distribution mod 1 of the powers of real (2×2) -matrices] 84g:10083

(with Tichy, Robert Franz) An improved estimate on the distribution mod 1 of powers of real matrices. 84m:10044

Ohkubo, Yukio On the weighted uniform distribution of sequences $(a_n x)$. 84b:10040

Sinnadurai, J. St. C. L. Note on a paper: "On u.d. mod 1 of sequences $(a_n x)$ " [Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 2, 231-236 see 84c:10xxx] by A. Topuzoglu. 84b:10041

Sós, Vera T. (with Zaremba, Stanisław) The mean-square discrepancies of some two-dimensional lattices. 84c:10054

Taschner, Rudolf J. A general version of van der Corput's difference theorem. 84m:10045

Tichy, Robert Franz Einige Beiträge zur Gleichverteilung modulo Eins. [Some contributions to uniform distribution modulo one] 84c:10061

See also Nowak, Werner-Georg, 84g:10083; Niederreiter, Harald, 84m:10043 and

Nowak, Werner-Georg, 84m:10044

Tijdejan, Robert A progress report on discrepancy. (See 84d:10005)

Topuzoglu, Alev On u.d. mod 1 of sequences $(a_n x)$. **84c:10039**

See also Sinnadurai, J. St. C. L., **84c:10041**

Vaaler, Jeffrey D. See Diamond, Harold G., (**84c:10004**)

Zaremba, Stanislaw See Sós, Vera T., **84c:10054**

secondary classifications:

Dupain, Y. (with Hall, R. R.; Tenenbaum, Gérard) Sur l'équirépartition modulo 1 de certaines fonctions de diviseurs. [Equidistribution modulo 1 of certain divisor functions] **(84m:10047)**

Faure, Henri Suites à faible discrepancy en dimension s . [Sequences with weak discrepancy in dimension s] (**See 84c:10003**)

Gabbasov, F. G. (with Moskvina, D. A.) On a limit theorem for the distribution of the fractional parts of an exponential function. (Russian) **(84i:60034)**

Hall, R. R. See Dupain, Y.; et al., **(84m:10047)**

Kirschenhofer, Peter (with Tichy, Robert Franz) Polynomalgebren und Diskrepanz. [Polynomial algebras and discrepancy] **(84b:68109)**

Liardet, Pierre Propriétés génériques de processus croisés. (English summary) [Generic properties of crossed processes] **(84c:22009)**

Moskvina, D. A. See Gabbasov, F. G., **(84i:60034)**

Ostrowski, Alexander M. On the error term in multidimensional Diophantine approximation. **(84c:10030)**

Regazzini, Eugenio The Benford-Furlan law as a statistical law. (Italian. English and French summaries) **(84h:62032)**

Ruzsa, Imre Z. Uniform distribution, positive trigonometric polynomials and difference sets. **(84h:10073)**

Shparlinskii, I. E. A property of a multiplicative random number generator. (Russian) **(84d:65006)**

Tenenbaum, Gérard See Dupain, Y.; et al., **(84m:10047)**

Tichy, Robert Franz Zur Gleichverteilung mit gewichteten Mitteln. [On equidistribution with weighted means] **(84c:10064)**

See also Kirschenhofer, Peter, **(84b:68109)**

Wang, Yuan On Diophantine approximation and approximate analysis. I. **(84f:10066)**

On Diophantine approximation and approximate analysis. II. **(84f:10067)**

10K10 Algorithms and expansions [See also 10A30, 10F20.]

Allouche, Jean-Paul (with Cosnard, Michel) Une propriété extrême de la suite de Thue-Morse en rapport avec les cascades de Feigenbaum. [An extremal property of the Thue-Morse sequence with respect to Feigenbaum cascades] **84g:10084**

Cosnard, Michel See Allouche, Jean-Paul, **84g:10084**

Liu, Wen Applications of singular monotone functions to the probabilistic theory of the expansion of real numbers. (Chinese) **84b:10076**

Panov, A. A. The mean for a sum of elements in a class of finite continued fractions. (Russian) **84d:10053**

Perelli, Alberto (with Zannier, Umberto) On the parity of $[m\sqrt{2}]$. (Italian. English summary) **84h:10070**

Schweiger, Fritz Ergodische Eigenschaften der Algorithmen von Brun und Selmer. [Ergodic properties of the algorithms of Brun and Selmer] **84m:10046**

Zannier, Umberto See Perelli, Alberto, **84h:10070**

secondary classifications:

De Dominicis, Rodolfo Weak convergence of empirical distribution functions for infinite-order chains. (Italian) **(84b:60027)**

Dekking, Michel (with Mendès France, Michel; Van der Poorten, A. J.) Folds. **(84f:10016a)**

(with Mendès France, Michel; Van der Poorten, A. J.) Folds. II. Symmetry disturbed. **(84f:10016b)**

(with Mendès France, Michel; Van der Poorten, A. J.) Folds. III. More morphisms. **(84f:10016c)**

Ferguson, Helaman R. P. (with Forcade, Rodney W.) Multidimensional Euclidean algorithms. **(84d:10015)**

Forcade, Rodney W. See Ferguson, Helaman R. P., **(84d:10015)**

Gardner, R. J. (with Mauldin, R. Daniel) On the Hausdorff dimension of a set of complex continued fractions. **(84f:30008)**

Hlawka, Edmund Gleichverteilung und mathematische Linguistik. [Uniform distribution and mathematical linguistics] **(84h:68106)**

Mauldin, R. Daniel See Gardner, R. J., **(84f:30008)**

Mendès France, Michel See Dekking, Michel; et al., **(84f:10016a); (84f:10016b) and (84f:10016c)**

Oren, Ishai Admissible functions with multiple discontinuities. **(84g:54052)**

Van der Poorten, A. J. See Dekking, Michel; et al., **(84f:10016a); (84f:10016b) and (84f:10016c)**

Whittaker, James V. On scale-invariant distributions. **(84h:60035)**

Ye, Yin Yu Study on ergodic problem of random matrix family with digraph and indefinite equation. **(84a:05033)**

10K15 Diophantine approximation [See also 10Fxx.]

Strauch, Otto Duffin-Schaeffer conjecture and some new types of real sequences. (Russian and Slovak summaries) **84f:10065**

Wang, Yuan On Diophantine approximation and approximate analysis. I. **84f:10066**
On Diophantine approximation and approximate analysis. II. **84f:10067**

secondary classifications:

Hlawka, Edmund Lineare Differenzengleichungen in mehreren Variablen. [Linear difference equations of several variables] **(84f:10043)**

Schmidt, Wolfgang M. Diophantine approximation properties of certain infinite sets. **(84g:10061)**

Wang, Yuan (with Yu, Kun Rui) A note on some metrical theorems in Diophantine approximation. (Chinese summary) **(84f:10044)**

Yu, Kun Rui See Wang, Yuan, **(84f:10044)**

10K20 Arithmetic functions

Alladi, Krishnaswami Additive functions and special sets of integers. **84h:10071**

Babu, Guttu Jogesh On the mean values and distributions of arithmetic functions. **84d:10054**

Distribution of the values of ω in short intervals. **84c:10062**

Delange, Hubert Sur une inégalité remarquable, avec une application à la théorie des nombres. (English summary) [A remarkable inequality, with an application to number theory] **84f:10068**

Dupain, Y. (with Hall, R. R.; Tenenbaum, Gérard) Sur l'équirépartition modulo 1 de certaines fonctions de diviseurs. [Equidistribution modulo 1 of certain divisor functions] **84m:10047**

Hall, R. R. See Dupain, Y.; et al., **84m:10047**

Heppner, E. Über Mittelwerte multiplikativer zahlentheoretischer Funktionen. [On mean values of multiplicative number-theoretic functions] **84g:10085**

Hildebrand, Adolf A characterization of the logarithm as an additive arithmetic function. **84c:10049**

Kryžius, Z. The distribution of additive arithmetic functions with shifted arguments. II. (Russian. English and Lithuanian summaries) **84f:10069**

Narkiewicz, W. L'équirépartition des valeurs de $\sigma_k(n)$. [Uniform distribution of the values of $\sigma_k(n)$] (**See 84c:10002**)

Norton, Karl K. On the number of restricted prime factors of an integer. III. **84i:10054**

Rejali, Ali On the limiting distribution of additive arithmetic functions. **84m:10048**

Tenenbaum, Gérard Sur la probabilité qu'un entier possède un diviseur dans un intervalle donné. [On the probability that an integer possesses a divisor in a given interval] **84f:10070**

See also Dupain, Y.; et al., **84m:10047**

Timofeev, N. M. (with Usmanov, Kh. Kh.) Some arithmetical models of random processes. (Russian. Tajiki summary) **84j:10062**

(with Usmanov, Kh. Kh.) Arithmetic modeling of Brownian motion. (Russian. Tajiki summary) **84c:10063**

(with Tulyaganov, S. T.) Distribution of values of additive functions with the weight $1/n$. I. (Russian) **84b:10077**

(with Tulyaganov, S. T.) Distribution of values of multiplicative functions. II. (Russian) **84g:10086**

Tulyaganov, S. T. See Timofeev, N. M., **84b:10077** and **84g:10086**

Usmanov, Kh. Kh. See Timofeev, N. M., **84c:10063** and **84f:10062**

secondary classifications:

Alladi, Krishnaswami The Turán-Kubilius inequality for integers without large prime factors. **(84c:10045)**

Balog, Antal Statistical theorems about the embeddings of abelian groups into symmetrical ones. **(84c:10047)**

Delange, Hubert Théorie probabiliste des nombres. [Probabilistic theory of numbers] (**See 84d:10005**)

Elliott, P. D. T. A. Representing integers as products of integers of a specified type. (**See 84c:10004**)

On representing integers as products of integers of a prescribed type. **(84m:10056)**

Hensley, Douglas The number of factorizations of numbers less than x into factors less than y . **(84g:10076)**

Levin, B. V. (with Timofeev, N. M.) Comparison theorems for multiplicative functions. (Russian) **(84c:10051)**

Lucht, Lutz (with Tuttas, Friedemann) Aufeinanderfolgende Elemente in multiplikativen Zahlenmengen. (English summary) [Successive elements in multiplicative number sets] **(84i:10043)**

Mačiulis, A. An integral theorem on large deviations of integer-valued additive functions. (Russian. English and Lithuanian summaries) **(84i:10049)**

Narkiewicz, W. On a kind of uniform distribution for systems of multiplicative functions. (Russian and Lithuanian summaries) **(84c:10056)**

Pálfi, P. P. (with Szalay, M.) The distribution of the character degrees of the symmetric p -groups. **(84h:20073)**

Ruzsa, Imre Z. Semigroup-valued multiplicative functions. **(84g:10014)**

Stepanavskas, G. A local theorem on large deviations for additive functions. (Russian. German and Lithuanian summaries) **(84i:10048)**

Szalay, M. See Pálfi, P. P., **(84h:20073)**

Tenenbaum, Gérard Sur la densité divisorielle d'une suite d'entiers. (English summary) [The divisor density of an integer sequence] **(84c:10067)**

Timofeev, N. M. See Levin, B. V., **(84c:10051)**

Tuttas, Friedemann See Lucht, Lutz, **(84i:10043)**

10K25 Normal numbers

Mukherjee, Samir Kumar On probabilistic and information-theoretic technique in (K, ϵ) -normal numbers. **84g:10087**

Szűsz, Péter (with Volkmann, Bodo) On numbers containing each block infinitely often. **84h:10072**

Volkmann, Bodo See Szűsz, Péter, **84h:10072**

10K30 Irregularities of distribution

Beck, József Irregularities of two-colourings of the $N \times N$ square lattice. **84m:10049**

Buttsworth, Robert Corrigenda: "On the probability that given polynomials have a specified highest common factor" [J. Number Theory **12** (1980), no. 4, 487-498; MR **82c:10091**]. **84f:10071**

Chen, W. W. L. Irregularities of point distribution in unit cubes. (**See 84c:10003**)

Faure, Henri Suites à faible discrepancy en dimension s . [Sequences with weak discrepancy in dimension s] (See 84c:10003)

Discrepancy de suites associées à un système de numération (en dimension s). [Discrepancy of sequences associated with a number system (in dimension s)] 84c:10050

Hemmer, P. C. See Hemmer, S., 84m:10051

Hemmer, S. (with Hemmer, P. C.) Recurrences in multidimensional arithmetic sequences. 84m:10051

Oren, Ishai Ergodicity of cylinder flows arising from irregularities of distribution. 84i:10055

Ruzsa, Imre Z. Uniform distribution, positive trigonometric polynomials and difference sets. 84h:10073

Spencer, Joel Sequences with small discrepancy relative to n events. 84c:10050

Tichy, Robert Franz Zur Gleichverteilung mit gewichteten Mitteln. [On equidistribution with weighted means] 84c:10064

secondary classifications:

Borosh, Itzhak (with Niederreiter, Harald) Optimal multipliers for pseudorandom number generation by the linear congruential method. (84c:65012)

Dani, S. G. On uniformly distributed orbits of certain horocycle flows. (84g:58068)

Faure, Henri Étude des restes pour les suites de van der Corput généralisées. (English summary) [Study of remainders for generalized van der Corput sequences] (84g:10062)

Glazunov, N. M. Equidistribution of values of Kloosterman sums. (Russian. English summary) (84h:10052)

Harman, Glyn Sums of distances between points of a sphere. (84b:52016)

Hlawka, Edmund Über einige Sätze, Begriffe und Probleme in der Theorie der Gleichverteilung. II. [On some theorems, concepts and problems in the theory of uniform distribution. II] (84j:10061)

Kirschenhofer, Peter (with Tichy, Robert Franz) Gleichverteilung und formale Sprachen. [Uniform distribution and formal languages] (84b:68107)

(with Tichy, Robert Franz) Polynomalgebren und Diskrepanz. [Polynomial algebras and discrepancy] (84b:68109)

Niederreiter, Harald See Borosh, Itzhak, (84c:65012)

Sokolovskii, A. V. On a theorem of A. Sárközy. (Russian) (84c:10046)

Tichy, Robert Franz Zur Diskrepanz in formalen Sprachen. [On the discrepancy in formal languages] (84b:68108)

See also Kirschenhofer, Peter, (84b:68107) and (84b:68109)

Tijdeman, Robert A progress report on discrepancy. (See 84d:10005)

10K35 Harmonic analysis and almost periodicity [See also 10H45.]

Rindler, H. Fast konstante Folgen. II. (English summary) [Almost constant sequences. II] 84m:10052

secondary classifications:

Fleischer, Wilhelm Ein Diskrepanzbegriff für kompakte Räume. [A discrepancy concept for compact spaces] (84f:47037)

Rindler, H. Fast konstante Folgen. [Almost constant sequences] (84a:22010)

Stegeman, J. D. On the constant in the Littlewood problem. (84m:42006)

Wang, Yuan A note on the approximate solution of the Cauchy problem by number-theoretic nets. (Chinese summary) (84g:65128)

10K40 Non-Archimedean theory

10K50 Measure; Hausdorff dimension

Cajar, Helmut ★ Billingsley dimension in probability spaces. 84a:10055

Lawton, Wayne M. A problem of Boyd concerning geometric means of polynomials. 84c:10056

Myerson, Gerald (with Smyth, C. J.) Corrigendum: "On measures of polynomials in several variables" [Bull. Austral. Math. Soc. 23 (1981), no. 1, 49–63; MR 82k:10074] by Smyth. 84g:10088

Smyth, C. J. See Myerson, Gerald, 84g:10088

secondary classifications:

Bellow, Alexandra Sur la structure des suites "mauvaises universelles" en théorie ergodique. (English summary) [On the structure of "bad universal" sequences in ergodic theory] (84f:28012)

Dubuc, Serge Une foire de courbes sans tangentes. [A throng of curves without tangents] (84a:58060)

Fedorov, A. I. Polymorphisms and partitionings of Lebesgue spaces. (Russian) (84g:28020)

Gardner, R. J. (with Mauldin, R. Daniel) On the Hausdorff dimension of a set of complex continued fractions. (84f:30008)

Hlawka, Edmund Über einige Sätze, Begriffe und Probleme in der Theorie der Gleichverteilung. II. [On some theorems, concepts and problems in the theory of uniform distribution. II] (84j:10061)

Liardet, Pierre Propriétés génériques de processus croisés. (English summary) [Generic properties of crossed processes] (84k:22009)

Mauldin, R. Daniel See Gardner, R. J., (84f:30008)

Niederreiter, Harald (with Tichy, Robert Franz) Beiträge zur Diskrepanz bezüglich gewichteter Mittel. (English summary) [Contributions to discrepancy with respect to weighted means] (84m:10043)

Schweiger, Fritz Ergodische Eigenschaften der Algorithmen von Brun und Selmer. [Ergodic properties of the algorithms of Brun and Selmer] (84m:10046)

Sullivan, Dennis Disjoint spheres, approximation by imaginary quadratic numbers, and the logarithm law for geodesics. (84j:58097)

Tichy, Robert Franz See Niederreiter, Harald, (84m:10043)

10K99 None of the above, but in this section

Rauzy, G. Nombres algébriques et substitutions. (English summary) [Algebraic numbers and substitutions] 84h:10074

secondary classifications:

Allouche, Jean-Paul Somme des chiffres et transcendance. (English summary) [Sum of digits, and transcendence] (84f:10045)

Blom, Gunnar (with Thorburn, Daniel) How many random digits are required until given sequences are obtained? (84b:60149)

Coppel, W. A. An interesting Cantor set. (84i:28005)

Mendès France, Michel Chaotic curves. (84i:58150)

Steele, J. Michael Long common subsequences and the proximity of two random strings. (84b:58047)

Thorburn, Daniel See Blom, Gunnar, (84b:60149)

von Weizsäcker, Heinrich The nonexistence of "liftings" for arithmetic density. (84c:28016)

10Lxx Sequences of integers

secondary classifications:

Erdős, Paul Some new problems and results in number theory. (84g:10002)

10L02 Density of sum sets, analogues and generalizations

Härtter, Erich p -Differenzen von Mengen nichtnegativer ganzer Zahlen. [p -differences of sets of nonnegative integers] 84f:10072

Hindman, Neil On density, translates, and pairwise sums of integers. 84c:10075

Klärner, David A. An algorithm to determine when certain sets have 0-density. 84c:10076

10L05 Addition of sequences, additive bases [See also 05B10.]

Hofmeister, Gerd Eine Verallgemeinerung des Reichweitenproblems. [A generalization of the size problem] 84g:10069

Die dreielementigen Extremalbasen. [Three-element extremal bases] 84c:10065

Lam, Clement W. H. (with Ma, S. L.; Siu, Man Keung) The existence and nonexistence of perfect addition sets. 84m:10053

Ma, S. L. See Lam, Clement W. H.; et al., 84m:10053

Perelli, Alberto (with Zannier, Umberto) On sums of distinct integers belonging to certain sequences. 84j:10063

Pritchard, Paul Another look at the "longest ascending subsequence" problem. 84f:10073

Siu, Man Keung See Lam, Clement W. H.; et al., 84m:10053

Zannier, Umberto See Perelli, Alberto, 84j:10063

secondary classifications:

Erdős, Paul Miscellaneous problems in number theory. (84f:10002)

Evans, Ronald J. Twenty-fourth power residue difference sets. (84c:12024)

Smarandache, Florentin Gh. Bases of solutions for linear congruences. (Romanian. English summary) (84i:10002)

Wang, Kai A generalization of group difference sets and the matrix equation $A^m = dI + \lambda J$. (84h:05023)

10L10 Special sequences (density, multiplicative, additive and other properties)

Abbott, H. L. On nonaveraging sets of integers. 84g:10090

Beck, József A remark on the concentration function of combinatorial number theory. 84g:10091

Gilpin, Michael (with Shelton, Robert) Forced differences between terms of subsequences of integer sequences. 84h:10077

Härtter, Erich Mehrfache Darstellung von Zahlen durch p -Differenzen von Mengen nichtnegativer ganzer Zahlen. [Multiplicity of representation of numbers via p -differences of sets of nonnegative integers] 84c:10066

Hwang, Jun Shung On a problem of Erdős about sum different from square. 84f:10074

Kostyrko, Pavel On f -thin sets. (Slovak summary) 84f:10075

Kovács, Katalin On the characterization of additive functions. 84b:10078

Mikheev, I. M. Trigonometric series with gaps. (Russian summary) 84m:10054

Morikawa, Ryozi On a method to construct covering sets. 84i:10057

Some examples of covering sets. 84j:10064

On eventually covering families generated by the bracket function. 84c:10051

Murty, G. Sri Rama Chandra A generalization of a theorem of Sierpiński. 84g:10092

Pollington, A. D. On generalized arithmetic and geometric progressions. 84a:10056

Rajagopal, A. K. See Sitharama Iyengar, S.; et al., 84m:10055

Richards, Ian On the gaps between numbers which are sums of two squares. 84d:10055

Sattler, R. On Erdős property P_1 for the sequence of squarefree numbers. 84f:10076a

On Erdős property P_1 for the arithmetical sequence. 84f:10076b

Shelton, Robert See Gilpin, Michael, 84h:10077

Sitharama Iyengar, S. (with Rajagopal, A. K.; Uppuluri, V. R. R.) String patterns of leading digits. 84m:10055

Tenenbaum, Gerald Sur la densité divisorielle d'une suite d'entiers. (English summary) [The divisor density of an integer sequence] 84c:10067

Uppuluri, V. R. R. See Sitharama Iyengar, S.; et al., 84m:10055

secondary classifications:

Beck, József On a problem of L. Fejes Tóth concerning "nontransparent" directions. (84h:52005)

Elliott, P. D. T. A. On representing integers as products of integers of a prescribed type. (84m:10056)

- Sárközy, A. On squares in arithmetic progressions. (84j:10055)
 Slater, Peter J. On repeated difference sequences of a permutation of N . (84g:05031)
 Stanton, Ralph G. Further results on covering integers of the form $1+k^2$ by primes. (84j:10009)
 von Weizsäcker, Heinrich The nonexistence of "liftings" for arithmetic density. (84a:28010)
 Zann, Štefan A survey of covering systems of congruences. (Russian and Slovak summaries) (84e:10004)

10L15 Representation functions

- Elliott, P. D. T. A. On representing integers as products of integers of a prescribed type. 84m:10056
 Pihko, Jukka An algorithm for additive representation of positive integers. 84k:10042

secondary classifications:

- Härtter, Erich Mehrfache Darstellung von Zahlen durch p -Differenzen von Mengen nichtnegativer ganzer Zahlen. [Multiplicity of representation of numbers via p -differences of sets of nonnegative integers] (84e:10066)
 Meyer, Jacques Représentation multiplicative des entiers et fonctions multiplicatives. [Multiplicative representation of integers and multiplicative functions] (See 84c:10004)

10L20 Arithmetic progressions [See also 10H20.]

- Gerver, Joseph L. Irregular sets of integers generated by the greedy algorithm. 84d:10056
 Porubský, Štefan A characterization of finite unions of arithmetic sequences. 84a:10057
 Taylor, Alan D. A note on van der Waerden's theorem. 84c:10052

secondary classifications:

- Bays, Carter (with Hudson, Richard H.) The cyclic behavior of primes in the arithmetic progressions modulo 11. (84d:10048)
 Beeler, Michael D. A new van der Waerden number. (84m:05006)
 Fouvry, Étienne Répartition des suites dans les progressions arithmétiques. [Distribution of sequences in arithmetical progressions] (84b:10065)
 Furstenberg, Harry (with Katznelson, Yitzhak; Ornstein, D.) The ergodic theoretical proof of Szemerédi's theorem. (84b:28016)
 Hudson, Richard H. See Bays, Carter. (84d:10048)
 Katznelson, Yitzhak See Furstenberg, Harry; et al., (84b:28016)
 Mansfield, Richard How many slopes in a polygon? (84j:03074)
 Mills, George A quintessential proof of van der Waerden's theorem on arithmetic progressions. (84c:05014)
 Ornstein, D. See Furstenberg, Harry; et al., (84b:28016)
 Sattler, R. On Erdős property P_1 for the sequence of squarefree numbers. (84f:10076a)
 On Erdős property P_1 for the arithmetical sequence. (84f:10076b)
 Tenenbaum, Gérard Sur la proximité des diviseurs. [On the proximity of divisors] (See 84c:10003)

10L99 None of the above, but in this section

secondary classifications:

- Buttsworth, Robert Corrigenda: "On the probability that given polynomials have a specified highest common factor" [J. Number Theory 12 (1980), no. 4, 487–498; MR 82e:10091]. (84f:10071)

10Mxx Rational arithmetic of algebraic objects

10M05 Polynomials [See also 13F20.]

- Cerlienco, Luigi (with Piras, Francesco) Resultant, l.c.m. and g.c.d. of two polynomials by the method of linear recurrent sequences. (Italian. English summary) 84m:10057
 Kimura, Noriaki Über die Nullstellen der von Potenzsummen der natürlichen Zahlen definierten Polynome. [On the zeros of polynomials which are defined by power sums of natural numbers] 84k:10043
 Lefton, Phyllis A trinomial discriminant formula. 84e:10068
 Piras, Francesco See Cerlienco, Luigi. 84m:10057
 Smyth, C. J. Conjugate algebraic numbers on conics. 84b:10079

secondary classifications:

- Brillhart, John Letter to the editor: "Properties of polynomials having Fibonacci numbers for coefficients" [Fibonacci Quart. 21 (1983), no. 1, 62–64; MR 84f:10018a] by D. H. Lehmer and E. Lehmer. (84f:10018b)
 Dvornicich, Roberto (with Zannier, Umberto) On polynomials taking small values at integral arguments. (84k:12001)
 Horadam, A. F. (with Horadam, E. M.) Roots of recurrence-generated polynomials. (84i:10009)
 Horadam, E. M. See Horadam, A. F., (84i:10009)
 Lehmer, D. H. (with Lehmer, Emma) Properties of polynomials having Fibonacci numbers for coefficients. (84f:10018a)
 See also Brillhart, John, (84f:10018b)
 Lehmer, Emma See Lehmer, D. H., (84f:10018a) and Brillhart, John, (84f:10018b)
 Myerson, Gerald On resultants. (84j:13004)
 Rutkowski, Jerzy On recurrence characterization of rational arithmetic functions. (84i:10004)
 Zannier, Umberto See Dvornicich, Roberto, (84k:12001)

10M10 Valued fields [See also 12J10.]

secondary classifications:

- Alajbegović, Jusuf On Cauchy sequences of a valued field. (84f:12014)
 Heinzer, William J. Valuation rings and simple transcendental field extensions. (84d:13003)

10M15 Ordered fields [See also 12J15.]

secondary classifications:

- Engler, Antonio J. (with Viswanathan, T. M.) Digging holes in algebraic closures à la Artin. II. (84m:12022b)
 Viswanathan, T. M. See Engler, Antonio J., (84m:12022b)

10M20 Matrices [See also 15A36.]

- Beard, Jacob T. B., Jr. (with McConnell, Robert M.) Matrix field extensions. 84d:10057
 Liang, Joseph J. (with Mead, George F., Jr.) On matrix equations over the ring of p -adic integers. 84e:10069
 McConnell, Robert M. See Beard, Jacob T. B., Jr., 84d:10057
 Mead, George F., Jr. See Liang, Joseph J., 84e:10069
 Newman, Morris Similarity over $SL(n, F)$. 84b:10080
 Shimojo, Tetsuji Transposable pairs—two-dimensional prime numbers. 84i:10058

secondary classifications:

- Friberg, Jöran ★A historically motivated study of families of Pythagorean or Babylonian triples and their generating semigroups of P - or B -orthonormal matrices. (84e:10021)
 Kaczorek, Tadeusz Algebraic operations on two-dimensional polynomials. (Russian summary) (84j:93045a)
 Algebraic operations on two-dimensional polynomial matrices. (Russian summary) (84j:93045b)
 Pizarro, Antonio Similarity classes of 3×3 matrices over a discrete valuation ring. (84j:15012)
 Tolstikov, A. V. Rotations of integer matrices (a remark on a theorem of Yu. V. Linnik). (Russian) (84k:15014)
 Tuler, Randy Detecting products of elementary matrices in $GL_2(\mathbb{Z}[\sqrt{d}])$. (84i:10027)

10M99 None of the above, but in this section

secondary classifications:

- Kornerup, Peter (with Matula, David W.) Finite precision rational arithmetic: an arithmetic unit. (84m:65143)
 Matula, David W. See Kornerup, Peter, (84m:65143)

10Nxx Connections with logic

10N05 Decidability [See also 03B25.]

- Jones, James P. Universal Diophantine equation. 84e:10070

secondary classifications:

- Jones, James P. (with Matiyasevich, Yu. V.) A new representation for the symmetric binomial coefficient and its applications. (French summary) (84g:03060a)
 (with Matiyasevich, Yu. V.) Errata: "A new representation for the symmetric binomial coefficient and its applications". (84g:03060b)
 Karpinski, Marek Decidability of "Skolem matrix emptiness problem" entails constructibility of exact regular expression. (84k:03039)
 Matiyasevich, Yu. V. See Jones, James P., (84g:03060a) and (84g:03060b)
 Zassenhaus, Hans J. Über die konstruktive Behandlung mathematischer Probleme. [On the constructive treatment of mathematical problems] (84d:03077)

10N10 Ultraproducts [See also 03C20.]

10N12 Model theory

secondary classifications:

- Calude, Cristian (with Vieri, Valentin) A note on Knuth's iterated powers. (84m:03062)
 Vieri, Valentin See Calude, Cristian, (84m:03062)

10N15 Nonstandard arithmetic [See also 03H15.]

secondary classifications:

- Cichon, E. A. A short proof of two recently discovered independence results using recursion theoretic methods. (84f:03049)
 Conway, John Horton ★Über Zahlen und Spiele. (German) [On numbers and games] (84m:03086)
 (Kunisch, Brigitte) See Conway, John Horton, (84m:03086)
 Laugwitz, Detlef Ω -calculus as a generalization of field extension—an alternative approach to nonstandard analysis. (84h:26024)
 Semenov, A. L. On the definability of arithmetic in its fragments. (Russian) (84a:03074)

10N99 None of the above, but in this section

12-XX ALGEBRAIC NUMBER THEORY, FIELD THEORY AND POLYNOMIALS

12-01 Elementary exposition, textbooks

secondary classifications:

Pierce, Richard S. ★Associative algebras. (84c:16001)

12-02 Advanced exposition (research surveys, monographs, etc.)

Browkin, Jerzy The meaning of Galois theory in modern mathematics and its role in the education of young mathematicians. (Polish. English and Russian summaries) (84j:12001)

Platonov, V. P. Arithmetic theory of algebraic groups. (Russian) (84h:12001)

secondary classifications:

(Boshko, O.) See Krein, M. G.; et al., (84i:12016)

Grigor'ev, D. Yu. Lower bounds in the algebraic complexity of computations. (Russian. English summary) (84j:68021)

(Howland, James Lucien) See Krein, M. G.; et al., (84i:12016)

Krein, M. G. (with Naimark, M. A.) The method of symmetric and Hermitian forms in the theory of the separation of the roots of algebraic equations. (84i:12016)

Macdonald, I. G. ★Symmetric functions and Hall polynomials. (84g:05003)

Naimark, M. A. See Krein, M. G., (84i:12016)

12-03 Historical (must also be assigned at least one classification number from Section 01)

Jehne, Wolfram Der Hassesche Normensatz und seine Entwicklung. [Hasse's norm theorem and its development] (84j:12002)

(Kummer, Ernst Eduard) See Neumann, Olaf, (84i:12001)

Neumann, Olaf Über die Anstöße zu Kummers Schöpfung der "idealen komplexen Zahlen". (English summary) [On the motivations for Kummer's creation of "ideal complex numbers"] (84i:12001)

secondary classifications:

Ayoub, Raymond G. On the nonsolvability of the general polynomial. (84h:12033)

Baker, Alan The Fermat equation and transcendence theory. (84j:01061)

Baur, Walter (with Strassen, Volker) The complexity of partial derivatives. (84c:68027)

Bos, Henk J. M. Algebraic equations and Galois theory, a historical overview. (Dutch) (84d:01026)

Bryce, R. A. Ruffini and the quintic equation. (84f:01020)

(Dedekind, Richard) See Edwards, Harold M.; et al., (84j:01035) and Strobl, Walter, (84i:01067)

Edwards, Harold M. (with Neumann, Olaf; Purkert, Walter) Dedekinds "Bunte Bemerkungen" zu Kroneckers "Grundzüge". [Dedekind's "Bunte Bemerkungen" on Kronecker's "Grundzüge"] (84g:01035)

Kahane, Jean-Pierre Le 13ème problème de Hilbert: un carrefour de l'algèbre, de l'analyse et de la géométrie. [Hilbert's 13th problem: an intersection of algebra, analysis and geometry] (84h:12031)

Kaplansky, Irving Hilbert's 17th problem. (Norwegian) (84g:01042)

Kleinfeld, Erwin A history of finite semifields. (84c:01042)

(Kronecker, Leopold) See Edwards, Harold M.; et al., (84g:01035)

Neumann, Olaf See Edwards, Harold M.; et al., (84g:01035)

Purkert, Walter See Edwards, Harold M.; et al., (84g:01035)

Schneider, Ivo Herausragende Einzelleistungen im Zusammenhang mit der Kreisteilungsgleichung, dem Fundamentalsatz der Algebra und der Reihenkonvergenz. [Notable individual accomplishments in connection with the cyclotomic equation, the fundamental theorem of algebra, and series convergence] (84h:01053)

Strassen, Volker See Baur, Walter, (84c:68027)

Strobl, Walter Über die Beziehungen zwischen der Dedekindschen Zahlentheorie und der Theorie der algebraischen Funktionen von Dedekind und Weber. [On the relationships between Dedekind's number theory and the theory of algebraic functions of Dedekind and Weber] (84i:01067)

Swan, Richard G. Noether's problem in Galois theory. (84k:12013)

(Weber, Heinrich) See Strobl, Walter, (84i:01067)

12-04 Explicit machine computation and programs (not the theory of computation or programming)

Adleman, Leonard M. (with Odlyzko, Andrew M.) Irreducibility testing and factorization of polynomials (extended abstract). (See 84a:68004)

Buchberger, B. See Möller, H. M., (84h:12003)

Cohen, Henri Sur la distribution asymptotique des groupes de classes. (English summary) [Asymptotic distribution of class groups] (84c:12001)

Graham, Dunstan Factors for cubics and quartics. (84h:12001)

Kreißig, Michael Ein nichtnumerischer Algorithmus zur Faktorisierung von Polynomen über den ganzen Zahlen in mehreren Variablen. [A nonnumerical algorithm for the factorization of polynomials in several variables over the integers] (84h:12002)

Über die Faktorisierung von Polynomen und ein spezieller

Faktorisierungsalgorithmus für Polynome in mehreren Variablen. [On the factorization of polynomials and a special factorization algorithm for polynomials of several variables] (84h:12002)

Lehmer, D. H. Computational advantages of cyclotomic fields. (84h:12003)

Lenstra, A. K. (with Lenstra, H. W., Jr.; Lovász, László) Factoring polynomials with rational coefficients. (84a:12002)

Lenstra, H. W., Jr. Reduced bases for lattices and factorization of polynomials. (See 84c:10004)

See also Lenstra, A. K.; et al., (84c:12002)

Lovász, László See Lenstra, A. K.; et al., (84c:12002)

Möller, H. M. (with Buchberger, B.) The construction of multivariate polynomials with preassigned zeros. (84h:12003)

Odlyzko, Andrew M. See Adleman, Leonard M., (See 84a:68004)

Strassen, Volker The computational complexity of continued fractions. (84h:12004)

Werner, Wilhelm On the simultaneous determination of polynomial roots. (84a:12003)

secondary classifications:

Adams, William W. (with Shanks, Daniel) Strong primality tests that are not sufficient. (84c:10007)

Akritis, Alkiviadis G. (with Ng, King H.) Exact algorithms for polynomial real root approximation using continued fractions. (German summary) (84d:65031)

(Armitage, J. V.) See Conference: Arithmetic, (84c:10003)

Baur, Walter (with Rabin, Michael O.) Linear disjointness and algebraic complexity. (84a:68035a)

(with Rabin, Michael O.) Linear disjointness and algebraic complexity.

(84a:68035b)

Camion, Paul F. Improving an algorithm for factoring polynomials over a finite field and constructing large irreducible polynomials. (84c:12008)

Dueck, G. W. See Williams, Hugh Cowie; et al., (84m:12010)

Ja'Ja', Joseph Computation of algebraic functions with root extractions. (See 84a:68004)

Lempel, Abraham (with Seroussi, Gadliel; Ziv, Jacob) On the power of straight-line computations in finite fields. (84h:68044)

(Lenstra, H. W., Jr.) See Schnorr, C.-P., (84d:10003) and Computational methods in number theory, (84d:10004)

Llorente, Pascual (with Oneto, Angel V.) On the real cubic fields. (84f:12002)

Martinet, Jacques Petits discriminants des corps de nombres. [Small discriminants of number fields] (84g:12009)

Ng, King H. See Akritis, Alkiviadis G., (84d:65031)

Oneto, Angel V. See Llorente, Pascual, (84f:12002)

Rabin, Michael O. See Baur, Walter, (84a:68035a) and (84a:68035b)

Riedel, W. Verfahren zur Nullstellenberechnung bei Polynomen. [Methods for computing zeros of polynomials] (84h:12032)

Schmid, B. K. See Williams, Hugh Cowie; et al., (84m:12010)

Schnorr, C.-P. A Monte Carlo factoring algorithm with finite storage. (84d:10003)

Schoof, R. J. Class groups of complex quadratic fields. (84h:12005)

Seah, Eric (with Washington, Lawrence C.; Williams, Hugh Cowie) The calculation of a large cubic class number with an application to real cyclotomic fields. (84m:12008)

Seroussi, Gadliel See Lempel, Abraham; et al., (84h:68044)

Shanks, Daniel See Adams, William W., (84c:10007)

(Tijdeman, Robert) See Computational methods in number theory, (84d:10004)

Turk, J. W. M. Fast arithmetic operations on numbers and polynomials. (84f:10006)

Washington, Lawrence C. See Seah, Eric; et al., (84m:12008)

Williams, Hugh Cowie (with Dueck, G. W.; Schmid, B. K.) A rapid method of evaluating the regulator and class number of a pure cubic field. (84m:12010)

See also Seah, Eric; et al., (84h:12008)

Ziv, Jacob See Lempel, Abraham; et al., (84h:68044)

Computational methods in number theory ★Computational methods in number theory. Part II. (84d:10004)

Conference:

Arithmetic ★Journées Arithmétiques, 1980. (French) [Arithmetic Conference, 1980] (84c:10003)

Exeter ★Journées Arithmétiques, 1980. (French) [Arithmetic Conference, 1980] (84c:10003)

12-06 Proceedings, conferences, etc.

(Amice, Y.) See Study group: Ultrametric analysis, (84j:12003)

(Christol, G.) See Study group: Ultrametric analysis, (84j:12003)

(Ihara, Yasutaka) See Galois groups and their representations, (84m:12001)

(Robba, P.) See Study group: Ultrametric analysis, (84j:12003)

Galois groups and their representations ★Galois groups and their representations.

(84m:12001)

Nagoya ★Galois groups and their representations. (84m:12001)

Study group:

Ultrametric analysis ★Groupe d'étude d'analyse ultramétrique. 9e année: 1981/82. Fasc. 1. (French) [Study group on ultrametric analysis. 9th year: 1981/82. No. 1] (84j:12003)

Symposium:

Galois groups and their representations ★Galois groups and their representations. (84m:12001)

(84m:12001)

secondary classifications:

(Artin, Michael) See Arithmetic and geometry, (84j:14005a)

(Koblitz, Neal) See Number theory related to Fermat's last theorem, (84a:10004)

(Shafarevich, Igor R.) See Arithmetic and geometry, (84j:14005a)

(Tate, John) See Arithmetic and geometry, (84j:14005a)

Arithmetic and geometry ★Arithmetic and geometry. Vol. I. (84j:14005a)

Birthdays:

Shafarevich, I. R. ★Arithmetic and geometry. Vol. I. (84j:14005a)

Cambridge, Mass. ★Number theory related to Fermat's last theorem. (84a:10004)

Conference:

Number Theory Related to Fermat's Last Theorem ★Number theory related to Fermat's last theorem. (84a:10004)

Number theory related to Fermat's last theorem ★Number theory related to Fermat's last theorem. (84a:10004)

12Axx Algebraic number theory: global fields (For complex multiplication, see 10D25.)

12A05 Analogues in number fields of elementary number theory

secondary classifications:

Hinz, Jürgen G. Eine Anwendung der Selbergschen Siebmethode in algebraischen Zahlkörpern. [An application of Selberg's sieve method in algebraic number fields] (84d:10050)

Character sums in algebraic number fields. (84i:10038)

Markanda, Raj K. ★On the number of remainders in Euclidean domains. (84c:13017)

Šliwa, Jan Remarks on factorizations in algebraic number fields. (84c:12004)

Watabe, Mutsuo On certain Diophantine equations in algebraic number fields. (84g:10031)

12A10 Characterizations of algebraic numbers and algebraic functions

secondary classifications:

Kaczorowski, Jerzy Completely irreducible numbers in algebraic number fields. (84i:10050)

12A15 Special algebraic numbers (PV numbers, etc.)

Boyd, David W. Families of Pisot and Salem numbers. 84h:12004

Cantor, David G. (with Straus, E. G.) On a conjecture of D. H. Lehmer. 84a:12004

Hunter, Jeffrey J. Algebraic integers on the unit circle. 84h:12005

Straus, E. G. See Cantor, David G., 84a:12004

secondary classifications:

Agrawal, M. K. See Parnami, J. C.; et al., (84d:10024a) and (84d:10024b)

Bazylewicz, A. Traces of monomials in algebraic numbers. (84a:12019)

Dress, Andreas W. M. (with Scharlau, Rudolf) Indecomposable totally positive numbers in real quadratic orders. (84a:12005)

Myerson, Gerald (with Smyth, C. J.) Corrigendum: "On measures of polynomials in several variables" [Bull. Austral. Math. Soc. 23 (1981), no. 1, 49-63; MR 82k:10074] by Smyth. (84g:10088)

Parnami, J. C. (with Agrawal, M. K.; Rajwade, A. R.) On expressing \sqrt{p} as a rational linear combination of cosines of angles which are rational multiples of π . (84d:10024a) (with Agrawal, M. K.; Rajwade, A. R.) On expressing a quadratic irrational as a rational linear combination of roots of unity. (84d:10024b)

Rajwade, A. R. See Parnami, J. C.; et al., (84d:10024a) and (84d:10024b)

Scharlau, Rudolf See Dress, Andreas W. M., (84a:12005)

Smyth, C. J. Conjugate algebraic numbers on conics. (84h:10079)

See also Myerson, Gerald, (84g:10088)

12A20 Polynomials (irreducibility, etc.)

Dvornicich, Roberto (with Zannier, Umberto) On polynomials taking small values at integral arguments. 84h:12001

Gati, Georg The complexity of solving polynomial equations by prime root extractions. 84g:12001

Herreijers, H. Study of the irreducibility of polynomials in the field of rational numbers. (Dutch) 84b:12006

Kantardzhieva, E. R. (with Pirgov, D. T.) A theorem on the irreducibility of Pólya's integer polynomials. (Bulgarian. English and Russian summaries) 84m:12003

Pirgov, D. T. (with Semkovski, A. B.) Irreducibility of a class of integer polynomials over the rational number field. (Bulgarian. English and Russian summaries) 84m:12002 See also Kantardzhieva, E. R., 84m:12003

Schinzel, Andrzej Diophantine equations with parameters. (See 84c:10003) Sur un problème de Lehmer. [On a problem of Lehmer] (See 84c:10004)

Semkovski, A. B. See Pirgov, D. T., 84m:12002

Sprindzhuk, V. G. Diophantine equations with prime unknowns. (Russian) 84d:12001

Takaku, Akira Criteria for irreducibility of polynomials. 84d:12002

Zannier, Umberto See Dvornicich, Roberto, 84k:12001

secondary classifications:

Adleman, Leonard M. (with Odlyzko, Andrew M.) Irreducibility testing and factorization of polynomials (extended abstract). (See 84a:68004)

Györy, K. On S -integral solutions of norm form, discriminant form and index form equations. (84g:10037)

Hunter, Jeffrey J. Algebraic integers on the unit circle. (84b:12005)

Ito, Hideji On the division equations of elliptic curves dissatisfying Hasse principle. (84h:14050)

Kreißig, Michael Ein nichtnumerischer Algorithmus zur Faktorisierung von Polynomen über den ganzen Zahlen in mehreren Variablen. [A nonnumerical algorithm for the factorization of polynomials in several variables over the integers] (84h:12002)

Lawton, Wayne M. A problem of Boyd concerning geometric means of polynomials. (84i:10056)

Lenstra, A. K. (with Lenstra, H. W., Jr.; Lovász, László) Factoring polynomials with rational coefficients. (84a:12002)

Lenstra, H. W., Jr. Reduced bases for lattices and factorization of polynomials. (See 84c:10004)

See also Lenstra, A. K.; et al., (84a:12002)

Lovász, László See Lenstra, A. K.; et al., (84a:12002)

Odlyzko, Andrew M. See Adleman, Leonard M., (See 84a:68004)

12A25 Quadratic fields

Brown, Ezra The class number and fundamental unit of $\mathbb{Q}(\sqrt{2p})$ for $p \equiv 1 \pmod{16}$ a prime. 84c:12001

Dress, Andreas W. M. (with Scharlau, Rudolf) Indecomposable totally positive numbers in real quadratic orders. 84a:12005

Hendy, M. D. ★Ideal numbers of the ring $\mathbb{Q}(\sqrt{-5})$. 84f:12001

Lu, Hong Wen Real quadratic fields with class number 1. (Chinese) 84j:12004

Mestre, Jean-François Courbes elliptiques et groupes de classes d'idéaux de certains corps quadratiques. [Elliptic curves and ideal class groups of certain quadratic fields] 84m:12004

Morton, Patrick The quadratic number fields with cyclic 2-classgroups. 84i:12001

Scharlau, Rudolf See Dress, Andreas W. M., 84a:12005

Schoof, R. J. Class groups of complex quadratic fields. 84h:12005

secondary classifications:

Brown, Ezra The class-number of $\mathbb{Q}(\sqrt{-pq})$, for $p \equiv -q \equiv 1 \pmod{4}$ primes. (84a:12014)

Currie, James D. See Williams, Kenneth S., (84b:12014)

Décoste, Hélène Des anneaux principaux, non euclidiens. [Principal ideal rings that are not Euclidean] (84f:13015)

Dummit, D. S. (with Gold, R.; Kisilevsky, H.) The field generated by the discriminant of the class invariants of an imaginary quadratic field. (84g:12006)

Fomenko, O. M. Sums of squares in imaginary quadratic fields. (Russian) (84g:10039)

Gold, R. See Dummit, D. S.; et al., (84g:12006)

Hudson, Richard H. (with Williams, Kenneth S.) Class number formulae of Dirichlet type. (84b:12013)

Hurrelbrink, Jürgen On the size of certain K -groups. (84d:12010)

Kamienny, S. Points of order p on elliptic curves over $\mathbb{Q}(\sqrt{p})$. (84g:14047)

Kaplan, Pierre À propos des équations anti-pelliennes. [On anti-Pell equations] (84k:10010)

Kisilevsky, H. See Dummit, D. S.; et al., (84g:12006)

Tanimura, Yosikatu Non-Euclidean point in field $\mathbb{Q}(\sqrt{97})$. (84j:10043)

Vaughan, Theresa P. The discriminant of a quadratic extension of an algebraic field. (84c:12006)

Williams, Kenneth S. (with Currie, James D.) Class numbers and biquadratic reciprocity. (84b:12014)

Congruences modulo 8 for the class numbers of $\mathbb{Q}(\sqrt{\pm p})$, $p \equiv 3 \pmod{4}$ a prime. (84a:12016)

See also Hudson, Richard H., (84b:12013)

12A30 Cubic and quartic fields

Amara, Hédi Groupe des classes et unité fondamentale des extensions quadratiques relatives à un corps quadratique imaginaire principal. [Class group and fundamental unit of quadratic extensions over a principal imaginary quadratic field] 84a:12006

Llorente, Pascual (with Oneto, Angel V.) On the real cubic fields. 84f:12002

(with Nart, Enric) Effective determination of the decomposition of the rational primes in a cubic field. 84d:12003

Nakahara, Toru On cyclic biquadratic fields related to a problem of Hasse. 84a:12007

Nakano, Shin Class numbers of pure cubic fields. 84j:12005

Nart, Enric See Llorente, Pascual, 84f:12003

Oneto, Angel V. See Llorente, Pascual, 84f:12002

Watabe, Mutsuo On certain cubic fields. I. 84m:12005a

On certain cubic fields. II. 84m:12005b

On certain cubic fields. III. 84m:12005c

secondary classifications:

Appelgate, H. (with Onishi, Hironori) Periodic expansion of modules and its relation to units. (84d:12005)

Cusick, T. W. Finding fundamental units in cubic fields. (84a:12010)

Dueck, G. W. See Williams, Hugh Cowie; et al., (84m:12010)

Godwin, H. J. The calculation of large units in cyclic cubic fields. (84c:12003)

Ke, Zhao (with Sun, Qi) The application of number theory in digital signal processing. (Chinese) (84c:94005)

Levesque, Claude Systèmes fondamentaux d'unités de certains corps de degré 4 et de degré 8 sur \mathbb{Q} . [Fundamental systems of units of certain fields of degree 4 and degree 8 over \mathbb{Q}] (84a:12012)

Onishi, Hironori See Appelgate, H., (84d:12005)

Saito, Hiroshi (with Yamauchi, Masatoshi) Congruences between Hilbert cusp forms and units in quartic fields. (84d:10034)

Satgé, Ph. Corps cubiques de discriminant donné. [Cubic fields with a given discriminant] (84d:12007)

Schmid, B. K. See Williams, Hugh Cowie; et al., (84m:12010)

Sun, Qi See Ke, Zhao, (84c:94005)

Williams, Hugh Cowie (with Dueck, G. W.; Schmid, B. K.) A rapid method of evaluating the regulator and class number of a pure cubic field. (84m:12010)

Yamauchi, Masatoshi See Saito, Hiroshi, (84d:10034)

12A35 Abelian and metabelian extensions (including cyclotomic, Kummer, cyclic)

Cornell, Gary Exponential growth of the f -rank of the class group of the maximal real subfield of cyclotomic fields. 84h:12007

Relative genus theory and the class group of f -extensions. 84i:12002

Cuoco, Albert A. Relations between invariants in \mathbb{Z}_2^2 -extensions. 84a:12008

Evans, Ronald J. Period polynomials for generalized cyclotomic periods. 84d:12004

Furiya, Hisako Ambiguous numbers over $P(\frac{1}{2})$ of absolutely abelian extensions of degree 6. 84h:12006

- Galovich, Steven (with Rosen, Michael) Units and class groups in cyclotomic function fields. **84b:12008**
- Gerth, Frank, III Counting certain number fields with prescribed l -class numbers. **84c:12002**
- Asymptotic results for class number divisibility in cyclotomic fields. **84j:12006**
- Heider, Franz-Peter (with Schmithals, Bodo) Zur Kapitulation der Idealklassen in unverzweigten primzyklischen Erweiterungen. [The capitulation of ideal classes in unramified prime-cyclic extensions] **84g:12002**
- Jaulent, Jean-François Théorie d'Iwasawa des tours métabeliennes. [Iwasawa theory of metabelian towers] **84b:12009**
- Kida, Yūji Cyclotomic \mathbb{Z}_l -extensions of J -fields. **84b:12010**
- Mazur, Barry C. (with Wiles, Andrew) Analogies between function fields and number fields. **84g:12003**
- McCulloh, Leon R. Stickelberger relations in class groups and Galois module structure. (See **84c:10003**)
- Oesterlé, J. Reformulation de la conjecture principale d'Iwasawa. [Reformulation of Iwasawa's Main Conjecture] **84c:12003**
- Okutsu, Kōsaku Integral basis of the field $\mathbb{Q}(\sqrt[n]{a})$. **84b:12007**
- Rosen, Michael See Galovich, Steven. **84b:12008**
- Schmithals, Bodo See Heider, Franz-Peter. **84g:12002**
- Takase, Koichi Some remarks on the relative genus fields. **84c:12003**
- Takeuchi, Teruo Genus number and l -rank of genus group of cyclic extensions of degree l . **84a:12009**
- Tateyama, Koichi On the ideal class groups of some cyclotomic fields. **84b:12011**
- Taylor, M. J. Group laws and rings with normal bases. **84c:12002**
- Wang, Kai On the dimensions of certain subspaces of an abelian extension field. **84b:12008**
- Wiles, Andrew See Mazur, Barry C. **84g:12003**
- Zhang, Xian Ke On number fields of type $(2, 2, \dots, 2)$. (Chinese. English summary) **84j:12007**

secondary classifications:

- Adleman, Leonard M. (with Pomerance, Carl; Rumely, Robert S.) On distinguishing prime numbers from composite numbers. (**84c:10008**)
- D'Mello, Joseph G. (with Madan, Manohar L.) Class group rank relations in \mathbb{Z}_l -extensions. (**84m:12016**)
- Feng, Ke Qin An elementary criterion on parity of class number of cyclic number field. (**84g:12007**)
- Hamada, Suguru Norm theorem on splitting fields of some binomial polynomials. (**84c:12007**)
- Hughes, I. (with Mollin, R.) Totally positive units and squares. (**84d:12006**)
- Ichimura, Humio On 2-rank of the ideal class groups of totally real number fields. (**84h:12025**)
- Jacquot, Olivier Théorie de Kummer sur une extension d'une courbe elliptique par G_m . [Kummer theory on an extension of an elliptic curve by G_m] (**84m:14049**)
- Kamienny, S. Modular curves and unramified extensions of number fields. (**84c:12011**)
- Kolster, Manfred Quadratic forms and Artin's reciprocity law. (**84c:10020**)
- Lang, Heinrich Über verallgemeinerte Dedekindsche Summen, Strahlklasseninvarianten reell-quadratischer Zahlkörper und die Klassenzahl des q -ten Kreisteilungskörpers. [On generalized Dedekind sums, ray class invariants of real quadratic number fields and the class number of the q th cyclotomic field] (**84m:12006**)
- Lehmer, D. H. Computational advantages of cyclotomic fields. (**84h:12003**)
- van der Linden, F. J. Class numbers of real abelian number fields of small conductor. (See **84c:10003**)
- Class number computations of real abelian number fields. (**84c:12005**)
- Madan, Manohar L. See D'Mello, Joseph G. (**84m:12016**)
- Menichetti, Giampaolo Commutative division algebras. (**84f:51051**)
- Mollin, R. See Hughes, I. (**84d:12006**)
- Newman, Morris Cyclotomic units and Hilbert's Satz 90. (**84c:12013**)
- Pomerance, Carl See Adleman, Leonard M.; et al. (**84c:10008**)
- Rumely, Robert S. See Adleman, Leonard M.; et al. (**84c:10008**)
- Schneider, Peter Height pairings in the Iwasawa theory of abelian varieties. (**84m:14050**)
- Seah, Eric (with Washington, Lawrence C.; Williams, Hugh Cowie) The calculation of a large cubic class number with an application to real cyclotomic fields. (**84m:12008**)
- Selucky, Konstantin (with Skula, Ladislav) Irregular imaginary fields. (**84a:12015**)
- Skula, Ladislav A remark on Mirimanoff polynomials. (**84b:10022**)
- See also Selucky, Konstantin. (**84a:12015**)
- Snaith, Victor Percy A topological "proof" of a theorem of Ribet. (**84g:12013**)
- Snyder, William M. Factoring repunits. (**84b:10011**)
- Steckel, Heinz-Dieter Arithmetik in Frobeniusgruppen. (English summary) [Arithmetic in Frobenius extensions] (**84c:12008**)
- Washington, Lawrence C. See Seah, Eric; et al. (**84m:12008**)
- Williams, Hugh Cowie See Seah, Eric; et al. (**84m:12008**)

12A40 Other number fields

- Barrucand, P. (with Laubie, F.) Ramification modérée dans les corps de nombres de degré premier. [Tame ramification in number fields of prime degree] **84k:12002**
- Laubie, F. See Barrucand, P. **84k:12002**

secondary classifications:

- Bartels, Hans-Jochen Zur Arithmetik von Diedergruppen-erweiterungen. [On the arithmetic of extensions of dihedral groups] (**84c:12009**)
- Bremner, Andrew (with Morton, Patrick) A new characterization of the integer 5906. (**84c:10016**)
- Morton, Patrick See Bremner, Andrew. (**84c:10016**)
- Nakamura, Ken A construction of the groups of units of some number fields from certain subgroups. (**84b:12012**)

- Pohst, Michael On the determination of algebraic number fields of given discriminant. (**84m:12007**)
- Ribet, Kenneth A. Generalization of a theorem of Tankoev. (**84h:14051**)
- Zhmud', É. M. A property of fields of group characters. (Russian) (**84m:20020**)

12A45 Units and factorization

- Appelgate, H. (with Onishi, Hironori) Periodic expansion of modules and its relation to units. **84d:12005**
- Cusick, T. W. Finding fundamental units in cubic fields. **84a:12010**
- Frei, Günther Fundamental systems of units in biquadratic parametric number fields. **84c:12011**
- Godwin, H. J. The calculation of large units in cyclic cubic fields. **84c:12003**
- Haggenmüller, Rudolf Signaturen von Einheiten und unverzweigte quadratische Erweiterungen total-reeller Zahlkörper. [Signatures of units and unramified quadratic extensions of totally real number fields] **84g:12004**
- Halter-Koch, Franz Metrische Theorie der Einheiten algebraischer Zahlkörper. [Metric theory of the units of algebraic number fields] **84c:12004**
- Hughes, I. (with Mollin, R.) Totally positive units and squares. **84d:12006**
- Komatsu, Keiichi On a certain property of profinite groups. **84g:12005**
- Kubert, Daniel S. (with Lang, Serge) \star Modular units. **84b:12009**
- Lang, Serge See Kubert, Daniel S. **84b:12009**
- Levesque, Claude Systèmes fondamentaux d'unités de certains corps de degré 4 et de degré 8 sur \mathbb{Q} . [Fundamental systems of units of certain fields of degree 4 and degree 8 over \mathbb{Q}] **84c:12012**
- Mollin, R. See Hughes, I. **84d:12006**
- Nakamura, Ken A construction of the groups of units of some number fields from certain subgroups. **84b:12012**
- Newman, Morris Cyclotomic units and Hilbert's Satz 90. **84c:12013**
- Onishi, Hironori See Appelgate, H. **84d:12005**
- Schmidt, C.-G. On relations between Gauss sums and cyclotomic units. (See **84c:10003**)
- Šliwa, Jan Remarks on factorizations in algebraic number fields. **84c:12004**

secondary classifications:

- Amara, Hédi Groupe des classes et unité fondamentale des extensions quadratiques relatives à un corps quadratique imaginaire principal. [Class group and fundamental unit of quadratic extensions over a principal imaginary quadratic field] (**84a:12006**)
- Brown, Ezra The class number and fundamental unit of $\mathbb{Q}(\sqrt[2p]{p})$ for $p \equiv 1 \pmod{16}$ a prime. (**84c:12001**)
- Dueck, G. W. See Williams, Hugh Cowie; et al. (**84m:12010**)
- Gurak, S. Minimal polynomials for Gauss circulants and cyclotomic units. (**84c:10032**)
- Hayes, David R. Elliptic units in function fields. (**84f:12005**)
- Heider, Franz-Peter (with Schmithals, Bodo) Zur Kapitulation der Idealklassen in unverzweigten primzyklischen Erweiterungen. [The capitulation of ideal classes in unramified prime-cyclic extensions] (**84g:12002**)
- Hendy, M. D. \star Ideal numbers of the ring $\mathbb{Q}(\sqrt{-5})$. (**84f:12001**)
- Iwasawa, Kenkichi On cohomology groups of units for \mathbb{Z}_p -extensions. (**84h:12013**)
- Kaczorowski, Jerzy Completely irreducible numbers in algebraic number fields. (**84c:10050**)
- Narkiewicz, W. (with Šliwa, Jan) Finite abelian groups and factorization problems. II. (**84c:20058**)
- Saito, Hiroshi (with Yamauchi, Masatoshi) Congruences between Hilbert cusp forms and units in quartic fields. (**84d:10034**)
- Schmid, B. K. See Williams, Hugh Cowie; et al. (**84m:12010**)
- Schmithals, Bodo See Heider, Franz-Peter. (**84g:12002**)
- Šliwa, Jan See Narkiewicz, W. (**84c:20058**)
- Watabe, Mutsuo On certain cubic fields. I. (**84m:12005a**)
- On certain cubic fields. III. (**84m:12005c**)
- Williams, Hugh Cowie (with Dueck, G. W.; Schmid, B. K.) A rapid method of evaluating the regulator and class number of a pure cubic field. (**84m:12010**)
- Yamauchi, Masatoshi See Saito, Hiroshi. (**84d:10034**)

12A50 Class number, discriminant

- Brown, Ezra The class-number of $\mathbb{Q}(\sqrt{-pq})$, for $p \equiv -q \equiv 1 \pmod{4}$ primes. **84a:12014**
- Currie, James D. See Williams, Kenneth S. **84b:12014**
- Diaz y Diaz, Francisco Sur les discriminants minimaux. [On minimal discriminants] **84f:12003**
- Valuers minima du discriminant des corps de degré 7 ayant une seule place réelle. (English summary) [Minimal values of the discriminant of algebraic number fields of degree 7 having only one real place] **84c:12004**
- Dueck, G. W. See Williams, Hugh Cowie; et al. **84m:12010**
- Dummit, D. S. (with Gold, R.; Kisilevsky, H.) The field generated by the discriminant of the class invariants of an imaginary quadratic field. **84g:12006**
- Feng, Ke Qin An elementary criterion on parity of class number of cyclic number field. **84g:12007**
- Fukuda, Takashi A class number formula of Iwasawa's modules. **84g:12008**
- Gold, R. See Dummit, D. S.; et al. **84g:12006**
- Győry, K. On discriminants and indices of integers of an algebraic number field. **84c:12005**
- Hudson, Richard H. (with Williams, Kenneth S.) Class number formulae of Dirichlet type. **84b:12013**
- Kisilevsky, H. See Dummit, D. S.; et al. **84g:12006**
- Lang, Heinrich Über verallgemeinerte Dedekindsche Summen, Strahlklasseninvarianten reell-quadratischer Zahlkörper und die Klassenzahl des q -ten Kreisteilungskörpers. [On generalized Dedekind sums, ray class invariants of real quadratic number fields and the class number of the q th cyclotomic field] **84m:12006**
- van der Linden, F. J. Class numbers of real abelian number fields of small conductor. (See **84c:10003**)

- Class number computations of real abelian number fields. **84c:12005**
- Martinet, Jacques. Petits discriminants des corps de nombres. [Small discriminants of number fields] **84j:12009**
- Pohst, Michael. On the determination of algebraic number fields of given discriminant. **84m:12007**
- Salce, Luigi (with Zanardo, Paolo). Arithmetical characterization of rings of algebraic integers with cyclic ideal class group. (Italian summary) **84c:12006**
- Satgé, Ph. Corps cubiques de discriminant donné. [Cubic fields with a given discriminant] **84d:12007**
- Schmid, B. K. See Williams, Hugh Cowie; et al. **84m:12010**
- Seah, Eric (with Washington, Lawrence C.; Williams, Hugh Cowie). The calculation of a large cubic class number with an application to real cyclotomic fields. **84m:12008**
- Selucký, Konstantin (with Skula, Ladislav). Irregular imaginary fields. **84d:12015**
- Skula, Ladislav. See Selucký, Konstantin. **84d:12015**
- Takhtayan, L. A. (with Vinogradov, A. I.). The Gauss-Hasse hypothesis on real quadratic fields with class number one. **84j:12010**
- Tsvetkov, V. M. On a theorem of Stickelberger and Voronoi. (Russian) **84m:12009**
- Vaughan, Theresa P. The discriminant of a quadratic extension of an algebraic field. **84c:12006**
- Vinogradov, A. I. See Takhtayan, L. A. **84j:12010**
- Washington, Lawrence C. See Seah, Eric; et al. **84m:12008**
- Williams, Hugh Cowie (with Dueck, G. W.; Schmid, B. K.). A rapid method of evaluating the regulator and class number of a pure cubic field. **84m:12010**
- See also Seah, Eric; et al. **84m:12008**
- Williams, Kenneth S. (with Currie, James D.). Class numbers and biquadratic reciprocity. **84b:12014**
- Congruences modulo 8 for the class numbers of $\mathbb{Q}(\sqrt{-p})$, $p \equiv 3 \pmod{4}$ a prime. **84c:12016**
- See also Hudson, Richard H. **84b:12013**
- Zanardo, Paolo. See Salce, Luigi. **84c:12006**

secondary classifications:

- Cohen, Henri. Sur la distribution asymptotique des groupes de classes. (English summary) [Asymptotic distribution of class groups] **(84c:12001)**
- Cornell, Gary. Exponential growth of the l -rank of the class group of the maximal real subfield of cyclotomic fields. **(84b:12007)**
- Relative genus theory and the class group of l -extensions. **(84i:12002)**
- Cuoco, Albert A. Relations between invariants in \mathbb{Z}_p^2 -extensions. **(84a:12008)**
- Furuya, Hisako. Ambiguous numbers over $P(\zeta_p)$ of absolutely abelian extensions of degree 6. **(84b:12006)**
- Galovich, Steven (with Rosen, Michael). Units and class groups in cyclotomic function fields. **(84b:12008)**
- Gerth, Frank, III. Counting certain number fields with prescribed l -class numbers. **(84c:12002)**
- Asymptotic results for class number divisibility in cyclotomic fields. **(84j:12006)**
- Ichimura, Humio. On 2-rank of the ideal class groups of totally real number fields. **(84b:12025)**
- Ito, Hiroshi. A result on the Siegel-Ramachandra class invariant over imaginary quadratic fields. **(84m:12012)**
- Iyanaga, Kenichi. Cusps associated to lattices in Hermitian vector spaces of dimension 2. **(84j:10048)**
- Kida, Yûji. Cyclotomic \mathbb{Z}_p -extensions of J -fields. **(84b:12010)**
- Lefton, Phyllis. A trinomial discriminant formula. **(84c:10068)**
- Llorente, Pascual (with Nart, Enric). Effective determination of the decomposition of the rational primes in a cubic field. **(84d:12003)**
- Lu, Hong Wen. Real quadratic fields with class number 1. (Chinese) **(84j:12004)**
- Mazur, Barry C. (with Wiles, Andrew). Analogies between function fields and number fields. **(84g:12003)**
- Morton, Patrick. The quadratic number fields with cyclic 2-classgroups. **(84i:12001)**
- Nakano, Shin. Class numbers of pure cubic fields. **(84j:12005)**
- Nart, Enric. See Llorente, Pascual. **(84d:12003)**
- Rosen, Michael. See Galovich, Steven. **(84b:12008)**
- Schoof, R. J. Class groups of complex quadratic fields. **(84b:12005)**
- Tateyama, Koichi. On the ideal class groups of some cyclotomic fields. **(84b:12011)**
- Washington, Lawrence C. Zeros of p -adic L -functions. **(84f:12008)**
- Watabe, Mutsuo. On certain cubic fields. II. **(84m:12005b)**
- Wiles, Andrew. See Mazur, Barry C. **(84g:12003)**
- Zhang, Xian Ke. On number fields of type $(2, 2, \dots, 2)$. (Chinese. English summary) **(84j:12007)**

12A55 Galois theory

- Belyi, G. V. On extensions of the maximal cyclotomic field having a given classical Galois group. **84b:12010**
- Brinkhuis, Jan. Symétries d'un module galoisien. [Symmetries of a Galois module] (See **84c:10004**)
- Normal integral bases and embedding problems. **84k:12003**
- Bushnell, Colin J. Diophantine approximation and norm distribution in Galois orbits. **84c:12007**
- Cognard, Jean. Résultats et problèmes sur la structure galoisienne des anneaux d'entiers. [Results and problems on the Galois structure of rings of integers] (See **84d:10005**)
- Gras, Georges. Groupe de Galois de la p -extension abélienne p -ramifiée maximale d'un corps de nombres. [Galois group of the maximal p -ramified abelian p -extension of a number field] **84j:12008**
- Hamada, Suguru. Norm theorem on splitting fields of some binomial polynomials. **84c:12007**
- Jensen, Christian U. (with Yui, Noriko). Polynomials with D_p as Galois group. **84j:12011**
- Opolka, Hans. Eine Bemerkung zur Konstruktion von Galoisdarstellungen. [A remark on the construction of Galois representations] **84f:12004**

- Queyruet, Jacques. S -groupes des classes d'un ordre arithmétique. [S -class groups of an arithmetic order] **84a:12017**
- Steckel, Heinz-Dieter. Arithmetik in Frobenius-erweiterungen. (English summary) [Arithmetic in Frobenius extensions] **84c:12008**
- Yui, Noriko. See Jensen, Christian U. **84j:12011**
- Zantema, H. Integer valued polynomials over a number field. **84i:12005**

secondary classifications:

- Aschbacher, Michael (with Guralnick, R.). Solvable generation of groups and Sylow subgroups of the lower central series. **(84c:20025)**
- Bartels, Hans-Jochen. Zur Arithmetik von Diedergruppenerweiterungen. [On the arithmetic of extensions of dihedral groups] **(84c:12009)**
- Browkin, Jerzy. The meaning of Galois theory in modern mathematics and its role in the education of young mathematicians. (Polish. English and Russian summaries) **(84j:12001)**
- Cassou-Noguès, Ph. (with Taylor, M. J.). Local root numbers and Hermitian-Galois module structure of rings of integers. **(84b:12026)**
- Chandrasekharan, K. (with Good, Anton). On the number of integral ideals in Galois extensions. **(84i:12008)**
- Gati, Georg. The complexity of solving polynomial equations by prime root extractions. **(84j:12001)**
- Good, Anton. See Chandrasekharan, K. **(84i:12008)**
- Guralnick, R. See Aschbacher, Michael. **(84c:20025)**
- Klingen, Norbert. Das Einbettungsproblem für algebraische Zahlkörper bei Beschränkung der Verzweigung. [The embedding problem for algebraic number fields under restriction of the ramification] **(84j:12009)**
- Komatsu, Keiichi. On a certain property of profinite groups. **(84j:12005)**
- Miyake, Katsuya. Central extensions and Schur's multipliers of Galois groups. **(84m:12013)**
- Queyruet, Jacques. Sommes de Gauss et structure galoisienne des anneaux d'entiers. [Gauss sums and Galois structure of rings of integers] (See **84c:10004**)
- Saltman, David J. Generic Galois extensions and problems in field theory. **(84d:13007)**
- Spiegel, Eugene (with Trojan, Allan). Minimal splitting fields in cyclotomic extensions. **(84a:20009)**
- Taylor, M. J. Galois module structure of rings of integers. (See **84c:10003**)
- See also Cassou-Noguès, Ph. **(84b:12026)**
- Trojan, Allan. See Spiegel, Eugene. **(84a:20009)**
- Wingberg, Kay. Eine Bemerkung zum Einbettungsproblem mit nicht-abelischem Kern. [A note on the imbedding problem with nonabelian kernel] **(84f:12006)**
- Zyapkova, Nikola P. Imbeddability of a universally imbeddable extension into a universally imbeddable extension. (Russian) **(84j:12026)**

12A57 Integral representations related to algebraic numbers [See also 20C10.]

- Girstmair, Kurt. Linear dependence of zeros of polynomials and construction of primitive elements. **84d:12008**
- Hironaka-Kobayashi, Yumiko. Class groups of group rings whose coefficients are algebraic integers. **84k:12004**
- Lewittes, Joseph. Characters and decomposition of a representation in a number field. **84b:12011**
- Opolka, Hans. Finite Galois modules and Galois representations of number fields. **84c:12009**
- Queyruet, Jacques. Sommes de Gauss et structure galoisienne des anneaux d'entiers. [Gauss sums and Galois structure of rings of integers] (See **84c:10004**)
- Roggenkamp, K. W. (with Scott, Leonard L.). Hecke actions on Picard groups. **84c:12008**
- Scott, Leonard L. See Roggenkamp, K. W. **84c:12008**
- Taylor, M. J. A logarithmic description of determinants in groups rings. (See **84c:18001b**)
- Galois module structure of rings of integers. (See **84c:10003**)
- Ullom, Stephen V. Character action on the class group of Fröhlich. **84b:12012**

secondary classifications:

- Bhandari, Ashwani K. (with Luthar, Indar S.). Conjugacy classes of torsion units of the integral group ring of D_p . **(84j:20011)**
- Brinkhuis, Jan. Symétries d'un module galoisien. [Symmetries of a Galois module] (See **84c:10004**)
- Normal integral bases and embedding problems. **(84k:12003)**
- Cassou-Noguès, Ph. (with Taylor, M. J.). Local root numbers and Hermitian-Galois module structure of rings of integers. **(84b:12026)**
- Cognard, Jean. Résultats et problèmes sur la structure galoisienne des anneaux d'entiers. [Results and problems on the Galois structure of rings of integers] (See **84d:10005**)
- Fröhlich, Albrecht. Value distributions of symplectic root numbers. **(84e:12010)**
- Luthar, Indar S. See Bhandari, Ashwani K. **(84j:20011)**
- McCulloh, Leon R. Stickelberger relations in class groups and Galois module structure. (See **84c:10003**)
- Taylor, M. J. Group laws and rings with normal bases. **(84c:12002)**
- See also Cassou-Noguès, Ph. **(84b:12026)**

12A60 Galois cohomology [See also 12Gxx, 16A16.]

- Bartels, Hans-Jochen. Zur Arithmetik von Diedergruppenerweiterungen. [On the arithmetic of extensions of dihedral groups] **84c:12009**
- Heider, Franz-Peter. Zahlentheoretische Knoten unendlicher Erweiterungen. [Number-theoretic knots of infinite extensions] **84i:12006**
- Iwasawa, Kenkichi. On cohomology groups of units for \mathbb{Z}_p -extensions. **84b:12013**
- Klingen, Norbert. Das Einbettungsproblem für algebraische Zahlkörper bei Beschränkung der Verzweigung. [The embedding problem for algebraic number fields under restriction of the ramification] **84j:12009**

Lorenz, Falko Zur Theorie der Normenreste. [On the theory of norm residues] **84i:12018**
Schacher, Murray Applications of the classification of finite simple groups to Brauer groups. **84b:12015**

secondary classifications:

D'Mello, Joseph G. (with Madan, Manohar L.) Class group rank relations in Z_p -extensions. **(84m:12016)**
Douai, Jean-Claude (with Touibi, C.) Courbes définies sur les corps de séries formelles et loi de réciprocité. [Curves defined over fields of formal power series, and a reciprocity law] **(84i:12010)**
 Suites exactes déduites de la suite spectrale de Leray en cohomologie non abélienne. [Exact sequences derived from the Leray spectral sequences in nonabelian cohomology] **(84c:14014)**
Hamada, Suguru Norm theorem on splitting fields of some binomial polynomials. **(84c:12007)**
Jehne, Wolfram Der Hassesche Normensatz und seine Entwicklung. [Hasse's norm theorem and its development] **(84j:12002)**
Madan, Manohar L. See **D'Mello, Joseph G.**, **(84m:12016)**
Touibi, C. See **Douai, Jean-Claude**, **(84i:12010)**
Zantema, H. Integer valued polynomials over a number field. **(84i:12005)**

12A62 Applications of algebraic K-theory

Hurrelbrink, Jürgen $K_2(o)$ for two totally real fields of degree three and four. **84d:12009**
 On the size of certain K-groups. **84d:12010**
 On the wild kernel. **84h:12014**
Merkur'ev, A. S. (with Suslin, A. A.) K-cohomology of Severi-Brauer varieties and the norm residue homomorphism. (Russian) **84i:12007**
Panin, I. A. Fields with vanishing K_2 . Torsion in $H^1(X, \mathbb{Z}_2)$ and $\text{Ch}^2(X)$. (Russian) **84g:12012**
Snath, Victor Percy A topological "proof" of a theorem of Ribet. **84g:12013**
Suslin, A. A. See **Merkur'ev, A. S.**, **84i:12007**

secondary classifications:

Bürgisser, Balz On the projective class group of arithmetic groups. **(84j:16015)**
Hurrelbrink, Jürgen On presentations of $SL_n(\mathbb{Z}_p)$. **(84i:20044)**
Kato, Kazuya Algebraic K-theory: its number-theoretic aspects. (Japanese) **(84c:12011)**
Merkur'ev, A. S. (with Suslin, A. A.) K-cohomology of Severi-Brauer varieties and the norm residue homomorphism. (Russian) **(84i:14025)**
Queyruet, Jacques S-groupes des classes d'un ordre arithmétique. [S-class groups of an arithmetic order] **(84a:12017)**
Rehmann, U. A survey of the congruence subgroup problem. **(84c:12018)**
Soulé, Christophe On K-theory and values of zeta functions. **(84j:12012)**
Suslin, A. A. See **Merkur'ev, A. S.**, **(84i:14025)**

12A65 Class field theory

Fröhlich, Albrecht Value distributions of symplectic root numbers. **84c:12010**
Furuta, Yoshiomi A prime decomposition symbol and integral quadratic forms. **84m:12011**
Gekeler, Ernst-Ulrich Zur Arithmetik von Drinfel'd-Modula. [On the arithmetic of Drinfel'd modules] **84j:12010**
Ito, Hiroshi A result on the Siegel-Ramachandra class invariant over imaginary quadratic fields. **84m:12012**
Kamienny, S. Modular curves and unramified extensions of number fields. **84c:12011**
Miyake, Katsuya Central extensions and Schur's multipliers of Galois groups. **84m:12013**
Schappacher, Norbert Une classe de courbes elliptiques à multiplication complexe. [A class of elliptic curves with complex multiplication] (See **84b:10005**)
Terada, Fumiyuki A principal ideal theorem. **84b:12015**

secondary classifications:

Cornell, Gary Exponential growth of the l -rank of the class group of the maximal real subfield of cyclotomic fields. **(84b:12007)**
 Relative genus theory and the class group of l -extensions. **(84i:12002)**
Gross, Benedict H. Algebraic Hecke characters for function fields. **(84h:12024)**
Heider, Franz-Peter Zahlentheoretische Knoten unendlicher Erweiterungen. [Number-theoretic knots of infinite extensions] **(84i:12006)**
Jarden, Moshe The Čebotarev density theorem for function fields: an elementary approach. **(84c:12016)**
van der Kallen, Wilberd $SL_3(\mathbb{C}[X])$ does not have bounded word length. **(84b:20037)**
Kobayashi, Midori The connected component of the idèle class group of an algebraic number field. **(84h:12022)**
Komatsu, Keiichi On a certain property of profinite groups. **(84g:12005)**
Kunyavskii, B. È. Arithmetic properties of three-dimensional algebraic tori. (Russian) **(84m:14027)**
Moreno, Carlos J. ★Advanced analytic number theory. Part I. **(84j:12015)**
Satgé, Ph. Corps cubiques de discriminant donné. [Cubic fields with a given discriminant] **(84d:12007)**
Steckel, Heinz-Dieter Arithmetik in Frobenius-erweiterungen. (English summary) [Arithmetic in Frobenius extensions] **(84c:12008)**
Takase, Koichi Some remarks on the relative genus fields. **(84c:12003)**
Tateyama, Koichi On the ideal class groups of some cyclotomic fields. **(84b:12011)**

12A67 Langlands-Weil conjectures, nonabelian class field theory [See also 10Dxx, 22E55.]

Arthur, James Automorphic representations and number theory. **84c:12012**
Hiramatsu, Toyokazu Higher reciprocity laws and modular forms of weight one. **84g:12014**

secondary classifications:

Boutot, Jean-François (with Breen, Lawrence; Gérardin, Paul; Giraud, Jean; Labesse, Jean-Pierre; Milne, James Stuart; Soulé, Christophe) ★Variétés de Shimura et fonctions L. (French) [Shimura varieties and L-functions] **(84m:14025)**
Breen, Lawrence See **Boutot, Jean-François** et al., **(84m:14025)**
Deligne, Pierre (with Milne, James Stuart; Ogus, Arthur; Shih, Kuang-yen) ★Hodge cycles, motives, and Shimura varieties. **(84m:14046)**
Drinfel'd, V. G. Two-dimensional l -adic representations of the fundamental group of a curve over a finite field and automorphic forms on $GL(2)$. **(84i:12011)**
Flicker, Yuval Z. ★The trace formula and base change for $GL(3)$. **(84d:10035)**
 Outer automorphisms and instability: the adjoint lifting from $SL(V)$ to $PGL(3)$. (See **84b:10005**)
Gelbart, S. (with Piatetski-Shapiro, Ilya Iosifovitch) Some remarks on metaplectic cusp forms and the correspondences of Shimura and Waldspurger. **(84g:10054)**
Gérardin, Paul See **Boutot, Jean-François** et al., **(84m:14025)**
Giraud, Jean See **Boutot, Jean-François** et al., **(84m:14025)**
Labesse, Jean-Pierre See **Boutot, Jean-François** et al., **(84m:14025)**
Milne, James Stuart See **Boutot, Jean-François** et al., **(84m:14025)** and **Deligne, Pierre**, et al., **(84m:14046)**
Moreno, Carlos J. ★Advanced analytic number theory. Part I. **(84j:12015)**
Ogus, Arthur See **Deligne, Pierre** et al., **(84m:14046)**
Piatetski-Shapiro, Ilya Iosifovitch See **Gelbart, S.**, **(84g:10054)**
Rapoport, M. (with Zink, Thomas) Über die lokale Zetafunktion von Shimuravarietäten. Monodromiefiltration und verschwindende Zyklen in ungleicher Charakteristik. [On the local zeta function of Shimura varieties. Monodromy filtration and vanishing cycles in unequal characteristic] **(84i:14016)**
Shih, Kuang-yen See **Deligne, Pierre** et al., **(84m:14046)**
Soulé, Christophe See **Boutot, Jean-François** et al., **(84m:14025)**
Zink, Thomas See **Rapoport, M.**, **(84i:14016)**

12A70 Zeta functions of number fields and generalizations [See also 10H08, 10H10.]

Arakawa, Tsuneo Generalized eta-functions and certain ray class invariants of real quadratic fields. **84b:12016**
Atiyah, Michael (with Donnelly, Harold; Singer, I. M.) Geometry and analysis of Shimizu L-functions. **84c:12013**
Bartz, Krystyna An estimate for $\zeta(s, \chi)$ -functions. **84g:12015**
Brattström, Gudrun Jacobi-sum Hecke characters of a totally real abelian field. **84m:12014**
Cassou-Nogues, Pierrette Séries de Dirichlet. [Dirichlet series] **84h:12017**
 Séries de Dirichlet. [Dirichlet series] (See **84d:10005**)
Chandrasekharan, K. (with Good, Anton) On the number of integral ideals in Galois extensions. **84i:12008**
Chinburg, T. Stark's conjecture for L-functions with first-order zeroes at $s=0$. **84g:12016**
 Derivatives of L-functions at $s=0$. **84d:12005**
Donnelly, Harold See **Atiyah, Michael** et al., **84c:12013**
Federer, Leslie Jane Regulators, Iwasawa modules and the main conjecture for $p=2$. (See **84a:10004**)
Goldfeld, Dorian (with Viola, C.) Some conjectures on elliptic curves over cyclotomic fields. **84b:12018**
Goldstein, Catherine Un théorème à la manière de Damerell. [A theorem of Damerell type] (See **84c:10004**)
Good, Anton See **Chandrasekharan, K.**, **84i:12008**
Goss, David On a new type of L-function for algebraic curves over finite fields. **84g:12017**
Gras, Georges Canonical divisibilities of values of p -adic L-functions. (See **84c:10003**)
Greenberg, Ralph Iwasawa's theory and p -adic L-functions for imaginary quadratic fields. (See **84a:10004**)
Harder, Günter Über spezielle Werte von L-Funktionen. [On special values of L-functions] **84b:12019**
Montgomery, Hugh L. (with Rohrlich, David E.) On the L-functions of canonical Hecke characters of imaginary quadratic fields. II. **84c:12014**
Moroz, B. Z. Euler products (variation on a theme of Kurokawa's). (See **84d:10005**)
Reich, Axel Zur Universalität und Hypertranszendenz der Dedekindschen Zetafunktion. [On the universality and hypertranscendence of the Dedekind zeta function] **84h:12016**
Rohrlich, David E. See **Montgomery, Hugh L.**, **84c:12014**
Rubin, Karl (with Wiles, Andrew) Mordell-Weil groups of elliptic curves over cyclotomic fields. **84b:12017**
 Congruences for special values of L-functions of elliptic curves with complex multiplication. **84b:12018**
Sato, Fumihito Zeta functions in several variables associated with prehomogeneous vector spaces. III. Eisenstein series for indefinite quadratic forms. **84c:12015c**
 Zeta functions in several variables associated with prehomogeneous vector spaces. I. Functional equations. **84c:12015a**
 Zeta functions in several variables associated with prehomogeneous vector spaces. II. A convergence criterion. **84c:12015b**
Sato, Ken-iti On the divisibility of $\zeta_{K, K}(s)/\zeta_{K, K}(s)$ by $\zeta_{K, K}(s)$. **84j:12011**
Sczech, Robert ★Zur Summation von L-Reihen. (German) [On the summation of L-series] **84m:12015**
Shintani, Takuro A remark on zeta functions of algebraic number fields. **84b:12019**
Singer, I. M. See **Atiyah, Michael** et al., **84c:12013**

- Soulé, Christophe On K -theory and values of zeta functions. **84j:12012**
 Viola, C. See Goldfeld, Dorian, **84b:12018**
 van der Waal, Robert W. Some results connected to Dedekind's zeta functions. **84b:12020**
 Wiles, Andrew See Rubin, Karl, **84b:12017**

secondary classifications:

- Anderson, Greg W. An Archimedean analogue of the root number. (See **84a:10004**)
 Logarithmic derivatives of Dirichlet L -functions and the periods of abelian varieties. (**84j:10041**)
 Aschbacher, Michael (with Guralnick, R.) Solvable generation of groups and Sylow subgroups of the lower central series. (**84c:20025**)
 Ehrenpreis, Leon (with Kawai, Takahiro) Poisson's summation formula and Hamburger's theorem. (**84b:46049**)
 Goldfeld, Dorian Sur les produits partiels eulériens attachés aux courbes elliptiques. (English summary) [On the partial Euler products associated with elliptic curves] (**84d:14031**)
 Goldstein, Catherine ★ Courbes elliptiques et théorie d'Iwasawa. (French) [Elliptic curves and Iwasawa theory] (**84b:14049**)
 Gross, Benedict H. On the conjecture of Birch and Swinnerton-Dyer for elliptic curves with complex multiplication. (**84e:14020**)
 Guralnick, R. See Aschbacher, Michael, (**84c:20025**)
 Kamienny, S. On $J_1(p)$ and the conjecture of Birch and Swinnerton-Dyer. (**84j:14030**) (with Stevens, G.) Special values of L -functions attached to $X_1(N)$. (**84j:14021**)
 Kawai, Takahiro See Ehrenpreis, Leon, (**84b:46049**)
 Lang, Heinrich Über verallgemeinerte Dedekindsche Summen, Strahlklasseninvarianten reell-quadratischer Zahlkörper und die Klassenzahl des q -ten Kreisteilungskörpers. [On generalized Dedekind sums, ray class invariants of real quadratic number fields and the class number of the q th cyclotomic field] (**84m:12006**)
 Müller, Werner ★ Signature defects of cusps of Hilbert modular varieties and values of L -series at $s=1$. (**84j:10037**)
 Oesterle, J. Reformulation de la conjecture principale d'Iwasawa. [Reformulation of Iwasawa's Main Conjecture] (**84i:12003**)
 Perrin-Riou, Bernadette Descente infinie et hauteur p -adique sur une courbe elliptique. [Infinite descent and p -adic height on an elliptic curve] (**84m:14048**)
 Rubenthaler, Hubert Espaces préhomogènes de type parabolique. [Prehomogeneous spaces of parabolic type] (**84j:17009**)
 Schappacher, Norbert Rationalité de valeurs spéciales de certaines fonctions L . [Rationality of special values of certain L -functions] (**84j:10042**)
 See also Goldstein, Catherine, (**84b:14049**)
 Schneider, Peter p -adic height pairings. I. (**84e:14034**)
 Stepanov, S. A. Rational trigonometric sums and Artin L -functions. (Russian) (**84a:10040**)
 Stevens, G. See Kamienny, S., (**84j:14021**)
 Stuhler, Ulrich On the cohomology of SL_n over rings of algebraic functions. (**84b:22021**)
 Takhtayan, L. A. (with Vinogradov, A. I.) The Gauss-Hasse hypothesis on real quadratic fields with class number one. (**84g:12010**)
 Thomason, R. W. The Lichtenbaum-Quillen conjecture for $K_2/L_2[\beta^{-1}]$. (**84f:18024**)
 Venkov, A. B. Artin-Takagi formula for the Selberg zeta function and the Roelcke hypothesis. (Russian) (**84b:10042**)
 Vinogradov, A. I. See Takhtayan, L. A., (**84g:12010**)
 Washio, Tadashi On class numbers of hyperelliptic function fields. III. (**84j:12014**)
 Weiss, Alfred The least prime ideal. (**84d:12011**)
 Wiertelak, Kazimierz On the density of some sets of primes. III. (**84i:10045**)
 Yager, Rodney I. On two variable p -adic L -functions. (**84b:14020**)

12A75 Density theorems

- Jarden, Moshe The Čebotarev density theorem for function fields: an elementary approach. **84e:12016**
 Weiss, Alfred The least prime ideal. **84d:12011**
 Wójcik, J. On the congruence $f(x^q) \equiv 0 \pmod{q}$, where q is a prime and f is a k -normal polynomial. **84g:12018**

12A80 Arithmetic of algebras [See also 12B35, 16A18, 16A39.]

- Bushnell, Colin J. (with Reiner, Irving) The prime ideal theorem in noncommutative arithmetic. **84i:12009**
 Pethő, Attila Beiträge zur Theorie der S -Ordnungen. [Contributions to the theory of S -orders] **84e:12017**
 Platonov, V. P. (with Rapinchuk, A. S.) Multiplicative structure of division algebras over number fields and the Hasse principle. (Russian) **84b:12021**
 Rapinchuk, A. S. See Platonov, V. P., **84b:12021**
 Rehmann, U. A survey of the congruence subgroup problem. **84e:12018**
 Reiner, Irving See Bushnell, Colin J., **84i:12009**

secondary classifications:

- Janusz, Gerald J. Finite subgroups of units of group algebras. I. (**84j:16007**)
 Körner, Otto Ordnungen von Quaternionenalgebren über lokalen Körpern. [Orders of quaternion algebras over local fields] (**84c:10022**)
 Le Bruyn, Lieven A note on maximal orders over Krull domains. (**84f:16008**)
 Platonov, V. P. Arithmetic theory of algebraic groups. (Russian) (**84b:12001**)
 Zhuk, I. K. The rationality of some homogeneous spaces of the group $SO(q)$. (Russian. English summary) (**84g:10050**)

12A82 Zeta functions of algebras

secondary classifications:

- Bushnell, Colin J. (with Reiner, Irving) The prime ideal theorem in noncommutative arithmetic. (**84i:12009**)
 Reiner, Irving See Bushnell, Colin J., (**84i:12009**)

12A85 Analysis in adèle rings and groups

- Kobayashi, Midori The connected component of the idèle class group of an algebraic number field. **84b:12022**
 Yamazaki, Tadashi A Poisson formula for a quasihomogeneous polynomial. **84b:12023**

secondary classifications:

- Flicker, Yuval Z. Stable and labile base change for $U(2)$. (**84i:22016**)
 Lachaud, Gilles An adelic proof of the Hardy-Littlewood theorem on Waring's problem. (See **84c:10003**)
 Prasad, Gopal (with Raghunathan, M. S.) On the congruence subgroup problem: determination of the "metaplectic kernel". (**84f:20051**)
 Raghunathan, M. S. See Prasad, Gopal, (**84f:20051**)

12A90 Arithmetic theory of algebraic function fields [See also 14--XX.]

- D'Mello, Joseph G. (with Madan, Manohar L.) Class group rank relations in \mathbb{Z}_p -extensions. **84m:12016**
 Douai, Jean-Claude (with Touibi, C.) Courbes définies sur les corps de séries formelles et loi de réciprocité. [Curves defined over fields of formal power series, and a reciprocity law] **84i:12010**
 Gross, Benedict H. Algebraic Hecke characters for function fields. **84b:12024**
 Hayes, David R. Elliptic units in function fields. **84i:12005**
 Lipnitskii, V. A. Norms in fields of real algebraic functions and the reduced Whitehead group. (Russian. English summary) **84d:12012**
 Madan, Manohar L. See D'Mello, Joseph G., **84m:12016**
 Touibi, C. See Douai, Jean-Claude, **84i:12010**
 Valentini, Robert C. Representations of automorphisms on differentials of function fields of characteristic p . **84j:12013**
 Washio, Tadashi On class numbers of hyperelliptic function fields. III. **84j:12014**
 Yu, Jing Irrationality of lattices in finite characteristic. **84g:12019**

secondary classifications:

- Berndt, Rolf Zur Arithmetik der elliptischen Funktionenkörper höherer Stufe. [On the arithmetic of elliptic function fields of higher level] (**84b:10029a**)
 Meromorphe Funktionen auf Mumfords Kompaktifizierung der universellen elliptischen Kurve N -ter Stufe. [Meromorphic functions on Mumford's compactification of the universal level N elliptic curve] (**84b:10029b**)
 Drinfel'd, V. G. Two-dimensional L -adic representations of the fundamental group of a curve over a finite field and automorphic forms on $GL(2)$. (**84i:12011**)
 Endo, Mikihiro Correction of: "The strong approximation theorem and locally bounded topologies of algebraic function fields" [Comment. Math. Univ. St. Paul. **30** (1981), no. 1, 77-86; MR **82k:12028**]. (**84b:12034**)
 Gekeler, Ernst-Ulrich Zur Arithmetik von Drinfel'd-Moduln. [On the arithmetic of Drinfel'd modules] (**84j:12010**)
 Goss, David On a new type of L -function for algebraic curves over finite fields. (**84g:12017**)
 Jarden, Moshe The Čebotarev density theorem for function fields: an elementary approach. (**84e:12016**)
 Morita, Yasuo Reduction modulo \mathfrak{P} of Shimura curves. (**84b:10039**)
 Murty, V. Kumar On the Sato-Tate conjecture. (**84e:14021**)
 Rubin, Karl Iwasawa theory and elliptic curves: supersingular primes. (See **84c:10003**)
 Saltman, David J. Generic Galois extensions and problems in field theory. (**84a:13007**)
 Schneider, Peter Zur Vermutung von Birch und Swinnerton-Dyer über globalen Funktionenkörpern. [On the conjecture of Birch and Swinnerton-Dyer over global function fields] (**84i:14027**)
 Silverman, Joseph H. The Catalan equation over function fields. (**84b:10021**)
 Stepanov, S. A. Diophantine equations over function fields. (Russian) (**84i:10019**)
 Stuhler, Ulrich On the cohomology of SL_n over rings of algebraic functions. (**84b:22021**)
 Washington, Lawrence C. Zeros of p -adic L -functions. (**84f:12008**)
 Yu, Jing Transcendental numbers arising from Drinfel'd modules. (**84b:10030**)

12A95 Totally real and totally positive fields

- Bazylewicz, A. Traces of monomials in algebraic numbers. **84a:12019**
 Ichimura, Humio On 2-rank of the ideal class groups of totally real number fields. **84b:12025**

secondary classifications:

- Atiyah, Michael (with Donnelly, Harold; Singer, I. M.) Geometry and analysis of Shimizu L -functions. (**84c:12013**)
 Brattström, Gudrun Jacobi-sum Hecke characters of a totally real abelian field. (**84m:12014**)
 Donnelly, Harold See Atiyah, Michael; et al., (**84c:12013**)
 Dress, Andreas W. M. (with Scharlau, Rudolf) Indecomposable totally positive numbers in real quadratic orders. (**84a:12005**)
 Hagenmüller, Rudolf Signaturen von Einheiten und unverzweigte quadratische Erweiterungen total-reeller Zahlkörper. [Signatures of units and unramified quadratic extensions of totally real number fields] (**84g:12004**)
 Hughes, I. (with Mollin, R.) Totally positive units and squares. (**84d:12006**)

Hurrelbrink, Jürgen $K_2(o)$ for two totally real fields of degree three and four. (84d:12009)

On the size of certain K -groups. (84d:12010)

Mollin, R. See Hughes, I., (84d:12006)

Scharlau, Rudolf See Dress, Andreas W. M., (84a:12005)

Singer, I. M. See Atiyah, Michael; et al., (84e:12013)

12A99 None of the above, but in this section

secondary classifications:

Dubois, E. (with Venetsanopoulos, A. N.) Fast convolution using the discrete Fourier transform over commutative rings with identity. (See 84f:93006b)

Venetsanopoulos, A. N. See Dubois, E., (See 84f:93006b)

12Bxx Algebraic number theory: local and p -adic fields

secondary classifications:

(Amice, Y.) See Study group: Ultrametric analysis, (84j:12003)

(Christol, G.) See Study group: Ultrametric analysis, (84j:12003)

(Robba, P.) See Study group: Ultrametric analysis, (84j:12003)

Study group:

Ultrametric analysis ★Groupe d'étude d'analyse ultramétrique. 9e année: 1981/82. Fasc. 1. (French) [Study group on ultrametric analysis. 9th year: 1981/82. No. 1] (84j:12003)

12B05 Polynomials

Moh, T. T. On two fundamental theorems for the concept of approximate roots. 84b:12020

12B10 Ramification and extension theory

Moreno, Carlos J. ★Advanced analytic number theory. Part I. (84j:12015)

secondary classifications:

Escassut, Alain Transcendence order over \mathbb{Q}_p in \mathbb{C}_p . (84j:10047)

Okutsu, Kōsaku Integral basis of the field $\mathbb{Q}(\sqrt[n]{a})$. (84h:12007)

12B15 Galois theory

Diekert, Volker (with Jannsen, Uwe; Wingberg, Kay) Errata: "Imbedding problems and Galois structure of local fields" [J. Reine Angew. Math. 319 (1980), 196–212; MR 82i:12018] by Jannsen and Wingberg: "Abelian p -extensions of p -adic number fields, for which every imbedding problem is solvable" [ibid. 323 (1981), 101–104; MR 82k:12016] by Diekert. (German) 84a:12020

Jannsen, Uwe Über Galoisgruppen lokaler Körper. [On Galois groups of local fields] 84g:12020a

(with Wingberg, Kay) Die Struktur der absoluten Galoisgruppe p -adischer Zahlkörper. [The structure of the absolute Galois group of p -adic number fields] 84g:12020b

See also Diekert, Volker; et al., 84a:12020

Neukirch, Jürgen The absolute Galois group of a p -adic number field. (See 84d:10005)

Nguyen-Quang-Do Thong Sur la structure galoisienne des corps locaux et la théorie d'Iwasawa. [The Galois structure of local fields and Iwasawa theory] 84j:12016a

Sur la structure galoisienne des corps locaux et la théorie d'Iwasawa. II. [The Galois structure of local fields and Iwasawa theory. II] 84j:12016b

Wingberg, Kay Der Eindeutigkeitsatz für Demushkinformationen. [The uniqueness theorem for Demushkin formations] 84g:12020c

Eine Bemerkung zum Einbettungsproblem mit nicht-abelschem Kern. [A note on the imbedding problem with nonabelian kernel] 84f:12006

See also Diekert, Volker; et al., 84a:12020 and Jannsen, Uwe, 84g:12020b

Zelvenskii, I. G. The reduced multiplicative group of a weakly ramified extension of a local field. (Russian) 84e:12019

12B17 Integral representations

Cassou-Nogues, Ph. (with Taylor, M. J.) Local root numbers and Hermitian-Galois module structure of rings of integers. 84h:12026

Taylor, M. J. See Cassou-Nogues, Ph., 84h:12026

12B20 Galois cohomology [See also 12Gxx, 16A16.]

Coleman, Robert F. The dilogarithm and the norm residue symbol. (French summary) 84j:12017

The arithmetic of Lubin-Tate division towers. 84c:12010

Kato, Kazuya Galois cohomology of complete discrete valuation fields. 84h:12006

secondary classifications:

Fontaine, Jean-Marc Sur certains types de représentations p -adiques du groupe de Galois d'un corps local; construction d'un anneau de Barsotti-Tate. [On certain types of p -adic representations of the Galois group of a local field; construction of a Barsotti-Tate ring] (84d:14010)

Iwasawa, Kenkichi On cohomology groups of units for \mathbb{Z}_p -extensions. (84h:12013)

Souto Menéndez, José Manuel On the extensions of local fields generated by the torsion points of some formal groups. (84h:12007)

12B22 Applications of algebraic K -theory

Kahn, Bruno K_2 d'un corps local à corps résiduel parfait. (English summary) [K_2 of a local field with perfect residue field] 84h:12021

Kato, Kazuya Algebraic K -theory: its number-theoretic aspects. (Japanese) 84c:12011

secondary classifications:

Cassou-Nogues, Ph. (with Taylor, M. J.) Local root numbers and Hermitian-Galois module structure of rings of integers. (84h:12026)

Coleman, Robert F. Dilogarithms, regulators and p -adic L -functions. (84a:12021)

Kato, Kazuya Galois cohomology of complete discrete valuation fields. (84h:12006)

Taylor, M. J. See Cassou-Nogues, Ph., (84h:12026)

12B25 Class field theory

Souto Menéndez, José Manuel Determination of the application of reciprocity in some extensions of local fields. (Spanish) 84c:12020

On the extensions of local fields generated by the torsion points of some formal groups. 84h:12007

Vostokov, S. V. The Hilbert symbol for Lubin-Tate formal groups. I. (Russian) 84f:12007

secondary classifications:

Coleman, Robert F. The dilogarithm and the norm residue symbol. (French summary) (84j:12017)

The arithmetic of Lubin-Tate division towers. (84c:12010)

Henniart, Guy La conjecture de Langlands locale pour $GL(3)$. [The local Langlands conjecture for $GL(3)$] (84g:12021)

Moreno, Carlos J. ★Advanced analytic number theory. Part I. (84j:12015)

12B27 Langlands-Weil conjectures, nonabelian class field theory [See also 10Dxx, 22E50.]

Bushnell, Colin J. (with Fröhlich, Albrecht) ★Gauss sums and p -adic division algebras. 84m:12017

Drinfeld, V. G. Two-dimensional t -adic representations of the fundamental group of a curve over a finite field and automorphic forms on $GL(2)$. 84c:12011

Fröhlich, Albrecht See Bushnell, Colin J., 84m:12017

Henniart, Guy Les conjectures de Langlands locales pour $GL(n)$. (English summary) [The local Langlands conjectures for $GL(n)$] (See 84d:10005)

La conjecture de Langlands locale pour $GL(3)$. [The local Langlands conjecture for $GL(3)$] 84g:12021

Rogawski, Jonathan D. Representations of $GL(n)$ and division algebras over a p -adic field. 84j:12018

secondary classifications:

Clozel, Laurent Changement de base pour les représentations tempérées des groupes réductifs réels. [Base change for tempered representations of real reductive groups] (84j:22015)

Gérardin, Paul Facteurs locaux des algèbres simples de rang 4. I. [Local factors of the simple algebras of rank 4. I.] (84f:22023)

Koch, Helmut Eisensteinsche Polynomfolgen und Arithmetik in Divisionsalgebren über lokalen Körpern. [Eisenstein polynomial sequences and arithmetic in division algebras over local fields] (84d:12015)

Lusztig, George Some examples of square integrable representations of semisimple p -adic groups. (84j:22023)

Moreno, Carlos J. ★Advanced analytic number theory. Part I. (84j:12015)

Rallis, Stephen Langlands' functoriality and the Weil representation. (84c:10025)

12B30 Zeta and L -functions [See also 10H08, 10H10.]

Anderson, Greg W. An Archimedean analogue of the root number. (See 84a:10004)

Coleman, Robert F. Dilogarithms, regulators and p -adic L -functions. 84a:12021

Gross, Benedict H. p -adic L -series at $s=0$. 84h:12022

Naito, Hirotada The p -adic Hurwitz L -functions. 84d:12013

Panchishkin, A. A. Higher level Rankin p -adic L -functions. (Russian) 84d:12014

Wagstaff, Samuel S., Jr. Zeros of p -adic L -functions. II. 84h:12027

Washington, Lawrence C. Zeros of p -adic L -functions. 84f:12008

secondary classifications:

Endo, Mikihiro An extension of p -adic integration. (84f:12009)

Fukuda, Takashi A class number formula of Iwasawa's modules. (84g:12008)

Gras, Georges Canonical divisibilities of values of p -adic L -functions. (See 84c:10003)

Harris, Michael p -adic measures for spherical representations of reductive p -adic groups. (84d:22031)

Morita, Yasuo A p -adic theory of hyperfunctions. I. (84h:12025)

Oesterle, J. Reformulation de la conjecture principale d'Iwasawa. [Reformulation of Iwasawa's Main Conjecture] (84i:12003)

Strauss, Leon Poles of a two-variable p -adic complex power. (84h:14019)

Yager, Rodney I. On two variable p -adic L -functions. (84h:14020)

12B35 Arithmetic of algebras [See also 12A80, 16A18, 16A39.]

Corwin, Lawrence Representations of division algebras over local fields. II. 84h:12023

Koch, Helmut Eisensteinsche Polynomfolgen und Arithmetik in Divisionsalgebren über lokalen Körpern. [Eisenstein polynomial sequences and arithmetic in division algebras over local fields] 84d:12015

Ullom, Stephen V. Action of $\text{Aut}(\mathbb{C}/\mathbb{Q})$ on zeta integrals and local constants. 84g:12022

secondary classifications:

- Le Bruyn, Lieven A note on maximal orders over Krull domains. (84f:16008)
 Rogawski, Jonathan D. Representations of $GL(n)$ and division algebras over a p -adic field. (84j:12018)

12B37 Zeta functions of algebras

secondary classifications:

- Bushnell, Colin J. (with Fröhlich, Albrecht) ★ Gauss sums and p -adic division algebras. (84m:12017)
 Fröhlich, Albrecht See Bushnell, Colin J., (84m:12017)

12B40 Other analytic theory

- Adolphson, Alan An analogue of Hilbert's Theorem 90. 84j:12019
 Dwork, Bernard M. On Apéry's differential operator. 84a:12022
 Endo, Mikihiko An extension of p -adic integration. 84f:12009
 Grincevičius, R. (with Markšaitis, H.) Expansion of characteristic functions of open sets of a p -adic integer ring in certain polynomials of a p -adic norm, and a special case of the Weierstrass-Stone theorem. (Russian. English and Lithuanian summaries) 84g:12023
 Hayes, David R. (with Nutt, Michael D.) Reflective functions on p -adic fields. 84a:12023
 Jha, S. N. (with Singh, Madan Prasad) A generalisation of Mertens' theorem. 84b:12024
 Kohlitz, Neal q -extension of the p -adic gamma function. II. 84a:12024
 Labeyrie, Jacques Les zéros des sommes exponentielles $\sum_{i,j \in \mathbb{N}} a_{ij} \exp(i + \alpha j)x$. (English summary) [The zeros of the exponential sums $\sum_{i,j \in \mathbb{N}} a_{ij} \exp(i + \alpha j)x$] 84e:12021
 Markšaitis, H. See Grincevičius, R., 84g:12023
 Morita, Yasuo A p -adic theory of hyperfunctions. I. 84b:12025
 Nguyễn Xuân Việt Invariant integration on a non-Archimedean compact group. (Vietnamese. Russian summary) 84i:12012
 Nutt, Michael D. See Hayes, David R., 84a:12023
 Osipov, Yu. V. On p -adic distributions. (Russian) 84d:12016
 Robba, P. Sur les équations différentielles linéaires p -adiques. II. [On p -adic linear differential equations. II] 84d:12017
 Singh, Madan Prasad See Jha, S. N., 84b:12024

secondary classifications:

- (Adolphson, Alan) See Dwork, Bernard M., (84g:12031)
 Arkhipov, G. I. (with Karatsuba, A. A.) A problem of comparison theory. (Russian) (84g:10046)
 Dwork, Bernard M. ★ Lectures on p -adic differential equations. (84g:12031)
 Karatsuba, A. A. See Arkhipov, G. I., (84g:10046)
 Lewis, D. J. (with Montgomery, Hugh L.) On zeros of p -adic forms. (84f:10029)
 Montgomery, Hugh L. See Lewis, D. J., (84f:10029)
 Naito, Hirotsada The p -adic Hurwitz L -functions. (84d:12013)
 Petrov, E. E. Harmonic analysis on the p -adic sphere. (Russian) (84m:22028)
 Stawski, M. S. On the theorem of Hartsogs in non-Archimedean valued fields. (84h:32017)
 Strauss, Leon Poles of a two-variable p -adic complex power. (84k:14019)
 Tateoka, Jun Fourier multipliers over a local field. (84b:43008)
 Wade, William R. (with Yoneda, Kaoru) Erratum to: "Uniqueness and quasimeasures on the group of integers of a p -series field" [Proc. Amer. Math. Soc. 84 (1982), no. 2, 202–206; MR 83c:43010]. (84e:43008)
 Woodcock, C. F. A spectral valuation on the ring of p -adic integers. (84b:46092)
 Yoneda, Kaoru See Wade, William R., (84e:43008)

12B45 Other nonanalytic theory

secondary classifications:

- Liang, Joseph J. (with Mead, George F., Jr.) On matrix equations over the ring of p -adic integers. (84e:10069)
 Mead, George F., Jr. See Liang, Joseph J., (84e:10069)

12B99 None of the above, but in this section

12Cxx Finite fields, and finite commutative rings (number-theoretic aspects)

12C05 Polynomials

- Agou, S. Degré minimum des polynômes $f(\sum_{i=0}^m a_i X^{p^i})$ sur les corps finis de caractéristique $p > m$. (English summary) [Minimum degree of the polynomials $f(\sum_{i=0}^m a_i X^{p^i})$ over finite fields of characteristic $p > m$] 84b:12026
 Beard, Jacob T. B., Jr. (with Doyle, J. Kevin; Mandelberg, Kenneth I.) Square-separable primes and unitary perfect polynomials. (Italian summary) 84e:12022
 Camion, Paul F. Factorisation des polynômes de $\mathbb{F}_q[X]$. (English summary) [Factorization of the polynomials of $\mathbb{F}_q[X]$] 84b:12027
 Improving an algorithm for factoring polynomials over a finite field and constructing large irreducible polynomials. 84k:12008
 Chen, Chin Long Formulas for the solutions of quadratic equations over $GF(2^m)$. 84g:12024
 Cohen, Stephen D. The irreducibility of compositions of linear polynomials over a finite field. 84g:12025
 Doyle, J. Kevin See Beard, Jacob T. B., Jr.; et al., 84e:12022
 Fredricksen, H. (with Wisniewski, R.) On trinomials $x^n + x^2 + 1$ and $x^{2^k} + x^k + 1$ irreducible over $GF(2)$. 84b:12013

- Herlestad, Tore On using prime polynomials in crypto generators. 84j:12020
 Isbell, John R. Zero sets of polynomials in finite rings. 84b:12028
 Mandelberg, Kenneth I. See Beard, Jacob T. B., Jr.; et al., 84e:12022
 Matthews, Rex Some generalisations of Chebyshev polynomials and their induced group structure over a finite field. 84f:12010
 The structure of the group of permutations induced by Chebyshev polynomial vectors over the ring of integers mod m . 84a:12025
 Mignotte, M. (with Nicolas, J.-L.) Statistiques sur $\mathbb{F}_q[X]$. (English summary) [Statistics on $\mathbb{F}_q[X]$] 84m:12018
 Mullen, Gary L. Equivalence classes of sets of polynomials over finite fields. 84b:12029
 Nicolas, J.-L. See Mignotte, M., 84m:12018
 Nöbauer, Wilfried Polynomfunktionen auf primen Restklassen. [Polynomial functions on prime residue classes] 84h:12028
 Poll, Alain (with Ventou, Michel) Codes principaux nilpotents, de dimension maximale, dans l'algèbre sur \mathbb{F}_q d'un p -groupe abélien élémentaire. (English summary) [Nilpotent principal codes, of maximum dimension, in the \mathbb{F}_q -algebra of an elementary abelian p -group] 84k:12009
 Smits, T. H. M. On the group of units of $GF(q)[x]/(a(x))$. 84b:12030
 Ventou, Michel See Poll, Alain, 84k:12009
 Webb, William A. Sieve methods for polynomial rings over finite fields. 84j:12021
 Wisniewski, R. See Fredricksen, H., 84b:12013

secondary classifications:

- Heise, Werner Zyklische lineare optimale $(n, 2)$ -Codes. [Cyclic linear optimal $(n, 2)$ -codes] (84a:94017)
 Hong, Jia Wei On some deterministic space complexity problems. (84h:68025)
 Lempel, Abraham (with Seroussi, Gadil; Ziv, Jacob) On the power of straight-line computations in finite fields. (84b:68044)
 Lüneburg, Heinz On Dedekind numbers. (84h:05005)
 Ritznyk, V. V. Ideal ring relationships and possibilities for their practical use. (84k:51012)
 Seroussi, Gadil See Lempel, Abraham; et al., (84b:68044)
 Takahashi, Iwarō Switching functions constructed by Galois extension fields. (84h:94027)
 Ward, Harold N. Binary views of ternary codes. (84a:20006)
 Zantema, H. Integer valued polynomials over a number field. (84i:12005)
 Ziv, Jacob See Lempel, Abraham; et al., (84b:68044)

12C10 Linear sequences

- Kumar, I. J. (with Kumari, Meena) Local complementation of periodic sequences over $GF(2)$. 84d:12018
 Kumari, Meena See Kumar, I. J., 84d:12018
 Vanstone, S. A. The discrete logarithm problem. 84b:12029

secondary classifications:

- Games, Richard A. There are no de Bruijn sequences of span n with complexity $2^{n-1} + n + 1$. (84k:05078)
 Ipatov, V. P. (with Platonov, V. D.; Samoilov, I. M.) A new class of triple sequences with ideal periodic autocorrelation properties. (Russian) (84h:94014)
 Platonov, V. D. See Ipatov, V. P.; et al., (84h:94014)
 Samoilov, I. M. See Ipatov, V. P.; et al., (84h:94014)

12C15 Arithmetic

- Bartocci, Umberto (with Ughi, Emanuela) Triplets of consecutive squares in a Galois field. (Italian. English summary) 84h:12030
 Cohen, Stephen D. Primitive roots in the quadratic extension of a finite field. 84j:12022
 Guerra, L. (with Ughi, Emanuela) On the distribution of Legendre symbols in Galois fields. 84d:12019
 Kasahara, Masao See Sugimura, Tatsuo; et al., 84e:12023
 Keller, J. M. See Thomas, J. J.; et al., 84g:12026
 Larsen, G. N. See Thomas, J. J.; et al., 84g:12026
 Namekawa, Toshihiko See Sugimura, Tatsuo; et al., 84e:12023
 Sugimura, Tatsuo (with Kasahara, Masao; Namekawa, Toshihiko) Notes on addition over a finite field using an addition table. 84e:12023
 Thomas, J. J. (with Larsen, G. N.; Keller, J. M.) Number theoretic transforms with independent length and moduli. 84g:12026
 Ughi, Emanuela See Guerra, L., 84d:12019 and Bartocci, Umberto, 84h:12030
 Zeitler, Herbert Rechnen in endlichen Körpern (Beispiele elementarer Zahlentheorie). [Computation in finite fields (examples in elementary number theory)] 84j:12023

secondary classifications:

- Beard, Jacob T. B., Jr. (with McConnel, Robert M.) Matrix field extensions. (84d:10057)
 Birtwistle, D. T. The eigenstructure of the number theoretic transforms. (French and German summaries) (84i:65124)
 Brickell, E. F. (with Moore, Judy H.) Some remarks on the Herlestad-Johannesson algorithm for computing logarithms over $GF(2^n)$. (See 84j:94004)
 Charpin, Pascale Puissances du nilradical d'une algèbre modulaire et codes cycliques. (English summary) [Powers of the nilradical of a modular algebra and cyclic codes] (84e:94015)
 Chen, Chin Long Formulas for the solutions of quadratic equations over $GF(2^m)$. (84g:12024)
 Hellman, Martin E. (with Reyneri, Justin M.) Fast computation of discrete logarithms in $GF(q)$. (See 84j:94004)
 Janicke, O. See Todorow, J., (84j:94011)
 Lempel, Abraham See Seroussi, Gadil, (84f:15020)
 McConnel, Robert M. See Beard, Jacob T. B., Jr., (84d:10057)
 Moore, Judy H. See Brickell, E. F., (See 84j:94004)
 Morgera, Salvatore D. See Wagh, Meghanad D., (84m:94023)

- Nagai, Keinosuke (with Suzuki, Michio) An extension of the range of characteristics in the complex number theoretic transform. (84h:94011)
- Newhart, Donald W. Information sets in quadratic-residue codes. (84g:94016)
- Newman, Morris Circulants and difference sets. (84i:05028)
- Reynier, Justin M. See Hellman, Martin E., (See 84j:94004)
- Seroussi, Gadiel (with Lempel, Abraham) On symmetric representations of finite fields. (84f:15020)
- Suzuki, Michio See Nagai, Keinosuke, (84h:94011)
- Todorow, J. (with Janicke, O.) Darstellung mehrwertiger Funktionen durch Reihenentwicklung nach orthogonalen Funktionensystemen über endlichen Körpern. [Representation of multivalued functions through series expansion in orthogonal function systems over finite fields] (84j:94011)
- Wagh, Meghanad D. (with Morgera, Salvatore D.) A new structured design method for convolutions over finite fields. I. (84m:94023)
- Webb, William A. Sieve methods for polynomial rings over finite fields. (84j:12021)
- Wegmann, H. Quadratsummen in Restklassenringen. [Sums of squares in residue class rings] (84i:10003)

12C20 Cyclotomy

- Belov, N. V. See Parkhomov, L. G.; et al., 84e:12025 and Rau, V. G.; et al., 84e:12026
- Evans, Ronald J. Twenty-fourth power residue difference sets. 84e:12024
- Ilyukhin, V. V. See Parkhomov, L. G.; et al., 84e:12025 and Rau, V. G.; et al., 84e:12026
- Lehmer, D. H. (with Lehmer, Emma) Multiple sums of cyclotomic numbers. 84m:12019
- Lehmer, Emma See Lehmer, D. H., 84m:12019
- Moreno, Oscar On primitive elements of trace equal to 1 in $GF(2^n)$. 84c:12012
- Parkhomov, L. G. (with Rau, V. G.; Ilyukhin, V. V.; Belov, N. V.) Cochran cyclotomic sets with a period divisible by 3. (Russian) 84e:12025
- See also Rau, V. G.; et al., 84e:12026
- Rajwade, A. R. Cyclotomy—a survey article. 84b:12031
- Rau, V. G. (with Parkhomov, L. G.; Ilyukhin, V. V.; Belov, N. V.) Some singularities of cyclotomic Patterson sets. (Russian) 84e:12026
- See also Parkhomov, L. G.; et al., 84e:12025

secondary classifications:

- Belov, N. V. See Parkhomov, L. G.; et al., (84d:05042)
- Diamond, Harold G. (with Gerth, Frank, III; Vaaler, Jeffrey D.) Gauss sums and Fourier analysis on multiplicative subgroups of Z_p . (84m:12020)
- Gerth, Frank, III See Diamond, Harold G.; et al., (84m:12020)
- Ilyukhin, V. V. See Parkhomov, L. G.; et al., (84d:05042)
- Lehmer, D. H. (with Lehmer, Emma) Cyclotomy for nonsquarefree moduli. (84h:10050)
- (with Lehmer, Emma) Cyclotomy with short periods. (84j:10048)
- Lehmer, Emma See Lehmer, D. H., (84h:10050) and (84j:10048)
- Lüneburg, Heinz Ein einfacher Beweis für den Satz von Zsigmondy über primitive Teiler von $A^n - 1$. [A simple proof of Zsigmondy's theorem on primitive prime divisors of $A^n - 1$] (84d:10006)
- Newman, Morris Cyclotomic units and Hilbert's Satz 90. (84c:12013)
- Parkhomov, L. G. (with Rau, V. G.; Ilyukhin, V. V.; Belov, N. V.) Necessary conditions for the existence of some Cochran cyclotomic sets with equal multiplicity. (Russian) (84d:05042)
- Rau, V. G. See Parkhomov, L. G.; et al., (84d:05042)
- Snyder, William M. Factoring repunits. (84h:10011)
- Thaine, Francisco Polynomials that generalize binomial coefficients and their applications to Fermat's last theorem. (Portuguese) (84j:10013)
- Polynomials generalizing binomial coefficients and their application to the study of Fermat's last theorem. (84d:10023)
- Vaaler, Jeffrey D. See Diamond, Harold G.; et al., (84m:12020)

12C25 Exponential sums

- Diamond, Harold G. (with Gerth, Frank, III; Vaaler, Jeffrey D.) Gauss sums and Fourier analysis on multiplicative subgroups of Z_p . 84m:12020
- Gerth, Frank, III See Diamond, Harold G.; et al., 84m:12020
- Vaaler, Jeffrey D. See Diamond, Harold G.; et al., 84m:12020

12C30 Structure theory

- Ratinov, V. A. Finite commutative rings with special types of groups of units. (Russian) 84i:12014

secondary classifications:

- Matthews, Rex The structure of the group of permutations induced by Chebyshev polynomial vectors over the ring of integers mod m . (84a:12025)
- Yao, Ching Hsing On combining elements from distinct finite rings for mixed factorial designs when the numbers of levels of factors are relatively prime in pairs. (84g:05027)

12C99 None of the above, but in this section

- Pettet, Martin R. Near-fields and linear transformations of finite fields. 84i:12015

secondary classifications:

- Allouche, Jean-Paul Somme des chiffres et transcendence. (English summary) [Sum of digits, and transcendence] (84f:10045)
- Lempel, Abraham (with Seroussi, Gadiel; Winograd, S.) On the complexity of multiplication in finite fields. (84c:68031)
- Seroussi, Gadiel See Lempel, Abraham; et al., (84c:68031)
- Sloane, N. J. A. Error-correcting codes and cryptography. I. (84j:94003a)
- Error-correcting codes and cryptography. II. (84j:94003b)
- Winograd, S. See Lempel, Abraham; et al., (84c:68031)

12Dxx Real and complex fields

- Schinzel, Andrzej ★Selected topics on polynomials. 84c:12010

12D05 Polynomials: factorization

- Bandy, C. Factorization of the general second degree polynomial. 84e:12020
- Dejter, Italo José Coefficients of paracyclotomic polynomials. (See 84b:00011)
- Salzberg, Pablo M. A multivariable form of the fundamental theorem of algebra. 84i:12011

secondary classifications:

- Cerlienco, Luigi (with Piras, Francesco) Resultant, l.c.m. and g.c.d. of two polynomials by the method of linear recurrent sequences. (Italian. English summary) (84m:10057)
- Illarionov, M. A. Local solvability of algebraic equations. (Russian. English summary) (84f:46070)
- Lerer, L. (with Tisemenetsky, M.) The Bezoutian and the eigenvalue-separation problem for matrix polynomials. (84e:15015)
- Piras, Francesco See Cerlienco, Luigi, (84m:10057)
- Rodman, Leiba Remark on irreducible factorizations of polynomials in several variables. (84h:32005)
- Tisemenetsky, M. See Lerer, L., (84e:15015)

12D10 Polynomials: location of zeros (algebraic theorems) {For the analytic theory, see 26C10, 30C15.}

- Berman, D. L. On the question of the distribution of roots of an algebraic polynomial with real coefficients. (Russian) 84c:12013
- (Boshko, O.) See Krein, M. G.; et al., 84e:12016
- (Howland, James Lucien) See Krein, M. G.; et al., 84e:12016
- Kahane, Jean-Pierre Le 13ème problème de Hilbert: un carrefour de l'algèbre, de l'analyse et de la géométrie. [Hilbert's 13th problem: an intersection of algebra, analysis and geometry] 84h:12031
- Krein, M. G. (with Naimark, M. A.) The method of symmetric and Hermitian forms in the theory of the separation of the roots of algebraic equations. 84i:12016
- Lal, Pande B. B. See Quadri, Irfan H.; et al., 84g:12027
- London, David On the van der Waerden conjecture and zeros of polynomials. 84i:12017
- Naimark, M. A. See Krein, M. G., 84i:12016
- Plak, Vlastimil (with Young, Nicholas J.) Zero location by Hermitian forms: the singular case. 84c:12014
- Quadri, A. See Quadri, Irfan H.; et al., 84g:12027
- Quadri, Irfan H. (with Quadri, A.; Lal, Pande B. B.) A new technique of solving the biquadratic equation. 84g:12027
- Riedel, W. Verfahren zur Nullstellenberechnung bei Polynomen. [Methods for computing zeros of polynomials] 84h:12032
- Saito, Kyoji Certain irreducible polynomials with multiplicatively independent roots. 84g:12028
- Vulpescu-Jalea, Florin On a certain class of polynomials. (Romanian) 84g:12029
- Wu, Hua Mo Elementary proof of the Schur-Cohn-Miller theorem. (Chinese. English summary) 84i:12018
- Young, Nicholas J. See Plak, Vlastimil, 84c:12014
- Zaher, Neyamat Algebra-valued composite abstract homogeneous polynomials. (Italian summary) 84j:12024

secondary classifications:

- Barnett, Stephen See Smart, Nancy M., (84h:65058)
- Craven, Thomas C. (with Csordas, George) An inequality for the distribution of zeros of polynomials and entire functions. (84b:30007)
- (with Csordas, George) On the number of real roots of polynomials. (84h:30006)
- Csordas, George See Craven, Thomas C., (84b:30006) and (84b:30007)
- Fukuma, Norio See Mori, Takehiro; et al., (84m:15011)
- (Gregor, J.) See Zeheb, Ezra, (84m:94039)
- Ho, Y. S. (with Roe, Peter H.) Detached coefficients representation and degree functor of a polynomial matrix with application to linear systems. (See 84g:93005b)
- Kuwahara, Michiyoshi See Mori, Takehiro; et al., (84m:15011)
- Lawton, Wayne M. A problem of Boyd concerning geometric means of polynomials. (84i:10056)
- Mori, Takehiro (with Fukuma, Norio; Kuwahara, Michiyoshi) On the conditions for the characteristic roots of a matrix in a sector. (84m:15011)
- Roe, Peter H. See Ho, Y. S., (See 84g:93005b)
- Roitman, Moshe On roots of polynomials and of their derivatives. (84i:30005)
- Schelin, Charles W. Counting zeros of real polynomials within the unit disk. (84h:30011)
- Schnabl, R. Über Bruiersche Reihen mit nicht negativen Koeffizienten. (English summary) [Bruier series with nonnegative coefficients] (84d:30089)
- Smart, Nancy M. (with Barnett, Stephen) Bilinear transformation of multivariable polynomials using the Horner method. (84h:65058)
- Werner, Wilhelm On the simultaneous determination of polynomial roots. (84a:12003)
- Xie, Xu Kai A note on the Routh criterion. (Chinese. English summary) (84g:93069)
- Zaher, Neyamat On Lucas-sets for vector-valued abstract polynomials in K -inner product spaces. (84d:30014)
- Zeheb, Ezra On n -dimensional impedances: "Biquadratic n -dimensional impedances" [Internat. J. Circuit Theory Appl. 9 (1981), no. 4, 369-377; MR 83f:94046] by J. Gregor. (84m:94039)

12D15 Formally real fields

- Becker, Eberhard Valuations and real places in the theory of formally real fields. 84f:12011

- Choi, Man Duen (with Dai, Zong Duo; Lam, Tsit Yuen; Reznick, Bruce) The Pythagoras number of some affine algebras and local algebras. **84f:12012**
- Dai, Zong Duo See Choi, Man Duen; et al., **84f:12012**
- Gondard, Danielle Théorie des modèles et fonctions définies positives sur les variétés algébriques réelles. (English summary) [Model theory and positive definite functions in real algebraic varieties] **84a:12026**
- Lam, Tsit Yuen See Choi, Man Duen; et al., **84f:12012**
- Prestel, Alexander Pseudo real closed fields. **84b:12032**
- Reznick, Bruce See Choi, Man Duen; et al., **84f:12012**

secondary classifications:

- Arason, J. K. (with Pfister, Albrecht) Supplement to the work: "Quadratic forms over affine algebras and an algebraic proof of the Borsuk-Ulam theorem" [J. Reine Angew. Math. **331** (1982), 181-184; MR **83d:10023**]. (German) **(84b:10027)**
- Baur, Walter On the elementary theory of pairs of real closed fields. II. **(84j:03072)**
- Becker, Eberhard The real holomorphy ring and sums of $2n$ th powers. **(84g:12032)**
(with Schwartz, Niels) Zum Darstellungssatz von Kadison-Dubois. [On the representation theorem of Kadison-Dubois] **(84m:12027)**
- Coste, Michel See Coste-Roy, Marie-Françoise. **(84b:14009)**
- Coste-Roy, Marie-Françoise (with Coste, Michel) Le spectre réel et la topologie des variétés algébriques sur un corps réel clos. [The real spectrum and the topology of algebraic varieties over a real-closed field] **(84b:14009)**
- Cowles, John R. The Henkin quantifier and real closed fields. **(84g:03048)**
- Kijima, Daiji (with Nishi, Mico) On the space of orderings and the group H . **(84e:10032)**
(with Nishi, Mico) Kaplansky's radical and Hilbert Theorem 90. II. **(84g:10043)**
- Knebusch, Manfred Isosceles geometry: first steps. **(84i:14017)**
- Meißner, Wilfried Quadratische Räume unendlicher Dimension und partielle Isomorphismen. [Quadratic spaces of infinite dimension and partial isomorphisms] **(84i:10020)**
- Nishi, Mico See Kijima, Daiji. **(84e:10032)** and **(84g:10043)**
- Pasini, Leonardo Real closure of generalized Hardy fields. (Italian. English summary) **(84e:26020)**
- Pfister, Albrecht See Arason, J. K., **(84b:10027)**
- Roitman, Judy Nonisomorphic hyper-real fields from nonisomorphic ultrapowers. **(84a:54030)**
- Schülting, Heinz-Werner Real holomorphy rings in real algebraic geometry. **(84d:14016)**
- Schwartz, Niels See Becker, Eberhard, **(84m:12027)**

12D99 None of the above, but in this section

- Sonnenschein, J. Sur une famille d'automorphismes différentiels de l'algèbre des polynômes. [On a family of differential automorphisms of the algebra of polynomials] **84a:12027**

secondary classifications:

- Cohen, Stephen D. Polynomials and finite sets connected with an identity. **(84i:12019)**
- Gemidzhiev, Georgi Some methods of division, algorithms and criteria for polynomials. (Bulgarian. English and Russian summaries) **(84b:32004)**
- Kirillov, A. N. See Vostokov, S. V., **(84m:93077)**
- Sargos, Patrick Séries de Dirichlet associées à des fractions rationnelles de plusieurs variables. [Dirichlet series associated to rational fractions in several variables] (See **84c:10004**)
- Svrtan, D. Proof of Scott's conjecture. **(84b:15008)**
- Vostokov, S. V. (with Kirillov, A. N.) Normed pairing in a two-dimensional local field. (Russian) **(84m:93077)**

12Exx General field theory

12E05 Polynomials (irreducibility, etc.)

- Abhyankar, Shreeram S. (with Rubel, Lee A.) Every difference polynomial has a connected zero-set. **84a:12028**
- Cohen, Stephen D. Polynomials and finite sets connected with an identity. **84i:12019**
- Desimirova, L. K. Some questions of the irreducibility of integral polynomials. (Russian. Romanian summary) **84a:12029**
- Rubel, Lee A. See Abhyankar, Shreeram S., **84a:12028**

secondary classifications:

- Angermüller, Gerhard On some conditions for a polynomial map with constant Jacobian to be invertible. **(84i:13005)**
- Buchberger, B. See Möller, H. M., **(84b:12003)**
- Kantardzhieva, E. R. (with Pirgov, D. T.) A theorem on the irreducibility of Pólya's integer polynomials. (Bulgarian. English and Russian summaries) **(84m:12003)**
- Moh, T. T. On the Jacobian conjecture and the configurations of roots. **(84m:14018)**
- Möller, H. M. (with Buchberger, B.) The construction of multivariate polynomials with preassigned zeros. **(84b:12003)**
- Pirgov, D. T. (with Semkovski, A. B.) Irreducibility of a class of integer polynomials over the rational number field. (Bulgarian. English and Russian summaries) **(84m:12002)**
See also Kantardzhieva, E. R., **(84m:12003)**
- Roquette, Peter p -adische und saturierte Körper. Neue Variationen zu einem alten Thema von Hasse. [p -adic and saturated fields. New variations on an old theme of Hasse] **(84m:12028)**
- Salzberg, Pablo M. A multivariable form of the fundamental theorem of algebra. **(84i:12011)**
- Semkovski, A. B. See Pirgov, D. T., **(84m:12002)**
- Sprindzhuk, V. G. Diophantine equations with prime unknowns. (Russian) **(84d:12001)**
- Weissauer, Rainer Der Hilbertsche Irreduzibilitätssatz. [Hilbert's irreducibility theorem] **(84c:12020)**

12E10 Special polynomials

- Ja'Ja', Joseph Computation of algebraic functions with root extractions. (See **84a:68004**)
- de Orozco, María Acosta (with Vélez, William Yslas) The lattice of subfields of a radical extension. **84e:12027**
- Vélez, William Yslas See de Orozco, María Acosta, **84e:12027**

secondary classifications:

- Vulpescu-Jalea, Florin On a certain class of polynomials. (Romanian) **(84g:12029)**
- Zantema, H. Integer valued polynomials over a number field. **(84i:12005)**

12E12 Equations

- Ayoub, Raymond G. On the nonsolvability of the general polynomial. **84b:12033**

secondary classifications:

- (Boshko, O.) See Krein, M. G.; et al., **(84i:12016)**
- (Howland, James Lucien) See Krein, M. G.; et al., **(84i:12016)**
- Krein, M. G. (with Naimark, M. A.) The method of symmetric and Hermitian forms in the theory of the separation of the roots of algebraic equations. **(84i:12016)**
- Naimark, M. A. See Krein, M. G., **(84i:12016)**

12E15 Skew fields, division rings [See also 12A80, 12B35, 16A39.]

- Cerrienco, Luigi (with Mureddu, Marina) A note on polynomial equations in quaternions. (Italian. English summary) **84f:12013**
- Mureddu, Marina See Cerrienco, Luigi, **84f:12013**
- Rowen, Louis Halle Cyclic division algebras. **84d:12021a**
Correction to: "Cyclic division algebras". **84d:12021b**
- Saltman, David J. Generic structures and field theory. (See **84a:00007**)
- Suslin, A. A. Quaternion homomorphism for the field of functions on a conic. (Russian) **84a:12030**
- Xu, Yong Hua On infinite Galois theory for division rings. (Chinese summary) **84d:12022**

secondary classifications:

- Amitur, S. A. Division algebras. A survey. **(84b:16021)**
- Baumgartner, Karlheinz ★ Fragmente: meine Konstruktion und die sie begleitenden allgemeinen Strukturtheorien. (German) [Fragments: my construction and the general structure theories that accompany it] **(84b:08008)**
- Behrens, Ernst August ★ A semigroup theoretical approach to the noncommutative arithmetic. **(84f:16007)**
- Iakin, A. L. Anomalies in higher-order conjugate quaternions: a clarification. **(84b:10013)**
- Jacobson, Nathan Brauer factor sets, Noether factor sets, and crossed products. **(84c:16020)**
- James, Donald G. Projective homomorphisms and von Staudt's theorem. **(84f:51002)**
- Mahdavi-Hezavehi, M. Matrix valuations and their associated skew fields. **(84b:16022)**
- Matveev, G. V. The trace form on a central simple algebra. (Russian) **(84a:16033)**
- Saltman, David J. Exterior powers of fields and subfields. **(84f:16019)**
- Scharlau, Winfried (with Tschimmel, Angelika) On the level of skew-fields. **(84i:16016)**
- Tschimmel, Angelika See Scharlau, Winfried, **(84i:16016)**

12E99 None of the above, but in this section

- Labeyrie, Jacques Factorisation de Ritt pour les polynômes exponentiels formels. (English summary) [Ritt factorization for formal exponential polynomials] **84m:12021**
- Milazzo, Filippo (with Vacirca, Vincenzo) Geometric representation and lattice characterization of certain algebras. (Italian) **84g:12030**
- Vacirca, Vincenzo See Milazzo, Filippo, **84g:12030**

secondary classifications:

- Fried, E. A comment on automorphism groups of fields. **(84j:12025)**
- Illarionov, M. A. Extensions and complete reducibility of polynomials over Banach algebras. (Russian. English summary) **(84c:46055)**
- Tamagawa, Tsumeo On regularly closed fields. **(84m:14024)**

12Fxx Field extensions

secondary classifications:

- Bourbaki, Nicolas ★ Éléments de mathématique. (French) [Elements of mathematics] **(84d:00002)**

12F05 Algebraic extensions

- Engler, Antonio J. (with Viswanathan, T. M.) Digging holes in algebraic closures à la Artin. II. **84m:12022b**
(with Viswanathan, T. M.) Digging holes in algebraic closures à la Artin. I. **84m:12022a**
- Fried, E. A comment on automorphism groups of fields. **84j:12025**
- Viswanathan, T. M. See Engler, Antonio J., **84m:12022a** and **84m:12022b**

secondary classifications:

- Cohen, Stephen D. Primitive roots in the quadratic extension of a finite field. **(84j:12022)**
- Lempel, Abraham (with Seroussi, Gadiel; Winograd, S.) On the complexity of multiplication in finite fields. **(84c:68031)**
- Seroussi, Gadiel See Lempel, Abraham; et al., **(84c:68031)**
- Winograd, S. See Lempel, Abraham; et al., **(84c:68031)**

Zeitler, Herbert Geometrische Charakterisierung endlicher (K, L) -Ebenen ungerader Ordnung. (English summary) [Geometric characterization of finite (K, L) -planes of odd order] (84c:51015)

12F10 Separable extensions, Galois theory

Girstmair, Kurt On the computation of resolvents and Galois groups. 84m:12023

Radford, David E. On when a separable field extension in characteristic $p > 0$ is determined by its Frobenius structure. I. 84m:12024

Zyapkov, Nikola P. Imbeddability of a universally imbeddable extension into a universally imbeddable extension. (Russian) 84j:12026

secondary classifications:

Ayoub, Raymond G. On the nonsolvability of the general polynomial. (84b:12033)

Baumgartner, Karlheinz ★Fragmente: meine Konstruktion und die sie begleitenden allgemeinen Strukturtheorien. (German) [Fragments: my construction and the general structure theories that accompany it] (84b:08008)

Browkin, Jerzy The meaning of Galois theory in modern mathematics and its role in the education of young mathematicians. (Polish. English and Russian summaries) (84j:12001)

Fried, E. (with Kollár, J.) Automorphism groups of fields. (84i:12020)

Girstmair, Kurt Linear dependence of zeros of polynomials and construction of primitive elements. (84d:12008)

Jarden, Moshe The elementary theory of large e -fold ordered fields. (84e:12029)

Kennison, John F. Separable algebraic closure in a topos. (84h:18007)

Kollár, J. See Fried, E., (84i:12020)

Mines, Ray (with Richman, Fred) Separability and factoring polynomials. (84e:03075)

de Orozco, María Acosta (with Vélez, William Yslas) The lattice of subfields of a radical extension. (84e:12027)

Poletti, Mario (with Volpi, Aldo) π -homomorphisms and their representation. (Italian) (84h:14057)

Richman, Fred See Mines, Ray, (84e:03075)

Vélez, William Yslas See de Orozco, María Acosta, (84e:12027)

Volpi, Aldo See Poletti, Mario, (84h:14057)

Weissauer, Rainer Der Hilbertsche Irreduzibilitätssatz. [Hilbert's irreducibility theorem] (84c:12020)

12F15 Inseparable extensions, derivations

Deveney, James K. (with Mordeson, John N.) Subfields containing distinguished subfields. 84j:12027

(with Mordeson, John N.) Maximal separable subfields of bounded codegree. 84k:12012

Mordeson, John N. See Deveney, James K., 84j:12027 and 84k:12012

secondary classifications:

Gerstenhaber, Murray (with May, Ralph) Geometry of subalgebras and inseparable extensions. (84a:14025)

May, Ralph See Gerstenhaber, Murray, (84a:14025)

12F20 Transcendental extensions

Deveney, James K. Ruled function fields. 84a:12031

Jarden, Moshe (with Shelah, Saharon) Pseudo-algebraically closed fields over rational function fields. 84c:12015

Shelah, Saharon See Jarden, Moshe, 84c:12015

Swan, Richard G. Noether's problem in Galois theory. 84k:12013

secondary classifications:

Arnautov, V. I. Extension of a locally bounded field topology to a prime transcendental extension of the field. (Russian) (84d:12028)

Cohen, Stephen D. Polynomials and finite sets connected with an identity. (84i:12019)

Deveney, James K. (with Mordeson, John N.) Subfields containing distinguished subfields. (84j:12027)

(with Mordeson, John N.) Maximal separable subfields of bounded codegree. (84k:12012)

Fried, E. (with Kollár, J.) Automorphism groups of fields. (84i:12020)

Heinzer, William J. Valuation rings and simple transcendental field extensions. (84d:13003)

van der Kallen, Wilberd $SL_2(\mathbb{C}[X])$ does not have bounded word length. (84b:20037)

Kollár, J. See Fried, E., (84i:12020)

Mordeson, John N. See Deveney, James K., (84j:12027) and (84k:12012)

Ohm, Jack Simple transcendental extensions of valued fields. (84a:13005)

12F99 None of the above, but in this section

Denef, Jan (with Jarden, Moshe; Lewis, D. J.) On A_x -fields which are C_x . 84j:12028

Fried, E. (with Kollár, J.) Automorphism groups of fields. 84i:12020

Jarden, Moshe See Denef, Jan; et al., 84j:12028

Kollár, J. See Fried, E., 84i:12020

Lewis, D. J. See Denef, Jan; et al., 84j:12028

secondary classifications:

Baur, Walter (with Strassen, Volker) The complexity of partial derivatives. (84c:68027)

Haran, Dan (with Jarden, Moshe) Bounded statements in the theory of algebraically closed fields with distinguished automorphisms. (84m:03015)

Jarden, Moshe (with Shelah, Saharon) Pseudo-algebraically closed fields over rational function fields. (84c:12015)

See also Haran, Dan, (84m:03015)

Shelah, Saharon See Jarden, Moshe, (84c:12015)

Strassen, Volker See Baur, Walter, (84c:68027)

12Gxx Homological methods

12G05 Galois cohomology [See also 12A60, 12B20, 13A20, 16A16.]

Haile, Darrell E. (with Larson, Richard G.; Sweedler, Moss E.) A new invariant for C over R : almost invertible cohomology theory and the classification of idempotent cohomology classes and algebras by partially ordered sets with a Galois group action. 84k:12014

Larson, Richard G. See Haile, Darrell E.; et al., 84k:12014

Rosset, Shmuel Remarks on a principle of localization. 84b:12034

Sweedler, Moss E. See Haile, Darrell E.; et al., 84k:12014

secondary classifications:

Caenepeel, S. A cohomological interpretation of the graded Brauer group. I. (84k:13005)

Cameron, Peter J. Some aspects of "post-classification" geometry. (84g:51017)

Douai, Jean-Claude (with Touibi, C.) Courbes définies sur les corps de séries formelles et loi de réciprocité. [Curves defined over fields of formal power series, and a reciprocity law] (84i:12010)

Suites exactes déduites de la suite spectrale de Leray en cohomologie non abélienne. [Exact sequences derived from the Leray spectral sequences in nonabelian cohomology] (84k:14014)

Lubotzky, Alexander Combinatorial group theory for pro- p -groups. (84e:20032)

Merkur'ev, A. S. (with Suslin, A. A.) K -cohomology of Severi-Brauer varieties and the norm residue homomorphism. (Russian) (84i:12007)

Platonov, V. P. Arithmetic theory of algebraic groups. (Russian) (84h:12001)

Suslin, A. A. See Merkur'ev, A. S., (84i:12007)

Touibi, C. See Douai, Jean-Claude, (84i:12010)

12G10 Cohomological dimension

12G99 None of the above, but in this section

12Hxx Differential and difference algebra

12H05 Differential algebra [See also 13N05.]

Abellanas, L. (with Galindo, A.) On the structure of exceptional evolution polynomials. 84a:12032

Davenport, James Harold The parallel Risch algorithm. I. 84b:12033

Galindo, A. See Abellanas, L., 84a:12032

Keigher, William F. Differential rings constructed from quasiprime ideals. 84c:12016

Morikawa, Hisasi On fundamental systems of differential semi-invariants in several variables. 84d:12023

Rubel, Lee A. An elimination theorem for systems of algebraic differential equations. 84a:12033

Shikishima, Kayoko Maximal differential field and its applications. (Japanese summary) 84c:12017

Tuy, Heang K. On almost monotonic real functions. 84e:12028

secondary classifications:

Bondareva, I. N. (with Shubin, M. A.) Growing asymptotic solutions of the Korteweg-de Vries equation and of its higher analogues. (Russian) (84k:35121)

Cherednik, I. V. Regularity of "finite-zone" solutions of integrable matrix differential equations. (Russian) (84f:35123)

Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Rational approximations to solutions of linear differential equations. (84k:10026)

Chudnovsky, Gregory V. See Chudnovsky, D. V., (84k:10026)

Dikii, L. A. Hamiltonian structures and Lax equations generated by matrix differential operators with polynomial dependence on a parameter. (84i:58053)

van den Essen, A. R. P. (with Levelt, A. H. M.) Irregular singularities in several variables. (84c:13031)

Gadzhiev, I. T. (with Gerdzhikov, V. S.; Ivanov, M. I.) Hamiltonian structures of nonlinear evolution equations connected with a polynomial pencil. (Russian. English summary) (84i:58054)

Gautrin, Henri-François Bäcklund transformation according to Gerdzhikov and Kullish for the Korteweg-de Vries equation. (84a:35258)

Gerdzhikov, V. S. See Gadzhiev, I. T.; et al., (84i:58054)

Gibbons, John (with Holm, Darryl D.; Kupershmidt, Boris A.) The Hamiltonian structure of classical chromohydrodynamics. (84h:58053)

Hainzl, J. On commuting linear partial differential operators. (84a:35052)

Hereman, Willy See Verheest, Frank, (84i:58063)

Hermann, Robert Infeld-Hull factorization, Galois-Picard-Vessiot theory for differential operators. (84m:58174)

Some algebraic, geometric, and system-theoretic properties of the special functions of mathematical physics. (84d:33023)

Holm, Darryl D. (with Kupershmidt, Boris A.) Poisson structures of superfluids. (84c:81086)

See also Gibbons, John; et al., (84h:58053)

Itô, Masaaki Symmetries and conservation laws of a coupled nonlinear wave equation. (84c:58036)

Ivanov, M. I. See Gadzhiev, I. T.; et al., (84i:58054)

- Keigher, William F. Differential schemes and premodels of differential fields. (84f:13022)
 Kupersmidt, Boris A. Nonautonomous form of the theory of Lax equations. (84c:58041)
 See also Holm, Darryl D., (84c:81066) and Gibbons, John; et al., (84h:58053)
 Laddomada, C. (with Tu, Gui Zhang) Bäcklund transformations for the Jaulent-Miodek equations. (84f:35130)
 Lammabhi, M. See Lammabhi-Lagarigue, Françoise, (84a:34011)
 Lammabhi-Lagarigue, Françoise (with Lammabhi, M.) Algebraic computation of the solution of some nonlinear differential equations. (84a:34011)
 Levitt, A. H. M. See van den Essen, A. R. P., (84c:13031)
 Madguerova, Andreana S. Isomorphisms of homogeneous algebras of functions on a torus. (Russian) (84c:46052)
 Morikawa, Hisasi On Poisson brackets of semi-invariants. (84j:58049)
 Müller, Winfried B. Formal integration in composition rings. (Russian summary) (84j:16032)
 Newcomb, Robert W. Differential systems on alternative algebras. (See 84g:93005b)
 Nichols, Warren D. (with Weisfeiler, Boris) Differential formal groups of J. F. Ritt. (84j:14045)
 (Poizat, Bruno) See Study group: Stable theories (Bruno Poizat), (84c:03009)
 Pommeret, Jean-François Bäcklund problem, differential algebra and group theory. (See 84c:00008)
 Przeworska-Rolewicz, D. D-shift and generalized periodic solutions of equations with right invertible operators. (See 84h:90007)
 Rubel, Lee A. Some research problems about algebraic differential equations. (84j:34005)
 Salzberg, Pablo M. A reflection principle for calculating the derivatives of a polynomial. (84c:26006)
 Shakiban, Chehrzad An invariant theoretic characterization of conservation laws. (84h:58135)
 Shubin, M. A. See Bondareva, I. N., (84c:35121)
 Tu, Gui Zhang Symmetries of equations $q_u = g(q, q_x, q_{xx}, \dots)$ and the formal complete integrability of the Boussinesq equation. (84b:58057)
 Infinitesimal canonical transformations of generalised Hamiltonian equations. (84c:58091)
 See also Laddomada, C., (84f:35130)
 Verheest, Frank (with Hereman, Willy) Nonlinear mode decoupling for classes of evolution equations. (84f:58063)
 Weisfeiler, Boris See Nichols, Warren D., (84j:14045)
 Wilson, George The affine Lie algebra C_1^1 and an equation of Hirota and Satsuma. (84c:58046)
 Wu, Wen Jun On the mechanization of theorem-proving in elementary differential geometry. (Chinese. English summary) (84h:03031)
 Yarskii, A. S. On the property of separability of an algebraic solution of a system of ordinary differential equations. (Russian. English, French and Slovak summaries) (84d:34006)
 Study group:
 Stable theories (Bruno Poizat) ★Groupe d'étude de théories stables. (Bruno Poizat). 3: 1980/1982. (French) [Study group on stable theories (Bruno Poizat). 3: 1980/1982] (84c:03009)

12H10 Difference algebra [See also 39Axx.]

- Infante, Ronald P. On the inverse problem in difference Galois theory. 84j:12029

12H20 Abstract differential equations [See also 34Gxx.]

- Rubel, Lee A. A counterexample to elimination in systems of algebraic differential equations. 84c:12015

12H25 p -adic differential equations [See also 12B40, 14G20, 34Gxx.]

- (Adolphson, Alan) See Dwork, Bernard M., 84g:12031
 Baldassarri, Francesco Differential modules and singular points of p -adic differential equations. 84i:12021
 Dwork, Bernard M. ★Lectures on p -adic differential equations. 84g:12031
 Majoration effective et application. [Effective upper bounds and an application] 84c:12016

secondary classifications:

- Robba, P. Sur les équations différentielles linéaires p -adiques. II. [On p -adic linear differential equations. II] (84d:12017)

12H99 None of the above, but in this section

secondary classifications:

- Katz, Nicholas M. A conjecture in the arithmetic theory of differential equations. (French summary) (84h:14014a)
 Corrections to: "A conjecture in the arithmetic theory of differential equations". (84h:14014b)
 Saloff-Coste, Laurent Opérateurs pseudo-différentiels sur un corps local. (English summary) [Pseudodifferential operators on a local field] (84m:43008)

12Jxx Topological fields

12J05 Normed fields

- Fresnel, Jean (with Matignon, Michel) Produit tensoriel topologique de corps valués. [Topological tensor product of fields with valuation] 84m:12025
 Matignon, Michel See Fresnel, Jean, 84m:12025
 Uspenskii, V. V. A metrizable space is imbedded in a metrizable field. (Russian) 84j:12030

12J10 Valued fields [See also 10M10.]

- Alajbegović, Jusuf On Cauchy sequences of a valued field. 84f:12014
 Arapović, M. Approximation theorems for fields and commutative rings. (Serbo-Croatian summary) 84j:12031
 Fuentes Villalba, Fernanda M. A class of compatible topologies in a commutative field K and its relation with the topology induced by a Krull valuation in K . (Spanish) 84c:12034
 Močkoř, Jiří The completion of valued fields and nonstandard models. 84d:12024
 Wadsworth, Adrian R. p -Henselian field: K -theory, Galois cohomology, and graded Witt rings. 84m:12026

secondary classifications:

- Baeza, R. Comparing u -invariants of fields of characteristic 2. (84f:10027)
 Becker, Eberhard Valuations and real places in the theory of formally real fields. (84f:12011)
 Kassimatis, N. See Stratigopoulos, D., (84g:54042)
 Mines, Ray (with Richman, Fred) Dedekind domains. (84g:13038)
 Ohm, Jack Simple transcendental extensions of valued fields. (84a:13005)
 Richman, Fred See Mines, Ray, (84g:13038)
 Stratigopoulos, D. (with Kassimatis, N.) Espaces ultramétriques orientés. [Oriented ultrametric spaces] (84g:54042)

12J15 Ordered fields [See also 10M15.]

- Becker, Eberhard The real holomorphy ring and sums of $2n$ th powers. 84g:12032
 (with Schwartz, Niels) Zum Darstellungssatz von Kadison-Dubois. [On the representation theorem of Kadison-Dubois] 84m:12027
 Jarden, Moshe The elementary theory of large e -fold ordered fields. 84c:12029
 Pestov, G. G. ★Строение упорядоченных полей. (Russian) [The structure of ordered fields] 84d:12025
 Révész, Gábor Ordering epic R -fields. 84i:12022
 Roquette, Peter p -adische und saturierte Körper. Neue Variationen zu einem alten Thema von Hasse. [p -adic and saturated fields. New variations on an old theme of Hasse] 84m:12028
 Schwartz, Niels See Becker, Eberhard, 84m:12027

secondary classifications:

- Cowles, John R. (with LaGrange, Robert) Generalized Archimedean fields. (84m:03054)
 Craven, Thomas C. On the prime ideal of an ordering of higher level. (84a:10020)
 Delfs, Hans (with Knebusch, Manfred) Zur Theorie der semialgebraischen Wege und Intervalle über einem reell abgeschlossenen Körper. [On the theory of semialgebraic paths and intervals over a real-closed field] (84f:14020)
 Dubois, D. W. (with Recio Muñoz, Tomás J.) Subordinate structure sheaves. (84c:14018)
 Engler, Antonio J. (with Viswanathan, T. M.) Digging holes in algebraic closures à la Artin. II. (84m:12022b)
 Gräter, Joachim Fortsetzungen von Manisbewertungen. [Extensions of Manis valuations] (84h:13004)
 Gröger, D. ★Über angeordnete Fastkörper. (German) [On ordered near-fields] (84c:12018)
 Knebusch, Manfred See Delfs, Hans, (84f:14020)
 LaGrange, Robert See Cowles, John R., (84m:03054)
 Mnëv, N. E. On the realizability over fields of the combinatorial types of convex polytopes. (Russian. English summary) (84m:52012)
 Pardini, Leonardo Real closure of generalized Hardy fields. (Italian. English summary) (84c:26020)
 Prestel, Alexander Pseudo real closed fields. (84h:12032)
 Recio Muñoz, Tomás J. See Dubois, D. W., (84c:14018)
 Rieger, G. J. A new approach to the real numbers (motivated by continued fractions). (84j:26002)
 Rolland, Raymond Étude des coupures dans les groupes et corps ordonnés. [Study of cuts in ordered groups and fields] (84c:06023)
 Schwartz, Niels The strong topology on real algebraic varieties. (84a:14012)
 Viswanathan, T. M. See Engler, Antonio J., (84m:12022b)

12J17 Topological semifields

secondary classifications:

- Mitchell, Sidney S. (with Sinutok, Porntip) The theory of semifields. (84d:16048)
 Sinutok, Porntip See Mitchell, Sidney S., (84d:16048)

12J20 General valuation theory

- Aboubdillah, Driss Topologies de corps A -linéaires. [A -linear topologies on fields] 84d:12026
 Weber, Hans Unabhängige Topologien, Zerlegung von Ringtopologien. [Independent topologies, decomposition of ring topologies] 84d:12027

secondary classifications:

- Becker, Eberhard The real holomorphy ring and sums of $2n$ th powers. (84g:12032)
 Fritsch, Rudolf (with Prestel, Alexander) Bewertungsfortsetzungen und nichtinjektive Kollineationen. [Extensions of valuations and noninjective collineations] (84b:51004)
 Gräter, Joachim Der allgemeine Approximationssatz für Manisbewertungen. (English summary) [General approximation theorem for Manis valuations] (84c:13004)
 Prestel, Alexander See Fritsch, Rudolf, (84b:51004)

- 12J25 Non-Archimedean valued fields [See also 26E30, 30G05, 32D25, 46P05.]

secondary classifications:

- Bayod, José M. (with Martínez Maurica, Javier) A characterization of the spherically complete normed spaces with a distinguished basis. (84h:46103)
 Fresnel, Jean (with Matignon, Michel) Produit tensoriel topologique de corps valués. [Topological tensor product of fields with valuation] (84m:12025)
 Martínez Maurica, Javier See Bayod, José M., (84h:46103)
 Matignon, Michel See Fresnel, Jean, (84m:12025)
 Moh, T. T. On two fundamental theorems for the concept of approximate roots. (84b:12020)
 On the Jacobian conjecture and the configurations of roots. (84m:14018)
 Nguyễn Xuân Viên Invariant integration on a non-Archimedean compact group. (Vietnamese. Russian summary) (84i:12012)

- 12J27 Krasner-Tate algebras [See mainly 32E27, also 46P05.]

secondary classifications:

- Escassut, Alain See Sarment-Durix, Marie-Claude, (84j:30086)
 Perrin, Yvette Fonctions analytiques dans les corps valués de rang supérieur à un. [Analytic functions in fields with valuation of rank greater than one] (84j:32021)
 Sarment-Durix, Marie-Claude (with Escassut, Alain) T -suites idempotentes. (English summary) [Idempotent T -sequences] (84j:30086)

- 12J99 None of the above, but in this section

- Arnautov, V. I. Extension of a locally bounded field topology to a prime transcendental extension of the field. (Russian) (84d:12028)
 Endo, Mikihiko Correction of: "The strong approximation theorem and locally bounded topologies of algebraic function fields" [Comment. Math. Univ. St. Paul. 30 (1981), no. 1, 77-86; MR 82k:12028]. (84b:12034)

secondary classifications:

- Day, B. J. A note on powers of Hausdorff fields. (84b:13038)

12Kxx Generalizations

- 12K05 Near-fields [See also 16A76.]

- Gröger, D. ★ Über angeordnete Fastkörper. (German) [On ordered near-fields] (84c:12018)

secondary classifications:

- Feigelson, Shalom Near rings without zero divisors. (84m:16034)
 Pettet, Martin R. Near-fields and linear transformations of finite fields. (84i:12015)
 Weinert, Hanns Joachim Zur Theorie der Halbfastkörper. [On the theory of seminear-fields] (84b:16025)

- 12K10 Semifields [See also 16A78.]

- Oehmke, Robert H. Some results on semifields. (See 84b:51003)

secondary classifications:

- (Hutchins, H.) See Weinert, Hanns Joachim, (84g:16035)
 Weinert, Hanns Joachim On idempotent semifields and a paper: "Division semirings with $1+1=1$ " [Semigroup Forum 22 (1981), no. 2, 181-188; MR 82e:16037] by H. Hutchins. (84g:16035)

- 12K99 None of the above, but in this section

secondary classifications:

- Boerner, Victoria (with Kallaher, Michael J.) Half-Bol quasifields. (84g:51004)
 Hsu, D. Frank ★ Cyclic neofields and combinatorial designs. (84g:05001)
 Kallaher, Michael J. See Boerner, Victoria, (84g:51004)

12Lxx Connections with logic

- 12L05 Decidability

- Richman, Fred Seidenberg's condition P . (84i:12017)
 Toffalori, Carlo Sheaves of pairs of algebraically closed fields. (Italian. English summary) (84e:12030)

secondary classifications:

- Denef, Jan (with Jarden, Moshe; Lewis, D. J.) On A_x -fields which are C_x . (84j:12028)
 Ershov, Yu. L. Undecidability of regularly closed fields. (Russian) (84c:03052)
 Ibarra, Oscar H. (with Moran, Shlomo) Probabilistic algorithms for deciding equivalence of straight-line programs. (84f:68033)
 Jarden, Moshe See Denef, Jan; et al., (84j:12028)
 Jensen, Christian U. L'indécidabilité d'une classe de corps des fonctions méromorphes. [Undecidability of a class of fields of meromorphic functions] (84g:03062)
 Lewis, D. J. See Denef, Jan; et al., (84j:12028)
 Moran, Shlomo See Ibarra, Oscar H., (84f:68033)

- Ono, Hirokazu Equational theories and universal theories of fields. (84g:03046)
 Wu, Wen Jun On the mechanization of theorem-proving in elementary differential geometry. (Chinese. English summary) (84h:03031)
 Zassenhaus, Hans J. Über die konstruktive Behandlung mathematischer Probleme. [On the constructive treatment of mathematical problems] (84d:03077)

- 12L10 Ultraproducts

- 12L12 Model theory

- Hickman, John L. Automorphisms of medial fields. (84c:12019)
 Toffalori, Carlo Questions in the theory of models for pairs of fields. (Italian. English summary) (84i:12023)

secondary classifications:

- Boffa, Maurice Élimination des quantificateurs en algèbre. [Elimination of quantifiers in algebra] (84c:03041)
 Cowles, John R. The Henkin quantifier and real closed fields. (84g:03048)
 Dahn, Bernd I. (with Gehne, Jürgen) A theory of ordered exponential fields which has no model completion. (See 84i:03008)
 van den Dries, Lou See Macintyre, Angus; et al., (84f:03028)
 Ershov, Yu. L. Regularly r -closed fields. (Russian) (84c:03060)
 Gehne, Jürgen See Dahn, Bernd I., (See 84i:03008)
 Haran, Dan (with Jarden, Moshe) Bounded statements in the theory of algebraically closed fields with distinguished automorphisms. (84m:03015)
 Jarden, Moshe The elementary theory of large e -fold ordered fields. (84c:12029)
 See also Haran, Dan, (84m:03015)
 Macintyre, Angus (with McKenna, Kenneth; van den Dries, Lou) Elimination of quantifiers in algebraic structures. (84f:03028)
 McKenna, Kenneth See Macintyre, Angus; et al., (84f:03028)
 Mijajlović, Žarko Completions of models and Galois theory. (84c:03062)
 Myasnikov, A. G. (with Remeslennikov, V. N.) Definability of the set of Mal'tsev bases and elementary theories of finite-dimensional algebras. I. (Russian) (84d:03039)
 (Poizat, Bruno) See Study group: Stable theories (Bruno Poizat), (84i:03009)
 Remeslennikov, V. N. See Myasnikov, A. G., (84d:03039)
 Urzyczyn, Paweł The unwind property in certain algebras. (84c:08005)
 Weissauer, Rainer Der Hilbertsche Irreduzibilitätssatz. [Hilbert's irreducibility theorem] (84c:12020)
 Study group: Stable theories (Bruno Poizat) ★ Groupe d'étude de théories stables. (Bruno Poizat). 3: 1980/1982. (French) [Study group on stable theories (Bruno Poizat). 3: 1980/1982] (84i:03009)

- 12L15 Nonstandard arithmetic [See also 03H15.]

- Weissauer, Rainer Der Hilbertsche Irreduzibilitätssatz. [Hilbert's irreducibility theorem] (84c:12020)

secondary classifications:

- Laugwitz, Detlef Ω -calculus as a generalization of field extension—an alternative approach to nonstandard analysis. (84b:26024)
 Močkoř, Jiří The completion of valued fields and nonstandard models. (84d:12024)
 Pasini, Leonardo Real closure of generalized Hardy fields. (Italian. English summary) (84c:26020)
 Richter, Michael M. ★ Ideale Punkte, Monaden und Nichtstandard-Methoden. (German) [Ideal points, monads and nonstandard methods] (84g:03107)

- 12L99 None of the above, but in this section

secondary classifications:

- Ellentuck, Erik Galois theorems for isolated fields. (84a:03048)
 Mines, Ray (with Richman, Fred) Separability and factoring polynomials. (84c:03075)
 Richman, Fred See Mines, Ray, (84c:03075)

13-XX COMMUTATIVE RINGS AND ALGEBRAS (For the noncommutative case, see 16-XX.)

- 13-01 Elementary exposition, textbooks

- 13-02 Advanced exposition (research surveys, monographs, etc.)

- (Andrunakievich, V. A.) See Dniester notebook, 84a:13001
 Nagata, Masayoshi Commutative algebra and algebraic geometry. (84c:13001)
 Dniester notebook ★ Днестровская тетрадь. (Russian) [The Dniester notebook] (84a:13001)

Problems:

- Commutative algebra Further problems. (84c:13001)
 Theory of rings and modules ★ Днестровская тетрадь. (Russian) [The Dniester notebook] (84a:13001)

secondary classifications:

- Nagata, Masayoshi Applications of the theory of valuation rings. (84g:13004)
 Viswanathan, T. M. Prüfer domains: results and problems. (84d:13014)

13-03 Historical (must also be assigned at least one classification number from Section 01)

- Rees, David Multiplicities, Hilbert functions and degree functions. **84j:13001**
 Sally, Judith D. Noether normalization. **84c:13001**

secondary classifications:

- Renschuch, Bodo (with Vogel, Wolfgang) Über den Bezoutschen Satz seit den Untersuchungen von B. L. van der Waerden. [On Bezout's theorem since the investigations by B. L. van der Waerden] (**84j:01059**)
 Swan, Richard G. Noether's problem in Galois theory. (**84c:12013**)
 Vogel, Wolfgang See Renschuch, Bodo, (**84j:01059**)

13-04 Explicit machine computation and programs (not the theory of computation or programming)

- Lazard, D. Commutative algebra and computer algebra. **84b:13001**

secondary classifications:

- Mora, Ferdinando An algorithm to compute the equations of tangent cones. (**84c:13012**)

13-06 Proceedings, conferences, etc.

- (Eisenbud, David) See Seminar: Eisenbud, D.—Singh, B.—Vogel, W., **84a:13003**
 (Greco, Silvio) See Commutative algebra. **84a:13002**
 (Sharp, R. Y.) See Commutative algebra. **84b:13002**
 (Singh, Balwant) See Seminar: Eisenbud, D.—Singh, B.—Vogel, W., **84a:13003**
 (Valla, Giuseppe) See Commutative algebra. **84c:13002**
 (Vogel, Wolfgang) See Seminar: Eisenbud, D.—Singh, B.—Vogel, W., **84a:13003**
 Commutative algebra ★ Commutative algebra: Durham 1981. **84b:13002**
 ★ Commutative algebra. **84a:13002**

Conference:

- Trento, Commutative Algebra ★ Commutative algebra. **84a:13002**
 Durham ★ Commutative algebra: Durham 1981. **84b:13002**

Seminar:

- Eisenbud, D.—Singh, B.—Vogel, W. ★ Seminar D. Eisenbud/B. Singh/W. Vogel. Vol. 2. **84a:13003**
 Some recent development in the theory of commutative rings ★ Some recent development in the theory of commutative rings. **84b:13001**
 Study of Buchsbaum rings and generalized Cohen-Macaulay rings ★ The study of Buchsbaum rings and generalized Cohen-Macaulay rings. (Japanese) **84a:13004**
 Symposium:
 Commutative Algebra ★ Commutative algebra: Durham 1981. **84b:13002**
 Some recent development in the theory of commutative rings ★ Some recent development in the theory of commutative rings. **84b:13001**
 Study of Buchsbaum Rings and Generalized Cohen-Macaulay Rings ★ The study of Buchsbaum rings and generalized Cohen-Macaulay rings. (Japanese) **84a:13004**
 Trento ★ Commutative algebra. **84a:13002**

secondary classifications:

- (Göbel, Rüdiger) See Abelian group theory, (**84j:20004**)
 (Lady, E. L.) See Abelian group theory, (**84j:20004**)
 (Mader, Adolf) See Abelian group theory, (**84j:20004**)
 Abelian group theory ★ Abelian group theory. (**84j:20004**)
 Conference:

- Abelian group theory ★ Abelian group theory. (**84j:20004**)
 Honolulu, Hawaii ★ Abelian group theory. (**84j:20004**)

13Axx General commutative ring theory

13A05 Divisibility

secondary classifications:

- Anderson, D. D. (with Anderson, David F.) Divisibility properties of graded domains. (**84c:13026**)
 (with Anderson, David F.) Grading integral domains. (**84f:13001**)
 Anderson, David F. See Anderson, D. D., (**84c:13026**) and (**84f:13001**)
 Bouvier, Alain The local class group of a Krull domain. (**84c:13023**)
 Johnson, Jon L. Integral closure and generalized transforms in graded domains. (**84f:13005**)
 Labeyrie, Jacques Factorisation de Ritt pour les polynômes exponentiels formels. (English summary) [Ritt factorization for formal exponential polynomials] (**84m:12021**)
 Viswanathan, T. M. Prüfer domains: results and problems. (**84d:13014**)

13A10 Radical theory

secondary classifications:

- Karpilovsky, G. The Jacobson radical of commutative group rings. (**84d:16011**)
 Munn, W. D. On commutative semigroup algebras. (**84g:20110**)

13A15 Ideals

- Anderson, D. D. On the ideal equation $I(B \cap C) = IB \cap IC$. **84c:13001**
 Barucci, Valentina (with Fontana, Marco) When are $D + \mathfrak{M}$ rings Laskerian? **84b:13003**
 Dobbs, David E. (with Fontana, Marco; Huckaba, James A.; Papick, Ira J.) Strong ring extensions and pseudovaluation domains. **84b:13004**

- Endler, Otto Ideals, divisors and valuations. (Portuguese) (See **84b:00011**)

- Fontana, Marco See Barucci, Valentina, **84b:13003** and Dobbs, David E.; et al., **84b:13004**

- Greither, Cornelius On the two generator problem for the ideals of a one-dimensional ring. **84c:13002**

- Huckaba, James A. See Dobbs, David E.; et al., **84b:13004**

- McAdam, Stephen Going down as a conforming relation. **84g:13001**

- Ngô Việt Trung Principal systems of ideals. **84c:13003**

- Papick, Ira J. See Dobbs, David E.; et al., **84b:13004**

- Renschuch, Bodo Beiträge zur konstruktiven Theorie der Polynomideale. XVII/2. Zur Hentzelt/Noether/Hermannschen Theorie der endlich vielen Schritte. (English and Russian summaries) [Contributions to the constructive theory of polynomial ideals. XVII/2. On the Hentzelt/Noether/Hermann theory of finitely many steps] **84m:13001**

- Beiträge zur konstruktiven Theorie der Polynomideale. XVIII. Zum Nachweis von Gleichheit, Elementrelation und Basen minimaler Länge durch Gjunterische Basen. (English and Russian summaries) [Contributions to the constructive theory of polynomial ideals. XVIII. On the proof of equality, element relation and bases of minimal length by means of Gjunter bases] **84m:13002**

- Sharma, Pramod K. A note on ideals in polynomial rings. **84c:13002**

- Sugtani, Takasi (with Yoshida, Ken-ichi) Some remarks on pseudovaluation domains. **84b:13005**

- Vaughan, Nick An integral domain with an almost division algorithm. **84c:13003**

- Yoshida, Ken-ichi See Sugtani, Takasi, **84b:13005**

secondary classifications:

- Berman, S. D. (with Vishnyakova, N. I.) The multiplicative semigroup of ideals of a valuation ring. (Russian) (**84d:13002**)
 Brodmann, Markus Rees rings and form rings of almost complete intersections. (**84f:13017**)
 Geramita, Anthony V. Remarks on the number of generators of some homogeneous ideals. (French summary) (**84b:13027**)
 Gilmer, Robert (with Heinzer, William J.) Ideals contracted from a Noetherian extension ring. (**84c:13006**)
 Heinzer, William J. See Gilmer, Robert, (**84c:13006**)
 Hirano, Yasuyuki On generalized p.p. rings. (**84g:13020**)
 Matlis, Eben The minimal prime spectrum of a reduced ring. (**84b:13010**)
 Mezzetti, Emilia (with Viola, Paolo) An operation on ideals in graded rings. (Italian. English summary) (**84f:13011**)
 Naoum, Adil G. A note on q -rings. (**84b:13024**)
 Papick, Ira J. Super-primitive elements. (**84b:13004**)
 Schinzel, Andrzej (with Wróblewski, J.) On ideals in the ring of polynomials in one variable over a Dedekind domain. (**84m:13021**)
 Viola, Paolo See Mezzetti, Emilia, (**84f:13011**)
 Vishnyakova, N. I. See Berman, S. D., (**84d:13002**)
 Wróblewski, J. See Schinzel, Andrzej, (**84m:13021**)

13A17 Prime and primary ideals and their generalizations

- Contessa, Maria On PM-rings. **84c:13002**
 Dobbs, David E. (with Fontana, Marco; Papick, Ira J.) On certain distinguished spectral sets. (Italian summary) **84b:13006**
 (with Fontana, Marco; Papick, Ira J.) On the flat spectral topology. (Italian summary) **84b:13007**
 Fontana, Marco See Dobbs, David E.; et al., **84b:13006** and **84b:13007**
 Hanna, Charles C. (with Johnson, Jon L.) Noetherian subsets of prime spectra. **84g:13002**
 Ischebeck, Friedrich Binäre Formen und Primideale. (English summary) [Binary forms and prime ideals] **84g:13003**
 Johnson, Jon L. See Hanna, Charles C., **84g:13002**
 Ngô Việt Trung Der gradierte Ring bezüglich des Primideals von Macaulay. [The graded ring with respect to the prime ideal of Macaulay] **84c:13003**
 Papick, Ira J. See Dobbs, David E.; et al., **84b:13006** and **84b:13007**
 Radu, Nicolae Sur les anneaux laskériens. [Laskerian rings] **84j:13002**
 Ratliff, Louis J., Jr. Note on asymptotic prime divisors and symbolic powers of primary ideals. **84m:13003**
 Tamone, Grazia The glueing of primary ideals and the origin of certain singularities. (Italian. English summary) **84d:13001**

secondary classifications:

- Ballico, Edoardo (with Dikranjan, Dikran) Invariant ideals and the variety of complexes. (Italian summary) (**84j:14055**)
 Barucci, Valentina (with Fontana, Marco) When are $D + \mathfrak{M}$ rings Laskerian? (**84b:13003**)
 Costa, Douglas L. (with Gallardo, Léonard; Querré, J.) On the distribution of prime elements in polynomial Krull domains. (**84c:13012**)
 Dikranjan, Dikran See Ballico, Edoardo, (**84j:14055**)
 Facchini, Alberto Fiber products and Morita duality for commutative rings. (**84j:13012**)
 Fontana, Marco See Barucci, Valentina, (**84b:13003**)
 Fried, M. A note on principal ideals and smooth curves. (**84b:14041**)
 Gallardo, Léonard See Costa, Douglas L.; et al., (**84c:13012**)
 Heitmann, Raymond C. (with McAdam, Stephen) Distinguished domains. (**84c:13027**)
 McAdam, Stephen See Heitmann, Raymond C., (**84c:13027**)
 Querré, J. See Costa, Douglas L.; et al., (**84c:13012**)
 de Souza Doering, Ada Maria The depth conjecture: a counterexample. (**84c:13016**)
 Vipera, Maria Cristina Some classes of ring epimorphisms. (Italian. English summary) (**84f:13006**)
 Wiegand, Sylvia Intersections of prime ideals in Noetherian rings. (**84g:13029**)

13A18 Valuations and their generalizations

- Berman, S. D. (with Vishnyakova, N. I.) The multiplicative semigroup of ideals of a valuation ring. (Russian) **84d:13002**
- David, John Edmonds On the asymptotic properties of the order function. (See **84b:00011**)
- Gräter, Joachim Fortsetzungen von Manisbewertungen. [Extensions of Manis valuations] **84d:13004**
- Der allgemeine Approximationssatz für Manisbewertungen. (English summary) [General approximation theorem for Manis valuations] **84d:13004**
- Heinzer, William J. Valuation rings and simple transcendental field extensions. **84d:13003**
- Nagata, Masayoshi Applications of the theory of valuation rings. **84g:13004**
- Ohm, Jack Simple transcendental extensions of valued fields. **84a:13005**
- Orbanz, Ulrich Note on local domains whose order function is a valuation. **84e:13004**
- Ribenboim, Paulo On a question of Anne Marie Nicolas concerning valuation rings. (Italian summary) **84m:13004**
- Vishnyakova, N. I. See Berman, S. D., **84d:13002**

secondary classifications:

- Arapović, M. Approximation theorems for fields and commutative rings. (Serbo-Croatian summary) **(84j:12031)**
- Baba, Kiyoshi Some remarks on p -radical descent for computing divisor class groups. **(84i:13003)**
- Becker, Eberhard (with Schwartz, Niels) Zum Darstellungssatz von Kadison-Dubois. [On the representation theorem of Kadison-Dubois] **(84m:12027)**
- Brumfiel, G. W. Real valuation rings and ideals. **(84j:14022)**
- Dobbs, David E. (with Eakin, Paul M., Jr.; Eastham, Jerome F., Jr.) Commutative rings whose simple proper overrings are Noetherian. **(84m:13016)**
- Eakin, Paul M., Jr. See Dobbs, David E.; et al. **(84m:13016)**
- Eastham, Jerome F., Jr. See Dobbs, David E.; et al. **(84m:13016)**
- Endler, Otto Ideals, divisors and valuations. (Portuguese) (See **84b:00011**)
- Fuchs, László Modules over valuation rings. **(84g:13016)**
- ★ Modules over valuation domains. **(84k:14006)**
- Ischebeck, Friedrich Binäre Formen und Primideale. (English summary) [Binary forms and prime ideals] **(84g:13003)**
- Mines, Ray (with Richman, Fred) Dedekind domains. **(84g:13038)**
- Morales, Marcelo Une propriété asymptotique des puissances symboliques d'un idéal. Application à la théorie de l'intersection sur les surfaces normales. (English summary) [An asymptotic property of the symbolic powers of an ideal. Application to the theory of the intersection of normal surfaces] **(84e:14006)**
- Richman, Fred See Mines, Ray, **(84g:13038)**
- Salce, Luigi (with Zanardo, Paolo) On a paper of I. Fleischer. **(84h:13012)**
- Schwartz, Niels See Becker, Eberhard, **(84m:12027)**
- Zanardo, Paolo See Salce, Luigi, **(84h:13012)**

13A20 Brauer groups [See also 12Gxx, 16A16.]

- Carneepel, S. A cohomological interpretation of the graded Brauer group. I. **84d:13005**
- Lee, Heisook (with Orzech, Morris) Brauer groups, class groups and maximal orders for a Krull scheme. **84d:13004**
- Maggioni, Renato Two variants of the Brauer group. (Italian, English summary) **84e:13005**
- Orzech, Morris See Lee, Heisook, **84d:13004**
- Taylor, Joseph L. A bigger Brauer group. **84g:13007**
- Van Oystaeyen, F. (with Verschoren, A.) On the Brauer group of a projective variety. **84d:13005**
- (with Verschoren, A.) On the Brauer group of a projective curve. **84g:13005**
- Crossed products over arithmetically graded rings. **84g:13006**
- Verschoren, A. The cohomological Brauer group of a projective variety. **84g:13008**
- On the reflexive class group. **84g:13009**
- See also Van Oystaeyen, F., **84d:13005** and **84g:13005**

secondary classifications:

- Haile, Darrell E. (with Larson, Richard G.; Sweedler, Moss E.) A new invariant for C over R : almost invertible cohomology theory and the classification of idempotent cohomology classes and algebras by partially ordered sets with a Galois group action. **(84k:12014)**
- Larson, Richard G. See Haile, Darrell E.; et al. **(84k:12014)**
- Parimala, Raman Failure of a quadratic analogue of Serre's conjecture. **(84d:13016)**
- Sweedler, Moss E. See Haile, Darrell E.; et al. **(84k:12014)**
- Takeuchi, Mitsuhiro (with Ulbrich, Karl-Heinz) Complexes of categories with abelian group structure. **(84g:18025)**
- Ulbrich, Karl-Heinz See Takeuchi, Mitsuhiro, **(84g:18025)**
- Verschoren, A. Exact sequences for relative Brauer groups and Picard groups. **(84e:13017)**

13A99 None of the above, but in this section

- Arapović, M. Characterizations of the 0-dimensional rings. (Serbo-Croatian summary) **84m:13005a**
- The minimal 0-dimensional overrings of commutative rings. (Serbo-Croatian summary) **84m:13005b**
- On the embedding of a commutative ring into a 0-dimensional commutative ring. (Serbo-Croatian summary) **84m:13005c**
- Estes, Dennis R. (with Guralnick, Robert M.) Module equivalences: local to global when primitive polynomials represent units. **84c:13005**
- Guralnick, Robert M. See Estes, Dennis R., **84c:13005**
- Kaczorowski, Jerzy Some remarks on the multiplicative structure of commutative rings. **84g:13010**

secondary classifications:

- Coste, Michel (with Coste-Roy, Marie-Françoise) Le spectre réel et la topologie des variétés algébriques sur un corps réel clos. [The real spectrum and the topology of algebraic varieties over a real-closed field] (See **84e:14002**)
- Coste-Roy, Marie-Françoise See Coste, Michel, (See **84e:14002**)
- Ratliff, Louis J., Jr. Integrally closed ideals, prime sequences, and Macaulay local rings. **(84b:13015)**
- Zöschinger, Helmut Gelfandringe und koabgeschlossene Untermoduln. [Gelfand rings and coclosed submodules] **(84k:13011)**

13Bxx Ring extensions and related topics

13B02 Extension theory

- Anderson, D. D. (with Anderson, David F.) Grading integral domains. **84f:13001**
- Anderson, David F. See Anderson, D. D., **84f:13001**
- Gaitan O., Hernando ★ Sobre anillos de anillos con pocos divisores de cero. (Spanish) [Overrings of rings with few zero divisors] **84i:13002**
- Gilmer, Robert (with Heinzer, William J.) Ideals contracted from a Noetherian extension ring. **84a:13006**
- Handelman, David E. Proximity of one-dimensional Gorenstein rings. **84d:13006a**
- Addendum: "Proximity of one-dimensional Gorenstein rings". **84d:13006b**
- Heinzer, William J. See Gilmer, Robert, **84a:13006**
- Thérond, Jean-Daniel Extensions cubiques d'un anneau local. (English summary) [Cubic extensions of a local ring] **84g:13011**
- Existence d'une extension cyclique cubique monogène de discriminant donné. [Existence of monogenic cubic cyclic extension with given discriminant] **84d:13006**

secondary classifications:

- Nousiainen, Pekka (with Sweedler, Moss E.) Automorphisms of polynomial and power series rings. **(84k:13004)**
- Riley, Adrian M. Balanced big Cohen-Macaulay modules and free extensions of local rings. **(84i:13020)**
- Sweedler, Moss E. See Nousiainen, Pekka, **(84i:13004)**

13B05 Galois theory

- Childs, L. N. A Stickelberger condition on cyclic Galois extensions. **84e:13006**
- Faith, Carl On the Galois theory of commutative rings. I. Dedekind's theorem on the independence of automorphisms revisited. **84h:13002**
- Kersten, Ina (with Michalíček, Johannes) Das Einbettungsproblem für zyklische p^n -Erweiterungen über einem semilokalen Ring. [The embedding problem for cyclic p^n -extensions over a semilocal ring] **84i:13002**
- Kishimoto, Kazuo On p -Galois extensions of rings. (See **84b:00011**)
- Michalíček, Johannes See Kersten, Ina, **84i:13002**
- Saltman, David J. Generic Galois extensions and problems in field theory. **84a:13007**

secondary classifications:

- Kambayashi, T. (with Srinivas, V.) On étale coverings of the affine space. **(84m:14017)**
- Kreimer, H. F. Quadratic Hopf algebras and Galois extensions. **(84b:16039)**
- Srinivas, V. See Kambayashi, T., **(84m:14017)**
- Swan, Richard G. Noether's problem in Galois theory. **(84k:12013)**
- Van Oystaeyen, F. Crossed products over arithmetically graded rings. **(84g:13006)**

13B10 Automorphisms and derivations

- Baba, Kiyoshi Some remarks on p -radical descent for computing divisor class groups. **84e:13003**
- Matsumura, Hideyuki Integrable derivations. **84e:13007**
- Nakajima, Haruhisa Relative invariants of finite groups. **84c:13006**
- Nousiainen, Pekka (with Sweedler, Moss E.) Automorphisms of polynomial and power series rings. **84i:13004**
- Shamsuddin, Ahmad Rings with automorphisms leaving no nontrivial proper ideals invariant. **84f:13003**
- Rings with automorphisms leaving no nontrivial proper ideals invariant. **84e:13008**
- Sweedler, Moss E. See Nousiainen, Pekka, **84i:13004**

secondary classifications:

- Angermüller, Gerhard On some conditions for a polynomial map with constant Jacobian to be invertible. **(84i:13005)**
- Avramov, Luchezar L. Pseudoreflection group actions on local rings. **(84k:13020)**
- Bass, Hyman The Jacobian conjecture and inverse degrees. **(84k:13007)**
- Bergen, Jeffrey See Bridges, Douglas S., **(84k:16048)**
- Bridges, Douglas S. (with Bergen, Jeffrey) On the derivation of x^n in a ring. **(84k:16048)**
- Connell, E. (with van den Dries, Lou) Injective polynomial maps and the Jacobian conjecture. **(84m:13006)**
- (with Drost, J.) Conservative and divergence free algebraic vector fields. **(84i:13014)**
- Draper, Richard N. (with Fischer, Klaus) Derivations and small C_4 . **(84i:32008b)**
- (with Fischer, Klaus) Derivations into the integral closure. **(84i:32008a)**
- van den Dries, Lou See Connell, E., **(84m:13006)**
- Drost, J. See Connell, E., **(84i:13014)**
- Fischer, Klaus See Draper, Richard N., **(84i:32008a)** and **(84i:32008b)**
- Guralnick, Robert M. (with Isaacs, I. Martin; Passman, D. S.) Nonexistence of partial traces for group actions. **(84k:16049)**
- Isaacs, I. Martin See Guralnick, Robert M.; et al., **(84k:16049)**

Levasseur, Thierry Anneaux d'opérateurs différentiels. [Rings of differential operators] (84j:32009)

Passman, D. S. See Guralnick, Robert M.; et al., (84b:16049)

Platte, Erich Nicht-ausgeartete reguläre Überlagerungen. [Nondegenerate regular coverings] (84a:13024)

Ștefănescu, Doru Morphisms of the polynomial algebras. (84h:13005)

13B15 Ramification theory

13B20 Integral dependence; integral closure; integrally closed rings, related rings (Japanese, etc.)

Anderson, David F. Root closure in integral domains. (84e:13009)

Angermüller, Gerhard On some conditions for a polynomial map with constant Jacobian to be invertible. (84e:13005)

Blass, J. (with Blass, Piotr) Computation of the conductor of the algebraic surface $Z^2 = X^2 Y^2$. (84d:13007)

Blass, Piotr See Blass, J., (84d:13007)

Brewer, James W. (with Nichols, Warren D.) Seminormality in power series rings. (84c:13003)

Brezuleanu, A. (with Rotthaus, Christel) Eine Bemerkung über Ringe mit geometrisch normalen formalen Fasern. [A comment on rings with geometrically normal formal fibres] (84g:13012)

Chiriacescu, Gabriel On a theorem of Tate. (Italian summary) (84f:13004)

On the theory of Japanese rings. (84g:13013)

Johnson, Jon L. Integral closure and generalized transforms in graded domains. (84f:13005)

Matsumura, Hideyuki Recent developments in the theory of excellent rings. (84c:13007)

Mirbagheri, Ahmad (with Ratliff, Louis J., Jr.) On the intersection of two overrings. (84g:13014)

Nagano, Yoshihiko Some remarks on subrings of integral closure. (Japanese summary) (84c:13010)

Nichols, Warren D. See Brewer, James W., (84h:13003)

Papick, Ira J. Super-primitive elements. (84h:13004)

Ratliff, Louis J., Jr. See Mirbagheri, Ahmad, (84g:13014)

Rotthaus, Christel See Brezuleanu, A., (84g:13012)

Schemmel, Klaus-Peter Eine notwendige und hinreichende Bedingung für die Approximationseigenschaft analytischer Potenzreihenringe über einem Körper beliebiger Charakteristik. [A necessary and sufficient condition for the approximation property of analytic power series rings over a field of arbitrary characteristic] (84j:13003)

Tanimoto, Hiroshi On the base field change of P-rings and P-2 rings. (84i:13006)

Yoshihiko, Nagano On subrings of the integral closure of certain algebra. (Japanese summary) (84g:13015)

secondary classifications:

Anderson, David F. Integrally closed domains. (84j:13018)

Aravović, M. The minimal 0-dimensional overrings of commutative rings. (Serbo-Croatian summary) (84m:13005b)

On the embedding of a commutative ring into a 0-dimensional commutative ring. (Serbo-Croatian summary) (84m:13005c)

Asanuma, Teruo On quasipolynomial algebras. (84c:13024)

Childs, L. N. A Stickelberger condition on cyclic Galois extensions. (84c:13006)

Draper, Richard N. (with Fischer, Klaus) Derivations and small C_4 . (84i:32008b) (with Fischer, Klaus) Derivations into the integral closure. (84i:32008a)

Fischer, Klaus See Draper, Richard N., (84i:32008a) and (84i:32008b)

Gaitan O., Hernando ★ Sobre anillos de anillos con pocos divisores de cero. (Spanish) [Overrings of rings with few zero divisors] (84f:13002)

Gilmer, Robert (with Spiegel, Eugene) The coefficient field of a semigroup algebra. (84m:16038)

Greither, Cornelius Eine Charakterisierung maximaler komplexer Räume. [A characterization of maximal complex spaces] (84d:32013)

On the two generator problem for the ideals of a one-dimensional ring. (84k:13002)

Handelman, David E. Proximity of one-dimensional Gorenstein rings. (84d:13006a)

Addendum: "Proximity of one-dimensional Gorenstein rings". (84d:13006b)

Heitmann, Raymond C. (with McAdam, Stephen) Distinguished domains. (84c:13027)

Katz, Daniel A note on asymptotic prime sequences. (84g:13022)

Lipkovski, Aleksandar A homeomorphic extension of geometric rings is integral. (Russian) (84j:14006)

Malik, S. K. (with Mott, J. L.) Strong S-domains. (84m:13017)

McAdam, Stephen Going down as a conforming relation. (84g:13001)

See also Heitmann, Raymond C., (84c:13027)

Mott, J. L. See Malik, S. K., (84m:13017)

Onoda, Nobuharu Remarks on one-dimensional seminormal rings. (84c:13020)

Spiegel, Eugene See Gilmer, Robert, (84m:16038)

13B25 Polynomials over commutative rings

Bass, Hyman The Jacobian conjecture and inverse degrees. (84c:13007)

Connell, E. (with van den Dries, Lou) Injective polynomial maps and the Jacobian conjecture. (84m:13006)

van den Dries, Lou See Connell, E., (84m:13006)

Lequain, Yves See de Souza Doering, Ada Maria, (84d:13008)

Myerson, Gerald On resultants. (84j:13004)

Revo, Philippe Anneau des invariants du groupe alterné. (English summary) [Invariant ring of the alternating group] (84m:13007)

de Souza Doering, Ada Maria (with Lequain, Yves) Chains of prime ideals in polynomial rings. (84d:13008)

Ștefănescu, Doru Morphisms of the polynomial algebras. (84h:13005)

Yanik, Joe Projective algebras. (84h:13006)

secondary classifications:

Brewer, James W. (with Kustin, Andrew R.) Constructing projective algebras. (84a:13009)

Cahen, Paul-Jean (with Grazzini, Fulvio; Haouat, Youssef) Intégrité du complété et théorème de Stone-Weierstrass. (English summary) [Integralness of the completion and Stone-Weierstrass theorem] (84j:13005)

Costa, Douglas L. Seminormality and projective modules. (84c:13011)

Flatto, Leopold (with Jacobson, David Norman) Functions satisfying a discrete mean value property. (84g:31004)

Gerstein, Larry J. A remark on the quadratic analogue of the Quillen-Suslin theorem. (84h:13028)

Grazzini, Fulvio See Cahen, Paul-Jean; et al., (84j:13005)

Haouat, Youssef See Cahen, Paul-Jean; et al., (84j:13005)

Illarionov, M. A. Local solvability of algebraic equations. (Russian. English summary) (84f:46070)

Jacobson, David Norman See Flatto, Leopold, (84g:31004)

Kustin, Andrew R. See Brewer, James W., (84a:13009)

Lindell, Hartmut On projective modules over polynomial rings over regular rings. (84d:13009)

Miyazaki, Masayoshi Regular subrings of a polynomial ring. II. (84g:14036)

Mohan Kumar, N. On a question of Bass and Quillen. (84h:13011)

Rotillon, Denis See Watanabe, Keiichi, (84c:13008)

Thérond, Jean-Daniel Existence d'une extension cyclique cubique monogène de discriminant donné. [Existence of monogenic cubic cyclic extension with given discriminant] (84j:13006)

Watanabe, Keiichi (with Rotillon, Denis) Invariant subrings of $\mathbb{C}[X, Y, Z]$ which are complete intersections. (84c:13008)

Yoshihiko, Nagano On subrings of the integral closure of certain algebra. (Japanese summary) (84g:13015)

13B30 Quotients and localization

Sharp, R. Y. (with Zakeri, H.) Modules of generalized fractions. (84a:13008)

Tripathi, S. M. On the complete ring of quotients. (84i:13007)

Zakeri, H. See Sharp, R. Y., (84a:13008)

secondary classifications:

Mattis, Eben The minimal prime spectrum of a reduced ring. (84h:13010)

Sharp, R. Y. (with Zakeri, H.) Modules of generalized fractions and balanced big Cohen-Macaulay modules. (84j:13002)

On the structure of certain exact Cousin complexes. (84f:13013)

Zakeri, H. See Sharp, R. Y., (84j:13021)

13B35 Completions

Cahen, Paul-Jean (with Grazzini, Fulvio; Haouat, Youssef) Intégrité du complété et théorème de Stone-Weierstrass. (English summary) [Integralness of the completion and Stone-Weierstrass theorem] (84j:13005)

Grazzini, Fulvio See Cahen, Paul-Jean; et al., (84j:13005)

Green, Edward L. Rings with Noetherian completions. (84j:13006)

Haouat, Youssef See Cahen, Paul-Jean; et al., (84j:13005)

secondary classifications:

Brodmann, Markus (with Rotthaus, Christel) A peculiar unmixed domain. (84h:13014)

Chiriacescu, Gabriel On a theorem of Tate. (Italian summary) (84f:13004)

Hierzog, Bernd Die Struktur flacher lokaler Erweiterungen lokaler Ringe. [The structure of flat local extensions of local rings] (84c:13012)

Rotthaus, Christel See Brodmann, Markus, (84h:13014)

Schemmel, Klaus-Peter Eine notwendige und hinreichende Bedingung für die Approximationseigenschaft analytischer Potenzreihenringe über einem Körper beliebiger Charakteristik. [A necessary and sufficient condition for the approximation property of analytic power series rings over a field of arbitrary characteristic] (84j:13003)

13B99 None of the above, but in this section

Brewer, James W. (with Kustin, Andrew R.) Constructing projective algebras. (84a:13009)

Kustin, Andrew R. See Brewer, James W., (84a:13009)

Rotillon, Denis See Watanabe, Keiichi, (84c:13008)

Vipera, Maria Cristina Some classes of ring epimorphisms. (Italian. English summary) (84f:13006)

Watanabe, Keiichi (with Rotillon, Denis) Invariant subrings of $\mathbb{C}[X, Y, Z]$ which are complete intersections. (84c:13008)

secondary classifications:

Bertuccioni, Inta A short proof of a theorem of Suslin-Kopeiko. (84f:13016)

Dobbs, David E. (with Fontana, Marco; Huckaba, James A.; Papick, Ira J.) Strong ring extensions and pseudovaluation domains. (84b:13004)

(with Eakin, Paul M., Jr.; Eastham, Jerome F., Jr.) Commutative rings whose

simple proper overrings are Noetherian. (84m:13016)

Eakin, Paul M., Jr. See Dobbs, David E.; et al., (84m:13016)

Eastham, Jerome F., Jr. See Dobbs, David E.; et al., (84m:13016)

Estes, Dennis R. (with Guralnick, Robert M.) Module equivalences: local to global when primitive polynomials represent units. (84c:13005)

- Fontana, Marco See Dobbs, David E.; et al., (84b:13004)
 Guralnick, Robert M. See Estes, Dennis R., (84c:13005)
 Hanna, Charles C. (with Johnson, Jon L.) Noetherian subsets of prime spectra. (84g:13002)
 Huckaba, James A. See Dobbs, David E.; et al., (84b:13004)
 Huneke, Craig Linkage and the symmetric algebra of ideals. (84j:13020)
 Johnson, Jon L. See Hanna, Charles C., (84g:13002)
 Matsuda, Ryūki Notes on Noetherian semigroup rings. (84d:13012)
 Papick, Ira J. See Dobbs, David E.; et al., (84b:13004)

13Cxx Theory of modules and ideals

13C05 Structure, classification theorems

- De Munter-Kuyt, Lucie Primary decomposition and rank of some quotients of torsion-free modules over a Dedekind domain. (84c:13008)
 Beaumont Pierce invariants for rank two modules over a Dedekind domain. (84c:13008b)
 On the existence of torsion-free modules with a prescribed type-set. (Italian summary) (84h:13007)
 Dugas, Manfred (with Göbel, Rüdiger) Every cotorsion-free algebra is an endomorphism algebra. (84h:13008)
 Evans, E. Graham (with Griffith, Phillip) Order ideals of minimal generators. (84b:13008)
 Facchini, Alberto Commutative rings whose finitely embedded modules have injective dimension ≤ 1 . (84j:13007)
 Fuchs, László Modules over valuation rings. (84g:13016)
 ★Modules over valuation domains. (84c:13009)
 Generalov, A. I. Inductive purities in a category of modules. (Russian) (84j:13008)
 Göbel, Rüdiger See Dugas, Manfred, (84h:13008)
 Griffith, Phillip See Evans, E. Graham, (84b:13008)
 Jain, Raj Kumar Generalized multiplication modules. (84j:13009)
 Matsuda, Ryūki Rings that become Krull rings after reduction. (Japanese) (84c:13010)
 Weakley, William D. Modules whose proper submodules are finitely generated. (84c:13010)
 Zelinsky, Daniel Similarity of nilpotent, integer matrices, or, four elementary categories. (84f:13007)
 Zöschinger, Helmut Gelfandringe und koabgeschlossene Untermoduln. [Gelfand rings and coclosed submodules] (84c:13011)

secondary classifications:

- Bichl, Ingrid On the connection of invariant factors of matrices with invariant factors of modules. (84j:15013)
 Bourbaki, Nicolas ★Éléments de mathématique. (French) [Elements of mathematics] (84d:00002)
 Buchsbaum, David A. (with Eisenbud, David) Gorenstein ideals of height 3. (84c:13017)
 Eisenbud, David (with Huneke, Craig) Cohen-Macaulay Rees algebras and their specialization. (84h:13030)
 See also Buchsbaum, David A., (84i:13017)
 Evans, E. Graham (with Griffith, Phillip) The syzygy problem: a new proof and historical perspective. (84f:13008)
 Facchini, Alberto Rings whose finitely generated torsion modules in the sense of Dickson decompose into direct sums of cyclic submodules. (Italian summary) (84c:13014)
 Griffith, Phillip See Evans, E. Graham, (84f:13008)
 Handelmann, David E. Proximity of one-dimensional Gorenstein rings. (84d:13006a)
 Addendum: "Proximity of one-dimensional Gorenstein rings". (84d:13006b)
 Huneke, Craig See Eisenbud, David, (84d:13030)
 Naudé, G. (with Nolte, C.) A survey of the realization and duality theories of linear systems over rings. (84j:93013)
 Nolte, C. See Naudé, G., (84j:93013)
 Singh, Surjeet Decomposition of modules. (84f:16031)
 Stafford, J. T. Corrigendum: "Generating modules efficiently: algebraic K -theory for noncommutative Noetherian rings" [J. Algebra 69 (1981), no. 2, 312–346; MR 82k:16018]. (84d:16019)

13C10 Projective and free modules and ideals [See also 18G05.]

- Avramov, Leuchezar L. Symmetric algebras of modules of projective dimension one. (84m:13008)
 Bhatwadekar, S. M. (with Roy, Amit) Stability theorems for overrings of polynomial rings. (84m:13009)
 Boratynski, M. Generating ideals up to radical and systems of parameters of graded rings. (84g:13017)
 Brumati, Paulo Roberto (with Lequain, Yves) Number of generators of a module over a ring of polynomials. (84g:13018)
 Chouinard, Leo G., II Projective modules over Krull semigroup rings. (84c:13009)
 Costa, Douglas L. Seminormality and projective modules. (84c:13011)
 De Marco, G. Projectivity of pure ideals. (84m:13011)
 Evans, E. Graham (with Griffith, Phillip) The syzygy problem: a new proof and historical perspective. (84f:13008)
 Ferrand, Daniel Trivialisation des modules projectifs. La méthode de Kronecker. [Trivialization of projective modules. The Kronecker method] (84h:13009)
 Gabel, Michael Randy Generation and projective generation of ideals. (84g:13019)
 Griffith, Phillip See Evans, E. Graham, (84f:13008)
 Gubeladze, I. Dzh. Generalized Serre problem for affine rings generated by monomials. (Russian. English and Georgian summaries) (84b:13009)
 Hirano, Yasuyuki On generalized p.p. rings. (84g:13020)
 Knus, Max-Albert Quaternionen über Polynomringen, quadratischen Formen über $\mathbb{R}[x,y]$ und Vektorbündel über $\mathbb{P}^2(\mathbb{C})$. [Quaterniones over polynomial rings, quadratic forms over $\mathbb{R}[x,y]$ and vector bundles over $\mathbb{P}^2(\mathbb{C})$] (84m:13012)

- Ledergerber, Paul G. Formal distributions are pure submodules. (84m:13013)
 Lequain, Yves See Brumati, Paulo Roberto, (84g:13018)
 Lindel, Hartmut On projective modules over polynomial rings over regular rings. (84d:13009)
 Matlis, Eben The minimal prime spectrum of a reduced ring. (84h:13010)
 Mohan Kumar, N. On a question of Bass and Quillen. (84h:13011)
 Ramras, Mark Sequences of Betti numbers. (84b:13010)
 Rao, Ravi Stability theorems for overrings of polynomial rings. II. (84m:13010)
 Roy, Amit See Bhatwadekar, S. M., (84m:13009)
 Vorst, Ton The Serre problem for discrete Hodge algebras. (84j:13010)
 Wiegand, Roger Descent of projectivity. (84c:13010)

secondary classifications:

- Asanuma, Teruo On quasipolynomial algebras. (84c:13024)
 Nagano, Yoshihiko Some remarks on subrings of integral closure. (Japanese summary) (84c:13010)
 Yanik, Joe Projective algebras. (84h:13006)
 Yoshihiko, Nagano On subrings of the integral closure of certain algebra. (Japanese summary) (84g:13015)

13C11 Injective and flat modules and ideals [See also 18G05.]

- Herzog, Bernd Die Struktur flacher lokaler Erweiterungen lokaler Ringe. [The structure of flat local extensions of local rings] (84c:13012)
 Matlis, Eben Commutative coherent rings. (84b:13008)
 Ideals of injective dimension 1. (84f:13009)

secondary classifications:

- Ahsan, Javed (with Enochs, E.) Rings all of whose torsion quasi-injective modules are injective. (84f:16029)
 Enochs, E. See Ahsan, Javed, (84f:16029)
 Facchini, Alberto Commutative rings whose finitely embedded modules have injective dimension ≤ 1 . (84j:13007)
 Matlis, Eben The minimal prime spectrum of a reduced ring. (84h:13010)

13C12 Torsion modules and ideals

- Call, Frederick W. (with Shores, Thomas S.) The splitting of bounded torsion submodules. (84c:13013)
 Facchini, Alberto Rings whose finitely generated torsion modules in the sense of Dickson decompose into direct sums of cyclic submodules. (Italian summary) (84c:13014)
 Salce, Luigi (with Zanardo, Paolo) On a paper of I. Fleischer. (84h:13012)
 Shores, Thomas S. See Call, Frederick W., (84c:13013)
 Zanardo, Paolo See Salce, Luigi, (84h:13012)
 Zimmermann-Huisgen, Birge Direct products of torsion modules. (84c:13011)

secondary classifications:

- Traldi, Lorenzo The determinantal ideals of link modules. I. (84h:57004)

13C13 Other special types

- Brewer, James W. (with Lantz, David; le Riche, L. R.) R -endomorphisms fixing essential ideals need not be automorphisms. (84b:13011)
 Crivei, Iuliu R -modules which have the property (E_M) . (84c:13011)
 Hein, James The structure of an almost Artinian module. (84d:13010)
 Horrocks, Geoffrey The rank of a module. (84j:13009)
 Lantz, David See Brewer, James W.; et al., (84b:13011)
 Northcott, D. G. Finite free resolutions and some basic concepts of commutative algebra. (See 84b:13002)
 le Riche, L. R. See Brewer, James W.; et al., (84b:13011)
 Yahya, S. M. Tensor product of modules over Dedekind domains. (84b:13013)

secondary classifications:

- Dugas, Manfred (with Göbel, Rüdiger) Every cotorsion-free algebra is an endomorphism algebra. (84h:13008)
 Facchini, Alberto On the structure of torch rings. (84m:13022)
 Göbel, Rüdiger See Dugas, Manfred, (84h:13008)
 Matlis, Eben Commutative coherent rings. (84b:13008)
 Ngô Việt Trung Absolutely superficial sequences. (84i:13019)

13C15 Dimension theory, depth, related rings (catenary, etc.)

- Bouchard, Pierre Suites régulières-homogènes et profondeur graduée. [Regular-homogeneous sequences and graded depth] (84f:13010)
 Brodmann, Markus (with Rothaus, Christel) A peculiar unmixed domain. (84h:13014)
 Brown, Martin Lawrence Defective big Cohen-Macaulay modules. (84h:13015)
 Doretti, Lucia On some formulas for the dimension of the tensor product of K -algebras. (Italian) (84c:13015)
 Huneke, Craig The theory of d -sequences and powers of ideals. (84g:13021)
 Katz, Daniel A note on asymptotic prime sequences. (84g:13022)
 Mandal, Satyagopal Basic elements and cancellation over Laurent polynomial rings. (84i:13010a)
 Number of generators for modules over Laurent polynomial rings. (84i:13010b)
 Mezzetti, Emilia (with Viola, Paolo) An operation on ideals in graded rings. (Italian. English summary) (84f:13011)
 Monsky, P. The Hilbert-Kunz function. (84c:13012)
 Mora, Ferdinando An algorithm to compute the equations of tangent cones. (84c:13012)

- Nashiev, Budh S. A note on efficient generation of ideals. **84i:13011**
 Park, Chan-Bong A remark on the Krull dimension. **84i:13013**
 Ratliff, Louis J., Jr. Note on analytic spread and asymptotic sequences. **84g:13023**
 On prime sequences over an ideal. **84g:13024**
 Roos, Jan-Erik Finiteness conditions in commutative algebra and solution of a problem of Vasconcelos. **84i:13012**
 Rothaus, Christel See Brodmann, Markus. **84i:13014**
 Valla, Giuseppe A property of almost complete intersections. **84i:13013**
 Vetter, Udo The depth of the module of differentials of a generic determinantal singularity. **84g:13025**
 Viola, Paolo See Mezzetti, Emilia. **84i:13011**

secondary classifications:

- Bărcănescu, Șerban Algebraic aspects of a combinatorial decomposition theorem. **(84i:16002)**
 Bhatwadekar, S. M. (with Roy, Amit) Stability theorems for overrings of polynomial rings. **(84m:13009)**
 Bouvier, Alain (with Fontana, Marco) On the catenarian property of the polynomial rings over a Prüfer domain. **(84i:13013)**
 Brodmann, Markus A lifting result for local cohomology of graded modules. **(84i:13014)**
 Rees rings and form rings of almost complete intersections. **(84i:13017)**
 Eisenbud, David (with Huneke, Craig) Cohen-Macaulay Rees algebras and their specialization. **(84i:13030)**
 Evans, E. Graham (with Griffith, Phillip) The syzygy problem: a new proof and historical perspective. **(84i:13008)**
 Fontana, Marco See Bouvier, Alain. **(84i:13013)**
 Goto, Shiro Approximately Cohen-Macaulay rings. **(84i:13033)**
 Greco, Silvio A note on universally catenary rings. **(84i:13019)**
 Griffith, Phillip See Evans, E. Graham. **(84i:13008)**
 Herzog, J. (with Simis, A.; Vasconcelos, W. V.) Koszul homology and blowing-up rings. **(84i:13015)**
 Huneke, Craig Linkage and the symmetric algebra of ideals. **(84j:13020)**
 See also Eisenbud, David. **(84i:13030)**
 Jain, Raj Kumar Generalized multiplication modules. **(84j:13009)**
 Jensen, Christian U. (with Lenzing, Helmut) Algebraic compactness of reduced products and applications to pure global dimension. **(84m:16018)**
 Karamzadeh, O. A. S. On the classical Krull dimension of rings. **(84i:16030)**
 Lenzing, Helmut See Jensen, Christian U. **(84m:16018)**
 Lequain, Yves See de Souza Doering, Ada Maria. **(84i:13008)**
 Malik, S. K. (with Mott, J. L.) Strong S-domains. **(84m:13017)**
 Matlis, Eben Ideals of injective dimension 1. **(84i:13009)**
 Matsumura, Hideyuki Homological methods in commutative algebra. **(84i:13020)**
 Mott, J. L. See Malik, S. K. **(84m:13017)**
 Rao, Ravi Stability theorems for overrings of polynomial rings. II. **(84m:13010)**
 Rothaus, Christel Potenzreihenweiterung und formale Fasern in lokalen Ringen mit Approximationseigenschaft. (English summary) [Power series extension and formal fibres in local rings with the approximation property] **(84j:13023)**
 Roy, Amit See Bhatwadekar, S. M. **(84m:13009)**
 Sharp, R. Y. A Cousin complex characterization of balanced big Cohen-Macaulay modules. **(84g:13028)**
 Simis, A. See Herzog, J.; et al. **(84i:13015)**
 de Souza Doering, Ada Maria The depth conjecture: a counterexample. **(84i:13016)**
 (with Lequain, Yves) Chains of prime ideals in polynomial rings. **(84i:13008)**
 Strogalov, S. S. Definitions of certain classes of local rings. (Russian) **(84i:13023)**
 Tanimoto, Hiroshi On the base field change of P-rings and P-2 rings. **(84i:13006)**
 Vasconcelos, W. V. See Herzog, J.; et al. **(84i:13015)**

13C99 None of the above, but in this section

- Bruns, Winfried Generic maps and modules. **84j:13011**
 Dzuon Tam Guè The minimum number of generators of a lattice of submodules of a semisimple module. (Russian) **84m:13014**
 Facchini, Alberto Fiber products and Morita duality for commutative rings. **84j:13012**
 Gilmer, Robert (with Heinzer, William J.) Cardinality of generating sets for modules over a commutative ring. **84i:13014**
 Heinzer, William J. See Gilmer, Robert. **84i:13014**
 Santodomingo, José ★ La loi du parallélogramme et le théorème de Gleason. (French) [The parallelogram law and the Gleason theorem] **84i:13016**

secondary classifications:

- André, Michel Théorie noethérienne des codes linéaires. [Noetherian theory of linear codes] **(84i:94012)**
 Avramov, Luchezar L. Invariants d'un groupe fini engendré par des pseudo-reflexions, opérant sur un anneau local. [Invariants of a finite group generated by pseudoreflections, acting on a local ring] **(84i:13020)**
 Baldassarri Ghezzi, S. (with Chiaruttini, S.) The representation of certain \tilde{A} -modules. (Italian) **(84i:14013)**
 Brewer, James W. (with Lantz, David; le Riche, L. R.) R -endomorphisms fixing essential ideals need not be automorphisms. **(84i:13011)**
 Chiaruttini, S. See Baldassarri Ghezzi, S. **(84i:14013)**
 Eckert, A. Graphen von Modulendomorphismen. I, II. (English summary) [Graphs of module endomorphisms. I, II] **(84i:13022)**
 Fernández Bermejo, Emiliano ★ Espacios simplecticos sobre β -anillos y anillos de Hermite, trasvecciones simplecticas. (Spanish) [Symplectic spaces over β -rings and Hermitian rings, symplectic transvections] **(84i:15019)**
 Hazewinkel, Michiel (with Perdon, Anna-Maria) On the theory of families of linear systems. (See **84g:93005c**)
 Keigher, William F. Differential rings constructed from quasiprime ideals. **(84i:12016)**

- Kopský, Vojtěch The concept of extended integrity bases. **(84i:14023)**
 (Kung, Joseph P. S.) See Young tableaux in combinatorics, invariant theory, and algebra. **(84b:05006)**
 Lantz, David See Brewer, James W.; et al. **(84i:13011)**
 Perdon, Anna-Maria See Hazewinkel, Michiel. (See **84g:93005c**)
 le Riche, L. R. See Brewer, James W.; et al. **(84i:13011)**
 Robbiano, Lorenzo On normal flatness and some related topics. **(84i:13021)**
 Smith, P. F. The Artin-Rees property. **(84i:16058)**
 Young tableaux in combinatorics, invariant theory, and algebra ★ Young tableaux in combinatorics, invariant theory, and algebra. **(84b:05006)**

13Dxx Homological methods

- Herzog, J. (with Simis, A.; Vasconcelos, W. V.) Koszul homology and blowing-up rings. **84i:13015**
 Simis, A. See Herzog, J.; et al. **84i:13015**
 Vasconcelos, W. V. See Herzog, J.; et al. **84i:13015**

13D03 Cohomology of commutative rings and algebras

- Brodmann, Markus A lifting result for local cohomology of graded modules. **84i:13014**
 Levin, Gerson Finitely generated Ext algebras. **84i:13011**
 Schenzel, Peter Notes on liaison and duality. **84i:13012**

secondary classifications:

- Avramov, Luchezar L. Obstacles to the existence of a multiplicative structure on minimal resolutions. (Russian) **(84i:13025)**
 Facchini, Alberto On the structure of torch rings. **(84m:13022)**
 Fedder, Richard F -purity and rational singularity. **(84i:13031)**
 Ferrer Santos, Walter Ricardo Cohomology of comodules. **(84i:18009)**
 See also **(84i:18009)**
 Goto, Shiro Blowing-up of Buchsbaum rings. **(84i:13032)**
 Approximately Cohen-Macaulay rings. **(84i:13033)**
 Hopkins, Glenn An algebraic approach to Grothendieck's residue symbol. **(84i:14009)**
 Ikeda, Shin The Cohen-Macaulayness of the Rees algebras of local rings. **(84i:13020)**
 Lin, Bertrand I Peng Crossed coproducts of Hopf algebras. **(84j:16004)**
 Schenzel, Peter Standard systems of parameters and their blowing-up rings. **(84m:13025)**
 Sharp, R. Y. (with Zakeri, H.) Modules of generalized fractions and balanced big Cohen-Macaulay modules. **(84j:13021)**
 Van Oystaeyen, F. (with Verschoren, A.) On the Brauer group of a projective curve. **(84g:13005)**
 Verschoren, A. See Van Oystaeyen, F. **(84g:13005)**
 Zakeri, H. See Sharp, R. Y. **(84j:13021)**

13D05 Homological dimension

- Foxby, Hans-Bjørn The theory of homological dimensions of complexes. (See **84i:13002**)
 Roos, Jan-Erik On the use of graded Lie algebras in the theory of local rings. **84g:13026**

secondary classifications:

- Bruns, Winfried Generic maps and modules. **(84j:13011)**
 Fed'dman, G. L. Global dimension of rings of differential operators. (Russian) **(84i:16023)**
 Hillman, Jonathan A. Alexander polynomials, annihilator ideals, and the Steinitz-Fox-Smythe invariant. **(84i:57002)**
 Ribenboim, Paulo On a question of Anne Marie Nicolas concerning valuation rings. (Italian summary) **(84m:13004)**
 Szpiro, L. Sur la théorie des complexes parfaits. [On the theory of perfect complexes] **(84m:13015)**

13D10 Deformations and infinitesimal methods [See also 14D15, 16A58, 32Gxx.]

- Herzog, J. Strict local rings. **84i:13017**
 Hoffman, Jerome William Counterexamples to the lifting problem for singularities. **84g:13027**

secondary classifications:

- Becker, Joseph (with Denef, Jan; Lipshitz, L.) The approximation property for some 5-dimensional Henselian rings. **(84j:13027)**
 Denef, Jan See Becker, Joseph; et al. **(84j:13027)**
 Iarrobino, Anthony Deformations of zero-dimensional complete intersections after M. Granger. T. Gaffney. **(84j:14012)**
 Kustin, Andrew R. (with Miller, Matthew) Multiplicative structure on resolutions of algebras defined by Herzog ideals. **(84j:13014)**
 Lipshitz, L. See Becker, Joseph; et al. **(84j:13027)**
 Miller, Matthew See Kustin, Andrew R. **(84j:13014)**

13D15 Grothendieck group, K -theory [See also 14F15, 18F25, 18F30.]

- Chu, Hua Some class of non-GE₂ rings. **84i:13013**
 Guin, Daniel Sur le groupe K_3 d'un anneau. [On the K_3 group of a ring] **84h:13018**
 Lady, E. L. Grothendieck rings for certain categories of quasihomomorphisms of torsion free modules over Dedekind domains. **84h:13019**
 Pardon, William A "Gersten conjecture" for Witt groups. **84i:13016**
 Verschoren, A. Exact sequences for relative Brauer groups and Picard groups. **84i:13017**

secondary classifications:

- Bachmuth, Seymour (with Mochizuki, Horace Y.) $E_2 \neq SL_2$ for most Laurent polynomial rings. (84a:20056)
 Geller, Susan C. (with Weibel, Charles A.) $K_1(A, B, I)$. (84b:18014)
 Ischebeck, Friedrich Binäre Formen und Primideale. (English summary) [Binary forms and prime ideals] (84j:13003)
 Mochizuki, Horace Y. See Bachmuth, Seymour. (84a:20056)
 Révész, Gábor On the abelianized multiplicative group of a universal field of fractions. (84f:16004)
 Suslin, A. A. Algebraic K -theory. (Russian) (84b:18006)
 Taddei, Giovanni Invariance du sous-groupe symplectique élémentaire dans le groupe symplectique sur un anneau. (English summary) [Invariance of the elementary symplectic subgroup in the symplectic group over a ring] (84c:20058)
 Vorst, Ton The Serre problem for discrete Hodge algebras. (84j:13010)
 Wagoner, J. B. Relative K_2 for powers of an ideal. (84c:18026)
 Weibel, Charles A. See Geller, Susan C. (84b:18014)
 Yanik, Joe Noninvertible retracts. (84j:13033)

13D25 Complexes [See also 14Mxx.]

- Akin, Kaan (with Buchsbaum, David A.) Some exact complexes and filtrations related to certain special Young diagrams. (84c:13016)
 Albu, Toma (with Raianu, Șerban) Cousin complex, local cohomology and torsion theory. (84c:13015)
 Buchsbaum, David A. See Akin, Kaan. (84c:13016)
 Kirby, David (with Mehran, Hefzi A.) Hilbert functions and the Koszul complex. (84j:13013)
 Kustin, Andrew R. (with Miller, Matthew) Multiplicative structure on resolutions of algebras defined by Herzog ideals. (84j:13014)
 Matsumura, Hideyuki Homological methods in commutative algebra. (84b:13020)
 Mehran, Hefzi A. See Kirby, David. (84j:13013)
 Miller, Matthew See Kustin, Andrew R. (84j:13014)
 Raianu, Șerban See Albu, Toma. (84c:13015)
 Sharp, R. Y. A Cousin complex characterization of balanced big Cohen-Macaulay modules. (84j:13028)
 On the structure of certain exact Cousin complexes. (84f:13013)
 Szpiro, L. Sur la théorie des complexes parfaits. [On the theory of perfect complexes] (84m:13015)

secondary classifications:

- Avramov, Luchezar L. (with Lescot, Jack) Bass numbers and Golod rings. (84c:13030)
 Obstacles to the existence of a multiplicative structure on minimal resolutions. (Russian) (84c:13025)
 Bacławski, Kenneth Cohen-Macaulay connectivity and geometric lattices. (84d:06001)
 Foxby, Hans-Bjørn The theory of homological dimensions of complexes. (See 84b:13002)
 Hopkins, Glenn An algebraic approach to Grothendieck's residue symbol. (84d:14009)
 Huneke, Craig Linkage and the Koszul homology of ideals. (84f:13019)
 Lescot, Jack See Avramov, Luchezar L. (84c:13030)
 Nielsen, H. Andreas Free resolutions of tensor forms. (84b:14062)
 Riley, Adrian M. Balanced big Cohen-Macaulay modules and free extensions of local rings. (84i:13020)
 Robbiano, Lorenzo (with Valla, Giuseppe) Free resolutions for special tangent cones. (84c:13019)
 Strickland, Elisabetta On the conormal bundle of the determinantal variety. (84g:14053)
 Stroganov, S. S. Definitions of certain classes of local rings. (Russian) (84i:13023)
 Valla, Giuseppe See Robbiano, Lorenzo. (84c:13019)

13D30 Torsion theory [See also 13C12, 16A63, 18E40.]

- Albu, Toma (with Năstăsescu, Constantin) Local cohomology and torsion theory. I. (84b:13012)
 Năstăsescu, Constantin See Albu, Toma. (84b:13012)

secondary classifications:

- Albu, Toma (with Raianu, Șerban) Cousin complex, local cohomology and torsion theory. (84c:13015)
 Buium, Alexandru Ritt schemes and torsion theory. (84j:13028)
 Call, Frederick W. (with Shores, Thomas S.) The splitting of bounded torsion submodules. (84c:13013)
 Félix, Yves (with Thomas, Jean-Claude) The radius of convergence of Poincaré series of loop spaces. (84f:55007)
 Fröberg, Ralf A study of graded extremal rings and of monomial rings. (84j:13019)
 Raianu, Șerban See Albu, Toma. (84c:13015)
 Sharp, R. Y. (with Zakeri, H.) Modules of generalized fractions and balanced big Cohen-Macaulay modules. (84j:13021)
 Shores, Thomas S. See Call, Frederick W. (84c:13013)
 Thomas, Jean-Claude See Félix, Yves. (84f:55007)
 Verschoren, A. Exact sequences for relative Brauer groups and Picard groups. (84c:13017)
 Zakeri, H. See Sharp, R. Y. (84j:13021)

13D99 None of the above, but in this section

- Helmstetter, Jacques Systèmes de puissances partiellement divisées. [Systems of partially divided powers] (84c:13014)
 Sjödin, Gunnar A characterization of local complete intersections in terms of the Ext-algebra. (84a:13015)

secondary classifications:

- Bouchard, Pierre Suites régulières-homogènes et profondeur graduée. [Regular-homogeneous sequences and graded depth] (84f:13010)
 Brodmann, Markus Rees rings and form rings of almost complete intersections. (84f:13017)
 Dutta, Sankar P. Weak linking and multiplicities. (84g:13036)
 Generalized intersection multiplicities of modules. (84i:13024)
 Facchini, Alberto Fiber products and Morita duality for commutative rings. (84j:13012)
 Goto, Shiro (with Shimoda, Yasuhiro) On the Rees algebras of Cohen-Macaulay local rings. (84a:13021)
 Vanishing of $\text{Ext}_A^i(M, A)$. (84c:13019)
 Hochster, Melvin The local homological conjectures. (84b:13037)
 Northcott, D. G. Finite free resolutions and some basic concepts of commutative algebra. (See 84b:13002)
 Ramras, Mark Sequences of Betti numbers. (84b:13010)
 Shimoda, Yasuhiro See Goto, Shiro. (84a:13021)
 Sjödin, Gunnar Hopf algebras and derivations. (84a:16016)
 Steurich, Manfred A characterization of unconditioned weak sequences. (84d:13018)

13Exx Chain conditions, finiteness conditions

13E05 Noetherian rings and modules

- Caruth, A. On Cohen's theorem. (84c:13018)
 Dobbs, David E. (with Eakin, Paul M., Jr.; Eastham, Jerome F., Jr.) Commutative rings whose simple proper overrings are Noetherian. (84m:13016)
 Eakin, Paul M., Jr. See Dobbs, David E.; et al. (84m:13016)
 Eastham, Jerome F., Jr. See Dobbs, David E.; et al. (84m:13016)
 Goto, Shiro (with Yamagishi, Kikumichi) Finite generation of Noetherian graded rings. (84j:13015)
 Greco, Silvio A note on universally catenary rings. (84c:13019)
 Ion, Ion D. Sur les anneaux gradués noethériens. [Noetherian graded rings] (84f:13014)
 Matsuda, Ryūki Notes on Noetherian semigroup rings. (84d:13012)
 Park, Jong Geun On the derived normal rings of a Noetherian integral domain. (84a:13016)
 Ratliff, Louis J., Jr. Independent elements and asymptotic sequences. (84c:13020)
 de Souza Doering, Ada Maria The depth conjecture: a counterexample. (84c:13016)
 Wiegand, Sylvia Intersections of prime ideals in Noetherian rings. (84g:13029)
 Yamagishi, Kikumichi See Goto, Shiro. (84j:13015)

secondary classifications:

- Bărcănescu, Șerban Algebraic aspects of a combinatorial decomposition theorem. (84c:16002)
 Facchini, Alberto Loewy and Artinian modules over commutative rings. (Italian summary) (84j:13016)
 Gilmer, Robert (with Heinzer, William J.) Principal ideal rings and a condition of Kummer. (84f:13025)
 Green, Edward L. Rings with Noetherian completions. (84j:13006)
 Heinzer, William J. See Gilmer, Robert. (84f:13025)
 Matsumura, Hideyuki Recent developments in the theory of excellent rings. (84c:13007)
 Ngô Việt Trung Principal systems of ideals. (84k:13003)
 Ratliff, Louis J., Jr. Note on asymptotic prime divisors and symbolic powers of primary ideals. (84m:13003)

13E10 Artinian rings and modules, finite-dimensional algebras

- Couchot, François Les modules artiniens et leurs enveloppes quasi-injectives. [Artinian modules and their quasi-injective hulls] (84b:13012)
 Ensaïem, Jacques Simplification et factorisation unique dans les produits tensoriels: quelques résultats. [Cancellation and unique factorization in tensor products: some results] (84d:13013)
 Facchini, Alberto Loewy and Artinian modules over commutative rings. (Italian summary) (84j:13016)

secondary classifications:

- Herzog, Bernd Die Hilbertfunktionen bilden einen Artinschen Verband. [The Hilbert functions form an Artin lattice] (84b:13016)
 Herzog, J. Strict local rings. (84b:13017)
 Jensen, Christian U. (with Lenzing, Helmut) Algebraic compactness of reduced products and applications to pure global dimension. (84m:16018)
 Lenzing, Helmut See Jensen, Christian U. (84m:16018)
 Levin, Gerson Finitely generated Ext algebras. (84d:13011)
 Weakley, William D. Modules whose proper submodules are finitely generated. (84b:13010)

13E15 Rings and modules of finite generation or representation

- Wajoryb, Bronisław Finiteness conditions in Krull subrings of a ring of polynomials. (84b:13022)
 Wehlen, Joseph A. Weak inertial coefficient rings. (84c:13021)

secondary classifications:

- Artamonov, V. A. Quillen's theorem for graded algebras. (Russian. English summary) (84b:16001)
 Avramov, Luchezar L. Pseudoreflexion group actions on local rings. (84c:13020)
 Dicks, Warren (with Formanek, Edward) Poincaré series and a problem of S. Montgomery. (84c:15032)

- Dixmier, Jacques Série de Poincaré et systèmes de paramètres pour les invariants des formes binaires de degré 7. (English summary) [Poincaré series and systems of parameters for invariants of binary forms of degree 7] (84f:15035)
- Formanek, Edward See Dicks, Warren, (84c:15032)
- Goto, Shiro (with Yamagishi, Kikumichi) Finite generation of Noetherian graded rings. (84j:13015)
- Yamagishi, Kikumichi See Goto, Shiro, (84j:13015)
- Yanik, Joe Projective algebras. (84b:13006)

13E99 None of the above, but in this section

- Heinzer, William J. (with Lantz, David) Commutative rings with acc on n -generated ideals. 84g:13030
- Lantz, David See Heinzer, William J., 84g:13030

secondary classifications:

- Anderson, D. D. (with Anderson, David F.) Divisibility properties of graded domains. (84c:13026)
- Anderson, David F. See Anderson, D. D., (84c:13026)
- Radu, Nicolae Sur les anneaux laskériens. [Laskerian rings] (84j:13002)

13Fxx Arithmetic rings [See also 12--XX.]

13F05 Dedekind and Prüfer rings and their generalizations

- Arnold, Jimmy T. Power series rings with finite Krull dimension. 84g:13031
- Dubrovina, N. I. The projective limit of rings with elementary divisors. (Russian) 84c:13023
- Malik, S. K. (with Mott, J. L.) Strong S -domains. 84m:13017
- Matsuda, Ryūki On a question posed by Huckaba-Papick. 84m:13018
- Mott, J. L. See Malik, S. K., 84m:13017
- Naoum, Adil G. A note on q -rings. 84h:13024
- Oneto, Angel V. A characterization of Prüfer rings. 84j:13017
- Van Oystaeyen, F. Generalized Rees rings and arithmetical graded rings. 84g:13032
- Viswanathan, T. M. Prüfer domains: results and problems. 84d:13014

secondary classifications:

- Arapović, M. Approximation theorems for fields and commutative rings. (Serbo-Croatian summary) (84j:12031)
- Baba, Kiyoshi Some remarks on p -radical descent for computing divisor class groups. (84i:13003)
- Bouvier, Alain (with Fontana, Marco) On the catenarian property of the polynomial rings over a Prüfer domain. (84i:13013)
- Call, Frederick W. (with Shores, Thomas S.) The splitting of bounded torsion submodules. (84c:13013)
- Costa, Douglas L. (with Gallardo, Léonard; Querré, J.) On the distribution of prime elements in polynomial Krull domains. (84c:13012)
- De Munter-Kuyt, Lucie Primary decomposition and rank of some quotients of torsion-free modules over a Dedekind domain. (84c:13008a)
- Beaumont Pierce invariants for rank two modules over a Dedekind domain. (84c:13008b)
- Dobbs, David E. (with Fontana, Marco) Pseudovaluation domains and their globalizations. (84g:13034)
- Fontana, Marco See Dobbs, David E., (84g:13034) and Bouvier, Alain, (84i:13013)
- Gaitan, O. Hernando ★ Sobre anillos de anillos con pocos divisores de cero. (Spanish) [Overrings of rings with few zero divisors] (84f:13002)
- Gallardo, Léonard See Costa, Douglas L.; et al., (84i:13012)
- Gräter, Joachim Der allgemeine Approximationssatz für Manisbewertungen. (English summary) [General approximation theorem for Manis valuations] (84c:13004)
- Heitmann, Raymond C. (with McAdam, Stephen) Distinguished domains. (84c:13027)
- Lady, E. L. Grothendieck rings for certain categories of quasihomomorphisms of torsion free modules over Dedekind domains. (84c:13019)
- McAdam, Stephen See Heitmann, Raymond C., (84c:13027)
- Mockor, Jiri The completion of valued fields and nonstandard models. (84d:12024)
- Nanda, V. C. See Narang, Asha, (84c:15013b)
- Narang, Asha Hermite normal form for matrices over Dedekind domains. (84c:15013a)
- (with Nanda, V. C.) Factorization of matrices over Dedekind domains. (84c:15013b)
- Querré, J. See Costa, Douglas L.; et al., (84i:13012)
- Salce, Luigi (with Zanardo, Paolo) Arithmetical characterization of rings of algebraic integers with cyclic ideal class group. (Italian summary) (84c:12006)
- Schinzel, Andrzej (with Wróblewski, J.) On ideals in the ring of polynomials in one variable over a Dedekind domain. (84m:13021)
- Shores, Thomas S. See Call, Frederick W., (84c:13013)
- Wróblewski, J. See Schinzel, Andrzej, (84m:13021)
- Yahya, S. M. Tensor product of modules over Dedekind domains. (84h:13013)
- Zanardo, Paolo See Salce, Luigi, (84c:12006)

13F07 Euclidean rings and generalizations

- Markanda, Raj K. ★ On the number of remainders in Euclidean domains. 84c:13017
- (with Pascual, Joaquín) On a problem of Samuel. (Spanish summary) 84c:13018
- Pascual, Joaquín See Markanda, Raj K., 84c:13018
- Popescu, Angel On the Euclideanity in rings. 84a:13017

13F10 Principal ideal rings

- Decoste, Hélène Des anneaux principaux, non euclidiens. [Principal ideal rings that are not Euclidean] 84f:13015

- Ecker, A. Graphen von Modulendomorphismen. I, II. (English summary) [Graphs of module endomorphisms. I, II] 84c:13022

- Gilmer, Robert (with Heinzer, William J.) Principal ideal rings and a condition of Kummer. 84h:13025

- Heinzer, William J. See Gilmer, Robert, 84h:13025

secondary classifications:

- De Munter-Kuyt, Lucie On the existence of torsion-free modules with a prescribed type-set. (Italian summary) (84h:13007)
- Eising, Rikun Pole assignment for systems over rings. (84d:93019a)
- Corrigenda: "Pole assignment for systems over rings". (84d:93019b)

13F15 Factorial rings, unique factorization domains

- Bouvier, Alain The local class group of a Krull domain. 84c:13023
- Costa, Douglas L. (with Gallardo, Léonard; Querré, J.) On the distribution of prime elements in polynomial Krull domains. 84c:13012
- Gallardo, Léonard See Costa, Douglas L.; et al., 84c:13012
- Matsuda, Ryūki On Kennedy's problems. 84m:13019
- Querré, J. See Costa, Douglas L.; et al., 84c:13012
- Xie, Bang Jie A short proof that $R[x]$ is a Gaussian ring. (Chinese) 84d:13015

secondary classifications:

- Anderson, D. D. (with Anderson, David F.) Divisibility properties of graded domains. (84c:13026)
- Anderson, David F. See Anderson, D. D., (84c:13026)
- Krause, Ulrich Eindeutige Faktorisierung ohne ideale Elemente. [Unique factorization without ideal elements] (84f:20078)
- Martinego, Chiara On certain divisor class groups on a projective scheme. (Italian. English summary) (84j:14049)

13F20 Polynomial rings [See also 10M05.]

- Asamura, Teruo On quasipolynomial algebras. 84c:13024
- On stably polynomial algebras. 84c:13025
- Bertuccioni, Inta A short proof of a theorem of Suslin-Kopeiko. 84f:13016
- Bouvier, Alain (with Fontana, Marco) On the catenarian property of the polynomial rings over a Prüfer domain. 84i:13013
- Cerović, B. See Perić, Veselin, 84m:13020
- Connell, E. (with Drost, J.) Conservative and divergence free algebraic vector fields. 84i:13014
- Drost, J. See Connell, E., 84i:13014
- Fontana, Marco See Bouvier, Alain, 84i:13013
- Ganong, R. Plane Frobenius sandwiches. 84h:13026
- Geramita, Anthony V. Remarks on the number of generators of some homogeneous ideals. (French summary) 84h:13027
- Gerstein, Larry J. A remark on the quadratic analogue of the Quillen-Suslin theorem. 84h:13028
- Gubeladze, I. Dzh. Subrings of the ring of polynomials generated by monomials. (Russian. English and Georgian summaries) 84c:13018
- Parimala, Raman Failure of a quadratic analogue of Serre's conjecture. 84d:13016
- Perić, Veselin (with Cerović, B.) Krullsche Dimension der Polynomringe über einem Ring der Dimension zwei. [Krull dimension of polynomial rings over a ring of dimension two] 84m:13020
- Renschuch, Bodo On radical-equivalent and zero-equivalent ideals. 84c:13017
- Sain, Michael K. See Wyman, B. F., (See 84g:93005d)
- Schinzel, Andrzej (with Wróblewski, J.) On ideals in the ring of polynomials in one variable over a Dedekind domain. 84m:13021
- Shamsuddin, Ahmad On automorphisms of polynomial rings. 84h:13013
- Wróblewski, J. See Schinzel, Andrzej, 84m:13021
- Wyman, B. F. (with Sain, Michael K.) Exact sequences for pole-zero cancellation. (See 84g:93005d)
- Yanik, Joe Noninvertible retracts. 84g:13033

secondary classifications:

- Anderson, David F. Root closure in integral domains. (84c:13009)
- Barnes, Frank W. Algebraic theory of brick packing. I. (84c:05044a)
- Algebraic theory of brick packing. II. (84c:05044b)
- Cerlenco, Luigi (with Piras, Francesco) Linear representation of division in $A^{(N)}$ and in A^N . (Italian. English summary) (84h:13029)
- Chen, Matthew S. Height one differential ideals in polynomial rings. (84h:13039)
- Gubeladze, I. Dzh. Generalized Serre problem for affine rings generated by monomials. (Russian. English and Georgian summaries) (84h:13009)
- Langmann, Klaus Ein algebraischer Beweis des Hilbertschen Nullstellensatzes. [An algebraic proof of Hilbert's Nullstellensatz] (84c:14003)
- Lindell, Hartmut On projective modules over polynomial rings over regular rings. (84d:13009)
- Mandal, Satyagopal Basic elements and cancellation over Laurent polynomial rings. (84i:13010a)
- Number of generators for modules over Laurent polynomial rings. (84i:13010b)
- Matsuda, Ryūki On a question posed by Huckaba-Papick. (84m:13018)
- Miyazaki, Masayoshi Regular subrings of a polynomial ring. II. (84g:14036)
- Mohan Kumar, N. On a question of Bass and Quillen. (84h:13011)
- Parimala, Raman Quadratic spaces over polynomial extensions of regular rings of dimension 2. (84d:10026)
- Piras, Francesco See Cerlenco, Luigi, (84h:13029)
- Procesi, Claudio Computing with matrices. (See 84c:00012)

- Revoý, Philippe Anneau des invariants du groupe alterné. (English summary) [Invariant ring of the alternating group] (84m:13007)
- Roggero, Margherita Sur la factoriabilité de l'anneau des fonctions polynomiales d'une variété réelle. (English summary) [On the factoriability of the polynomial ring on a real variety] (84j:14019)
- Šebek, Michael 2-D polynomial equations. (84k:93027)
- Sharma, Pramod K. A note on ideals in polynomial rings. (84e:13002)
- Smits, T. H. M. On the group of units of $\text{GF}(q)[x]/(a(x))$. (84b:12030)
- Tannenbaum, Allen Polynomial rings over arbitrary fields in two or more variables are not pole assignable. (84g:93032)
- Vaughan, Nick An integral domain with an almost division algorithm. (84e:13003)
- Wajnyb, Bronisław Finiteness conditions in Krull subrings of a ring of polynomials. (84h:13022)
- Xie, Bang Jie A short proof that $R[x]$ is a Gaussian ring. (Chinese) (84d:13015)
- Yoshihiko, Nagano On subrings of the integral closure of certain algebra. (Japanese summary) (84g:13015)
- Zlatoš, Pavol On the ring of the variety of algebras over a ring. (84i:08005)

13F25 Formal power series rings

- Cerlienco, Luigi (with Piras, Francesco) Linear representation of division in $A^{(N)}$ and in A^N . (Italian. English summary) (84h:13029)
- Peskin, Barbara R. Quotient-singularities and wild p -cyclic actions. (84k:13018)
- Piras, Francesco See Cerlienco, Luigi. (84h:13029)

secondary classifications:

- Allaway, William R. Isomorphisms from the Eulerian umbral algebra onto formal Newton series. (84k:05003)
- Arnold, Jimmy T. Power series rings with finite Krull dimension. (84g:13031)
- Artin, Michael Algebraic structure of power series rings. (84b:13014)
- Brewer, James W. (with Nichols, Warren D.) Seminormality in power series rings. (84h:13003)
- Emsalem, Jacques Simplification et factorisation unique dans les produits tensoriels: quelques résultats. [Cancellation and unique factorization in tensor products: some results] (84d:13013)
- Heinzer, William J. (with Lantz, David) Commutative rings with acc on n -generated ideals. (84g:13030)
- Hirano, Yasuyuki On generalized p.p. rings. (84g:13020)
- Labeysie, Jacques Factorisation de Ritt pour les polynômes exponentiels formels. (English summary) [Ritt factorization for formal exponential polynomials] (84m:12021)
- Lantz, David See Heinzer, William J. (84g:13030)
- Nichols, Warren D. See Brewer, James W. (84h:13003)
- Platte, Erich Nicht-ausgeartete reguläre Überlagerungen. [Nondegenerate regular coverings] (84a:13024)
- Yagzhev, A. V. On a functional equation of theoretical physics. (Russian) (84j:81054)
- Zhitomirskii, M. Ya. Finite determinacy of formal series. (Russian) (84m:58102)

13F30 Discrete valuation rings

13F99 None of the above, but in this section

- Anderson, David F. (with Dobbs, David E.) On the product of ideals. (84a:13019)
- Dobbs, David E. See Anderson, David F. (84a:13019)
- Facchini, Alberto On the structure of torch rings. (84m:13022)

secondary classifications:

- Rush, David E. Rings which resemble rings of entire functions. (84d:13019)

13G05 Integral domains

- Anderson, D. D. (with Anderson, David F.) Divisibility properties of graded domains. (84e:13026)
- Anderson, David F. Integrally closed domains. (84j:13018)
- See also Anderson, D. D., (84e:13026)
- Dobbs, David E. (with Fontana, Marco) Pseudovaluation domains and their globalizations. (84g:13034)
- Fontana, Marco See Dobbs, David E. (84g:13034)
- Heitmann, Raymond C. (with McAdam, Stephen) Distinguished domains. (84e:13027)
- McAdam, Stephen See Heitmann, Raymond C. (84e:13027)

secondary classifications:

- Anderson, D. D. (with Anderson, David F.) Grading integral domains. (84f:13001)
- Anderson, David F. Root closure in integral domains. (84e:13009)
- See also Anderson, D. D., (84f:13001)
- Henriksen, Melvin Gauge functions and the divisor chain condition. (84k:20034)
- Markanda, Raj K. ★ On the number of remainders in Euclidean domains. (84c:13017)
- Matsuda, Ryūki Rings that become Krull rings after reduction. (Japanese) (84a:13010)
- Papick, Ira J. Super-primitive elements. (84h:13004)
- Taha, Faleh Algèbres simples centrales sur les corps ultra-produits de corps p -adiques. [Central simple algebras over fields which are ultraproducts of p -adic fields] (84a:16035)

13Hxx Local rings and semilocal rings

13H05 Regular local rings

- Artin, Michael Algebraic structure of power series rings. (84b:13014)
- Robbiano, Lorenzo (with Valla, Giuseppe) Free resolutions for special tangent cones. (84c:13019)
- Valla, Giuseppe See Robbiano, Lorenzo. (84c:13019)

secondary classifications:

- Choi, Man Duen (with Dai, Zong Duo; Lam, Tsit Yuen; Reznick, Bruce) The Pythagoras number of some affine algebras and local algebras. (84f:12012)
- Dai, Zong Duo See Choi, Man Duen; et al., (84f:12012)
- Evans, E. Graham (with Griffith, Phillip) The syzygy problem: a new proof and historical perspective. (84f:13008)
- Griffith, Phillip Simple bundles of rank three. (84a:14008)
- See also Evans, E. Graham, (84f:13008)
- Horrocks, Geoffrey The rank of a module. (84c:13009)
- Lam, Tsit Yuen See Choi, Man Duen; et al., (84f:12012)
- Narasimhan, R. Hyperplanarity of the equimultiple locus. (84f:14001)
- Nashier, Budh S. A note on efficient generation of ideals. (84c:13011)
- Park, Jong Geun On the derived normal rings of a Noetherian integral domain. (84a:13016)
- Ramras, Mark Sequences of Betti numbers. (84h:13010)
- Reznick, Bruce See Choi, Man Duen; et al., (84f:12012)

13H10 Special types (Macaulay, Gorenstein, etc.)

- Aoyama, Yōichi Some basic results on canonical modules. (84i:13015)
- Avramov, Luchezar L. Invariants d'un groupe fini engendré par des pseudo-reflexions, opérant sur un anneau local. [Invariants of a finite group generated by pseudoreflections, acting on a local ring] (84a:13020)
- Pseudoreflection group actions on local rings. (84c:13020)
- Bacławski, Kenneth Combinatorial decompositions of rings and almost Cohen-Macaulay complexes. (84c:13021)
- Brodmann, Markus Rees rings and form rings of almost complete intersections. (84f:13017)
- Brown, William C. A note on the Cohen-Macaulay type of lines in uniform position in A^{n+1} . (84f:13022)
- Bruns, Winfried The canonical module of a determinantal ring. (84i:13016)
- Buchsbaum, David A. (with Eisenbud, David) Gorenstein ideals of height 3. (84c:13017)
- Cavaliere, Maria Pia (with Niesi, Gianfranco) On form ring of a one-dimensional semigroup ring. (84i:13018)
- Eisenbud, David (with Huneke, Craig) Cohen-Macaulay Rees algebras and their specialization. (84h:13030)
- See also Buchsbaum, David A., (84i:13017)
- Fedder, Richard F -purity and rational singularity. (84h:13031)
- Florentini, Mario Intersections résiduelles dans les anneaux de Cohen-Macaulay et un critère de régularité relative. [Residual intersections in Cohen-Macaulay rings and a criterion for relative regularity] (84c:13023)
- Fröberg, Ralf A study of graded extremal rings and of monomial rings. (84j:13019)
- Geramita, Anthony V. (with Orecchia, Ferruccio) Minimally generating ideals defining certain tangent cones. (84e:13028)
- Goto, Shiro (with Shimoda, Yasuhiro) On the Rees algebras of Cohen-Macaulay local rings. (84a:13021)
- Blowing-up of Buchsbaum rings. (84h:13032)
- Approximately Cohen-Macaulay rings. (84h:13033)
- Vanishing of $\text{Ext}'_i(M, A)$. (84c:13019)
- Gräbe, Hans-Gert Kanonische Parametersysteme quadratfreier Potenzproduktideale. [Canonical systems of parameters of squarefree power product ideals] (84f:13018)
- Huneke, Craig Linkage and the symmetric algebra of ideals. (84j:13020)
- Linkage and the Koszul homology of ideals. (84f:13019)
- Strongly Cohen-Macaulay schemes and residual intersections. (84m:13023)
- See also Eisenbud, David, (84h:13030)
- Ikeda, Shin The Cohen-Macaulayness of the Rees algebras of local rings. (84f:13020)
- Kirby, David (with Mehran, Hefzi A.) A note on the coefficients of the Hilbert-Samuel polynomial for a Cohen-Macaulay module. (84a:13022)
- Mehran, Hefzi A. See Kirby, David, (84a:13022)
- Ngô Việt Trung Classification of the double projections of Veronese varieties. (84d:13017)
- On the associated graded ring of a Buchsbaum ring. (84h:13034)
- Absolutely superficial sequences. (84i:13019)
- Niesi, Gianfranco See Cavaliere, Maria Pia, (84i:13018)
- Onoda, Nobuharu Remarks on one-dimensional seminormal rings. (84c:13020)
- Oishi, Akira Castelnuovo's regularity of graded rings and modules. (84m:13024)
- Orecchia, Ferruccio Maximal Hilbert functions of one-dimensional local rings. (84h:13035)
- See also Geramita, Anthony V., (84e:13028)
- Ratiff, Louis J., Jr. Integrally closed ideals, prime sequences, and Macaulay local rings. (84h:13015)
- Riley, Adrian M. Balanced big Cohen-Macaulay modules and free extensions of local rings. (84i:13020)
- Robbiano, Lorenzo On normal flatness and some related topics. (84c:13021)
- Roberts, Paul Calvin Rings of type I are Gorenstein. (84i:13022)
- Rossi, Maria Evelina The Rees and symmetric algebras of an ideal. (Italian. English summary) (84f:13021)
- Schenzel, Peter A note on almost complete intersections. (84g:13035)
- Standard systems of parameters and their blowing-up rings. (84m:13025)
- Sharp, R. Y. (with Zakeri, H.) Modules of generalized fractions and balanced big Cohen-Macaulay modules. (84j:13021)
- Shimoda, Yasuhiro See Goto, Shiro, (84a:13021)

- Steurich, Manfred A characterization of unconditioned weak sequences. **84d:13018**
 Stroganov, S. S. Definitions of certain classes of local rings. (Russian) **84i:13023**
 Zakeri, H. See Sharp, R. Y., **84j:13021**

secondary classifications:

- Avramov, Luchezar L. Symmetric algebras of modules of projective dimension one. **84m:13008**
 Baclawski, Kenneth (with Garsia, Adriano M.) Combinatorial decompositions of a class of rings. **84a:06003a**
 Rings with lexicographic straightening law. **84a:06003b**
 Billera, Louis J. Polyhedral theory and commutative algebra. **84m:52009**
 Brodmann, Markus (with Rothaus, Christel) A peculiar unmixed domain. **84h:13014**
 Cavaliere, Maria Pia (with Niesi, Gianfranco) On monomial curves and Cohen-Macaulay type. **84h:14061**
 Cumino, Caterina (with Greco, Silvio; Manaresi, Mirella) Bertini theorems for weak normality. **84h:14036**
 Dutta, Sankar P. Weak linking and multiplicities. **84g:13036**
 Generalized intersection multiplicities of modules. **84i:13024**
 Garsia, Adriano M. See Baclawski, Kenneth. **84a:06003a**
 Gordeev, N. L. Subgroups of a finite group whose algebra of invariants is a complete intersection. (Russian) **84h:20045**
 Gräbe, Hans-Gert Über das assoziierte Ideal zyklischer Polynome. [On the associated ideal of cyclic polynomials] **84m:52010**
 Greco, Silvio See Cumino, Caterina; et al., **84h:14036**
 Greither, Cornelius On the two generator problem for the ideals of a one-dimensional ring. **84h:13002**
 Handelsman, David E. Proximity of one-dimensional Gorenstein rings. **84d:13006a**
 Addendum: "Proximity of one-dimensional Gorenstein rings". **84d:13006b**
 Herrmann, Manfred (with Orbanz, Ulrich) Two notes on flatness. **84j:14013**
 Herzog, Bernd Die Struktur flacher lokaler Erweiterungen lokaler Ringe. [The structure of flat local extensions of local rings] **84i:13012**
 Herzog, J. Strict local rings. **84h:13017**
 Homma, Yuko On projective Cohen-Macaulayness of a del Pezzo surface embedded by a complete linear system. **84h:14003**
 Huneke, Craig The theory of d -sequences and powers of ideals. **84g:13021**
 Manaresi, Mirella See Cumino, Caterina; et al., **84h:14036**
 Matsumura, Hideyuki Recent developments in the theory of excellent rings. **84c:13007**
 Nakajima, Haruhisa Relative invariants of finite groups. **84c:13006**
 Ngô Việt Trung Der gradierte Ring bezüglich des Primideals von Macaulay. [The graded ring with respect to the prime ideal of Macaulay] **84c:13003**
 Niesi, Gianfranco See Cavaliere, Maria Pia. **84h:14061**
 Oneto, Anna (with Zatini, Elsa) Finite morphisms of Gorenstein curves. **84g:14051**
 Orbanz, Ulrich See Herrmann, Manfred. **84j:14013**
 Ratliff, Louis J., Jr. Independent elements and asymptotic sequences. **84c:13020**
 Robbiano, Lorenzo (with Valla, Giuseppe) Some curves in P^3 are set-theoretic complete intersections. **84m:14059**
 Roos, Jan-Erik Finiteness conditions in commutative algebra and solution of a problem of Vasconcelos. **84f:13012**
 Rothaus, Christel See Brodmann, Markus. **84h:13014**
 Sally, Judith D. Reductions, local cohomology and Hilbert functions of local rings. **84g:13037**
 Schenzel, Peter Notes on liaison and duality. **84a:13012**
 Valla, Giuseppe A property of almost complete intersections. **84c:13013**
 See also Robbiano, Lorenzo. **84m:14059**
 Watanabe, Keiichi Rational singularities with k^* -action. **84e:14005**
 Watanabe, Masayuki On projective normality of space curves on a nonsingular cubic surface in P^3 . **84h:14040**
 Zatini, Elsa See Oneto, Anna. **84g:14051**

13H15 Multiplicity theory and related topics

- Dutta, Sankar P. Weak linking and multiplicities. **84g:13036**
 Generalized intersection multiplicities of modules. **84i:13024**
 Gupta, Surender K. (with Roberts, Leslie G.) Cartesian squares and ordinary singularities of curves. **84h:13036**
 Herrmann, Manfred (with Orbanz, Ulrich) Between equimultiplicity and normal flatness. **84c:13024**
 Herzog, Bernd Die Hilbertfunktionen bilden einen Artinschen Verband. [The Hilbert functions form an Artin lattice] **84i:13016**
 On a relation between the Hilbert functions belonging to a local homomorphism. **84c:13029**
 Hochster, Melvin The local homological conjectures. **84h:13037**
 Lipman, Joseph Equimultiplicity, reduction, and blowing up. **84a:13023**
 Orbanz, Ulrich See Herrmann, Manfred. **84j:13024**
 Roberts, Leslie G. See Gupta, Surender K. **84h:13036**
 Sally, Judith D. Reductions, local cohomology and Hilbert functions of local rings. **84g:13037**

secondary classifications:

- Achilles, Rüdiger (with Schenzel, Peter) A degree bound for the defining equations of one-dimensional tangent cones. **84g:14027**
 Ale, J. Fonction de Hilbert-Samuel dans les anneaux locaux réguliers non-commutatifs. [Hilbert-Samuel function in noncommutative regular local rings] **84d:16018**
 Almkvist, Gert Some formulas in invariant theory. **84i:14030**
 Brown, William C. A note on the Cohen-Macaulay type of lines in uniform position in A^{n+1} . **84c:13022**
 Félix, Yves (with Thomas, Jean-Claude) The radius of convergence of Poincaré series of loop spaces. **84f:55007**
 Herrmann, Manfred (with Orbanz, Ulrich) Two notes on flatness. **84j:14013**

- Iarrobino, Anthony Deforming complete intersection Artin algebras. Appendix: Hilbert function of $C[x,y]/I$. **84j:14010**
 Kirby, David (with Mehran, Hefzi A.) Hilbert functions and the Koszul complex. **84j:13013**
 Kiyek, Karl-Heinz Multiplicity sequence and value semigroup. **84h:14039**
 Lemaire, Jean-Michel Anneaux locaux et espaces de lacets à séries de Poincaré irrationnelles (d'après Anick, Roos, etc.). [Local rings and loop spaces with irrational Poincaré series (after Anick, Roos, etc.)] **84e:55006**
 Mehran, Hefzi A. See Kirby, David. **84j:13013**
 Mora, Ferdinando An algorithm to compute the equations of tangent cones. **84c:13012**
 Narasimhan, R. Hyperplanarity of the equimultiple locus. **84f:14001**
 Ngô Việt Trung On the associated graded ring of a Buchsbaum ring. **84h:13034**
 Absolutely superficial sequences. **84i:13019**
 Orbanz, Ulrich See Herrmann, Manfred. **84j:14013**
 Orecchia, Ferruccio Maximal Hilbert functions of one-dimensional local rings. **84h:13035**
 Rees, David Multiplicities, Hilbert functions and degree functions. **84j:13001**
 Schenzel, Peter Standard systems of parameters and their blowing-up rings. **84m:13025**
 See also Achilles, Rüdiger. **84g:14027**
 Sweedler, Moss E. Tor gives the inverse to the Hilbert function of a graded algebra. **84c:16015**
 Tamone, Grazia Blowing-up and glueings in one-dimensional rings. **84d:14017**
 Teissier, Bernard Polyèdre de Newton jacobien et équisingularité. [Jacobian Newton polyhedra and equisingularity] **84h:14007**
 Thomas, Jean-Claude See Félix, Yves. **84f:55007**

13H99 None of the above, but in this section

- Avramov, Luchezar L. (with Lescot, Jack) Bass numbers and Golod rings. **84c:13030**
 Obstacles to the existence of a multiplicative structure on minimal resolutions. (Russian) **84c:13025**
 Lescot, Jack See Avramov, Luchezar L., **84c:13030**

secondary classifications:

- Brown, Martin Lawrence Defective big Cohen-Macaulay modules. **84h:13015**
 Herzog, Bernd A criterion for tangential flatness. **84m:14008**
 Hoffman, Jerome William Counterexamples to the lifting problem for singularities. **84g:13027**
 Jacobsson, Calle On the double Poincaré series of the enveloping algebras of certain graded Lie algebras. **84c:17010a**
 See also Löfwall, Clas. **84c:17010b**
 Katz, Daniel A note on asymptotic prime sequences. **84g:13022**
 Löfwall, Clas Appendix to: "On the double Poincaré series of the enveloping algebras of certain graded Lie algebras" [Math. Scand. 51 (1982), no. 1, 45-58; MR 84c:17010a] by C. Jacobsson. **84c:17010b**
 Massaza, Carla On some axiomatic aspects of Nagata's criterion. (Italian. English summary) **84d:14002**
 Monsky, P. The Hilbert-Kunz function. **84c:13012**
 Park, Chan-Bong A remark on the Krull dimension. **84c:13013**
 Ratliff, Louis J., Jr. Note on analytic spread and asymptotic sequences. **84g:13023**
 On prime sequences over an ideal. **84g:13024**
 Roos, Jan-Erik On the use of graded Lie algebras in the theory of local rings. **84g:13026**
 Sjödin, Gunnar A characterization of local complete intersections in terms of the Ext-algebra. **84a:13015**
 Hopf algebras and derivations. **84a:16016**
 Tanimoto, Hiroshi On the base field change of P-rings and P-2 rings. **84i:13006**

13Jxx Topological rings [See also 16A80.]

13J05 Power series rings

- Baldassarri, Francesco On inseparable descent. **84j:13022**
 Platte, Erich Nicht-ausgetretete reguläre Überlagerungen. [Nondegenerate regular coverings] **84a:13024**
 Rothaus, Christel Potenzreihenweiterung und formale Fasern in lokalen Ringen mit Approximationseigenschaft. (English summary) [Power series extension and formal fibres in local rings with the approximation property] **84j:13023**

secondary classifications:

- Daepf, Ulrich The saturation of k -analytic rings and topological equivalence of associated analytic set germs. **84h:32006**
 Ganong, R. Plane Frobenius sandwiches. **84h:13026**
 Klyushin, A. V. Compact monothetic rings. (Russian) **84j:13026**
 Ledergerber, Paul G. Formal distributions are pure submodules. **84m:13013**

13J10 Complete rings

- Contessa, Maria (with Zanolin, Fabio) On some remarks about a not completable convergence ring. **84j:13024**
 Dikranjan, Dikran Extension of minimal ring topologies. **84j:13025**
 Klyushin, A. V. Compact monothetic rings. (Russian) **84j:13026**
 Lu, Chin Pi Quasicomplete rings. **84c:13021**
 Wiseman, Andrew N. Integral extensions of linearly compact domains. **84c:13026**
 Zanolin, Fabio See Contessa, Maria. **84j:13024**

secondary classifications:

- Brezuleanu, A. (with Rothaus, Christel) Eine Bemerkung über Ringe mit geometrisch normalen formalen Fasern. [A comment on rings with geometrically normal formal fibres] **84g:13012**

Cahen, Paul-Jean (with Grazzini, Fulvio; Haouat, Youssef) Intégrité du completé et théorème de Stone-Weierstrass. (English summary) [Integralness of the completion and Stone-Weierstrass theorem] (84j:13005)

Grazzini, Fulvio See Cahen, Paul-Jean; et al., (84j:13005)

Greco, Silvio A note on universally catenary rings. (84e:13019)

Haouat, Youssef See Cahen, Paul-Jean; et al., (84j:13005)

Numakura, Katsumi Notes on compact rings with open radical. (84f:16046)

Rotthaus, Christel See Brezuleanu, A., (84g:13012)

13J15 Henselian rings

Becker, Joseph (with Denef, Jan; Lipshitz, L.) The approximation property for some 5-dimensional Henselian rings. 84j:13027

Denef, Jan See Becker, Joseph; et al., 84j:13027

Lipshitz, L. See Becker, Joseph; et al., 84j:13027

Sheets, Robert W. Partial Henselizations. 84a:13025

secondary classifications:

Artin, Michael (with Denef, Jan) Smoothing of a ring homomorphism along a section. (84m:14007)

Brown, Martin Lawrence A class of 2-dimensional local rings with Artin's approximation property. (84j:14011)

Cumino, Caterina On the order of branches. (84f:14009)

Denef, Jan See Artin, Michael, (84m:14007)

van den Dries, Lou A specialization theorem for analytic functions on compact sets. (84f:14003)

Rotthaus, Christel Potenzreihenerweiterung und formale Fasern in lokalen Ringen mit Approximationseigenschaft. (English summary) [Power series extension and formal fibres in local rings with the approximation property] (84j:13023)

Wadsworth, Adrian R. p -Henselian field: K -theory, Galois cohomology, and graded Witt rings. (84m:12026)

13J20 Global topological rings

secondary classifications:

Abouabdillah, Driss Topologies de corps A -linéaires. [A -linear topologies on fields] (84d:12026)

Weber, Hans Unabhängige Topologien, Zerlegung von Ringtopologien. [Independent topologies, decomposition of ring topologies] (84d:12027)

13J25 Ordered rings [See also 06F25, 16A86.]

13J99 None of the above, but in this section

Day, B. J. A note on powers of Hausdorff fields. 84h:13038

Rush, David E. Rings which resemble rings of entire functions. 84d:13019

Vizitiu, V. N. Continuation of some topological rings onto their extensions. (Russian) 84a:13026

secondary classifications:

Caruth, A. On Cohen's theorem. (84e:13018)

13K05 Witt vectors and related rings

secondary classifications:

Baldassarri, Francesco On inseparable descent. (84j:13022)

Facchini, Alberto On the structure of toric rings. (84m:13022)

Pardon, William A "Gersten conjecture" for Witt groups. (84e:13016)

Warshauer, Max L. ★The Witt group of degree k maps and asymmetric inner product spaces. (84c:10017)

13L05 Applications of logic to commutative algebra [See also 03Cxx, 03Hxx.]

Mines, Ray (with Richman, Fred) Dedekind domains. 84g:13038

Richman, Fred See Mines, Ray, 84g:13038

Toffalori, Carlo Nilreal rings. (Italian. English summary) 84c:13022

Model theory for some classes of local rings. (Italian. English summary) 84i:13025

secondary classifications:

Berline, Chantal (with Cherlin, Gregory) QE rings in characteristic p . (84a:03032)

Bunge, Marta On the transfer of an abstract nullstellensatz. (84c:03074)

Cherlin, Gregory See Berlin, Chantal, (84a:03032)

Dugas, Manfred (with Göbel, Rüdiger) Every cotorsion-free algebra is an endomorphism algebra. (84h:13008)

Göbel, Rüdiger See Dugas, Manfred, (84h:13008)

Jensen, Christian U. Applications logiques en théorie des anneaux et des modules. [Applications of logic in the theory of rings and modules] (84h:16017)

Noskov, G. A. The elementary theory of a finitely generated commutative ring. (Russian) (84g:03063)

Reineke, Joachim On algebraically closed models of theories of commutative rings. (84c:03064)

Renschuch, Bodo Beiträge zur konstruktiven Theorie der Polynomideale. XVII/2. Zur Hentzelt/Noether/Hermannschen Theorie der endlich vielen Schritte. (English and Russian summaries) [Contributions to the constructive theory of polynomial ideals. XVII/2. On the Hentzelt/Noether/Hermann theory of finitely many steps] (84m:13001)

13Mxx Finite commutative rings (For number-theoretic aspects, see 12Cxx.)

13M05 Structure

Xia, You Ming Properties of rings with a finite number of zero divisors. (Chinese) 84c:13023

secondary classifications:

Ratinov, V. A. Finite commutative rings with special types of groups of units. (Russian) (84i:12014)

13M10 Polynomials

13M99 None of the above, but in this section

Luo, Tie (with Wang, Yang) On the order of a finite ring and the number of its zero-divisors. (Chinese) 84g:13039

Wang, Yang See Luo, Tie, 84g:13039

13N05 Differential algebra [See also 12H05.]

Braconnier, Jean Éléments d'algèbre différentielle graduée. [Elements of graded differential algebra] 84c:13027

Buium, Alexandru Ritt schemes and torsion theory. 84j:13028

Chen, Matthew S. Height one differential ideals in polynomial rings. 84h:13039

van den Essen, A. R. P. (with Levitt, A. H. M.) Irregular singularities in several variables. 84e:13031

Keigher, William F. Differential schemes and premodels of differential fields. 84f:13022

On the structure presheaf of a differential ring. 84g:13040

Levitt, A. H. M. See van den Essen, A. R. P., 84e:13031

secondary classifications:

Connell, E. (with Drost, J.) Conservative and divergence free algebraic vector fields. (84i:13014)

Drost, J. See Connell, E., (84i:13014)

Keigher, William F. Differential rings constructed from quasiprime ideals. (84c:12016)

Levasseur, Thierry Anneaux d'opérateurs différentiels. [Rings of differential operators] (84j:32009)

Madguerova, Andreana S. Isomorphisms of homogeneous algebras of functions on a torus. (Russian) (84c:46052)

Maksimov, V. M. Equations of Cauchy-Riemann type associated with commutative algebras. (Russian) (84c:30073)

Rubel, Lee A. A counterexample to elimination in systems of algebraic differential equations. (84c:12015)

Toffalori, Carlo Model theory for a class of differential rings. (Italian) (See 84k:03006)

Trofimov, V. V. Commutative graded algebras with Poincaré duality and Hamiltonian systems. (Russian) (84j:58053)

Tuy, Heang K. On almost monotonic real functions. (84e:12028)

14-XX ALGEBRAIC GEOMETRY

14-01 Elementary exposition, textbooks

Coble, Arthur B. ★Algebraic geometry and theta functions. 84m:14001

(Danilov, V. I.) See Griffiths, Phillip; et al., 84e:14001

Griffiths, Phillip (with Harris, Joseph Daniel) ★Принципы алгебраической геометрии. Том 1, 2. (Russian) [Principles of algebraic geometry. Vol. 1, 2] 84e:14001

Harris, Joseph Daniel See Griffiths, Phillip, 84e:14001

Iitaka, Shigeru ★Algebraic geometry. 84j:14001

(Iskovskikh, V. A.) See Griffiths, Phillip; et al., 84e:14001

(Shabat, G. B.) See Griffiths, Phillip; et al., 84e:14001

(Shokurov, V. V.) See Griffiths, Phillip; et al., 84e:14001

secondary classifications:

Byrnes, C. (with Hazewinkel, Michiel; Martin, Clyde Franklin; Rouchaleau, Y.)

Introduction to geometrical methods for the theory of linear systems. (84h:93032)

Chenciner, Alain ★Courbes algébriques planes. (French) [Plane algebraic curves] (84k:14023)

Hazewinkel, Michiel See Byrnes, C.; et al., (84h:93032)

Lang, Serge ★Introduction to algebraic and abelian functions. (84m:14032)

Martin, Clyde Franklin See Byrnes, C.; et al., (84h:93032)

Rouchaleau, Y. See Byrnes, C.; et al., (84h:93032)

14-02 Advanced exposition (research surveys, monographs, etc.)

Bucur, Ionel ★Capitole speciale de algebră. (Romanian) [Special chapters of algebra] 84c:14001

Conte, Alberto Recent developments in the work of Francesco Severi: intersection theory, enumerative geometry, algebraic curves. (Italian) 84m:14002

Drinfel'd, V. G. (with Krichever, Ios. M.; Manin, Yu. I.; Novikov, S. P.) Methods of algebraic geometry in contemporary mathematical physics. 84h:14001

(Galbură, Gh.) See Bucur, Ionel, 84c:14001

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Manin, Yu. I. See Drinfel'd, V. G.; et al., 84h:14001

Novikov, S. P. See Drinfel'd, V. G.; et al., 84h:14001

(Onicescu, Octav) See Bucur, Ionel, 84c:14001

secondary classifications:

- (Eisenbud, David) See Harris, Joseph Daniel, (84j:14024)
 Harris, Joseph Daniel ★Curves in projective space. (84j:14024)
 Itaka, Shigeru ★Algebraic geometry. (84j:14001)
 Kurke, Herbert ★Vorlesungen über algebraische Flächen. (German) [Lectures on algebraic surfaces] (84i:14029)
 Lê Dũng Tráng (with Teissier, Bernard) Report on the problem session. (84k:32002)
 Nagata, Masayoshi Commutative algebra and algebraic geometry. (84e:13001)
 Teissier, Bernard See Lê Dũng Tráng, (84k:32002)

14-03 Historical (must also be assigned at least one classification number from Section 01)

- Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Introduction. 84i:14001
 Chudnovsky, Gregory V. See Chudnovsky, D. V., 84i:14001
 Kendig, Keith M. Algebra, geometry, and algebraic geometry: some interconnections. 84i:14002

secondary classifications:

- Bondarenko, A. A. Algebra and algebraic geometry in the works of mathematicians of the V. I. Lenin Belorussian State University. (Russian) (84h:01071)
 Griffiths, Phillip Poincaré and algebraic geometry. (84j:14020)
 (Itaka, Shigeru) See Ueno, Kenji, (84e:01085)
 Kukhtenko, A. I. (with Nikitenko, O. V.; Udilov, V. V.) Algebraic invariants and the theory of control of finite-dimensional stationary objects. (84j:93029)
 Nikitenko, O. V. See Kukhtenko, A. I.; et al., (84j:93029)
 Picard, Charles-Émile ★Œuvres de Charles-Émile Picard. Tome III. (French) [Works of Charles-Émile Picard. Vol. III] (84a:01060a)
 ★Œuvres de Ch.-É. Picard. Tome IV. (French) [Works of Ch.-É. Picard. Vol. IV] (84a:01060b)
 Renschuch, Bodo (with Vogel, Wolfgang) Über den Bezoutschen Satz seit den Untersuchungen von B. L. van der Waerden. [On Bezout's theorem since the investigations by B. L. van der Waerden] (84j:01059)
 Severi, Francesco ★Opere matematiche: memorie e note. Vol. I. (Italian) [Mathematical works: memoirs and notes. Vol. I: 1900-1908] (84k:01070a)
 ★Opere matematiche: memorie e note. Vol. II. (Italian) [Mathematical works: memoirs and notes. Vol. II: 1909-1917] (84k:01070b)
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 Udilov, V. V. See Kukhtenko, A. I.; et al., (84j:93029)
 Ueno, Kenji Classification of algebraic varieties. Award of 10th Japan Mathematical Society Prize to Shigeru Itaka. (Japanese) (84e:01085)
 Vleduts, S. G. On the history of complex multiplication. Abel's complex multiplication. (Russian) (84h:01057)
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 Bibliography:
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 Biography:
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14-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Davenport, James Harold ★On the integration of algebraic functions. (84k:14024)
 Holme, Audun Computation of some projective invariants. (84j:14027)
 Laska, Michael An algorithm for finding a minimal Weierstrass equation for an elliptic curve. (84i:14033)

14-06 Proceedings, conferences, etc.

- (Aroca Hernández-Ros, José Manuel) See Algebraic geometry, 84h:14002
 (Artin, Michael) See Arithmetic and geometry, 84j:14005
 (Bădescu, Lucian) See Proceedings: Week of Algebraic Geometry, 84h:14003
 (Buchweitz, Ragnar) See Algebraic geometry, 84h:14002
 (Ciliberto, Ciro) See Algebraic geometry—open problems, 84i:14003
 (Dolgachev, Igor V.) See Algebraic geometry, 84j:14002
 (Friedman, Robert David) See Birational geometry of degenerations, 84a:14001
 (Gherardelli, Francesco) See Invariant theory, 84i:14004
 (Ghione, Franco) See Algebraic geometry—open problems, 84i:14003
 (Giusti, Marc) See Algebraic geometry, 84h:14002
 (Hervier, Yves) See Enumerative geometry and classical algebraic geometry, 84a:14002
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 (Merle, Michel) See Algebraic geometry, 84h:14002
 (Morrison, David R.) See Birational geometry of degenerations, 84a:14001
 (Nagata, Masayoshi) See Recent progress of algebraic geometry in Japan, 84i:14005
 (Orecchia, Ferruccio) See Algebraic geometry—open problems, 84i:14003
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 (Shioda, Tetsuji) See Algebraic geometry, 84j:14003
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- (Weber, Claude) See Knots, braids and singularities, 84m:14004
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 ★Algebraic geometry. 84j:14002
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 Ann Arbor, Mich. ★Algebraic geometry. 84j:14002
 Arcata, Calif. ★Singularities. Part I. 84h:14004a
 ★Singularities. Part 2. 84h:14004b
 Arithmetic and geometry ★Arithmetic and geometry. Vol. I. 84j:14005a
 ★Arithmetic and geometry. Vol. II. 84j:14005b
 Birational geometry of degenerations ★The birational geometry of degenerations. 84a:14001
 Birthday:
 Shafarevich, I. R. ★Arithmetic and geometry. Vol. I. 84j:14005a
 ★Arithmetic and geometry. Vol. II. 84j:14005b
 Bucharest ★Proceedings of the Week of Algebraic Geometry. 84h:14003
 Cambridge, Mass. ★The birational geometry of degenerations. 84a:14001
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 Midwest, algebraic geometry ★Algebraic geometry. 84j:14002
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 La Rabida ★Algebraic geometry. 84h:14002
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 Montecatini ★Invariant theory. 84i:14004
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 Tokyo ★Algebraic varieties and analytic varieties. 84j:14004
 Toyko ★Algebraic geometry. 84j:14003
 secondary classifications:
 (Boutet de Monvel, Louis) See Mathematics and physics, (84m:32001)
 (Calapso, Renato) See Proceedings: Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso, (84f:00012)
 (Carrell, James B.) See Group actions and vector fields, (84f:32001)
 (Douady, Adrien) See Yang-Mills equations, (84j:14026) and Mathematics and physics, (84m:32001)
 (Greco, Silvio) See Commutative algebra, (84a:13002)
 (Koblitz, Neal) See Number theory related to Fermat's last theorem, (84a:10004)
 (Valla, Giuseppe) See Commutative algebra, (84a:13002)
 (Verdier, Jean-Louis) See Yang-Mills equations, (84j:14026) and Mathematics and physics, (84m:32001)
 Anniversary:
 Birth of Calapso, Renato ★Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)

Astérisque ★ Les équations de Yang-Mills. (French) [Yang-Mills equations] (84j:14026)
Cambridge, Mass. ★ Number theory related to Fermat's last theorem. (84a:10004)
Commutative algebra ★ Commutative algebra. (84a:13002)

Conference:

Calapso, Renato ★ Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)

Number Theory Related to Fermat's Last Theorem ★ Number theory related to Fermat's last theorem. (84a:10004)

Trento, Commutative Algebra ★ Commutative algebra. (84a:13002)

Group actions and vector fields ★ Group actions and vector fields. (84f:32001)

Mathematics and physics ★ Mathématique et physique. (French) [Mathematics and physics] (84m:32001)

Messina ★ Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)

Number theory related to Fermat's last theorem ★ Number theory related to Fermat's last theorem. (84a:10004)

Paris ★ Mathématique et physique. (French) [Mathematics and physics] (84m:32001)

Proceedings:

Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso ★ Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)

Seminar:

Mathematics and physics ★ Mathématique et physique. (French) [Mathematics and physics] (84m:32001)

Polish-North American, Group Actions and Vector Fields ★ Group actions and vector fields. (84f:32001)

Taormina ★ Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)

Trento ★ Commutative algebra. (84a:13002)

Vancouver, B.C. ★ Group actions and vector fields. (84f:32001)

Yang-Mills equations ★ Les équations de Yang-Mills. (French) [Yang-Mills equations] (84j:14026)

14Axx Foundations

14A05 Relevant commutative algebra [See also 13--XX.]

Langmann, Klaus Ein algebraischer Beweis des Hilbertschen Nullstellensatzes. [An algebraic proof of Hilbert's Nullstellensatz] (84c:14003)

secondary classifications:

Baldassarri Ghezzi, S. (with Chiaruttini, S.) The representation of certain \hat{A} -modules. (Italian) (84c:14013)

Bellaccini, Barbara Proper morphisms and excellent schemes. (84c:14006)

Chiaruttini, S. See Baldassarri Ghezzi, S., (84c:14013)

Coste-Roy, Marie-Françoise Faisceau structural sur le spectre réel et fonctions de Nash. [Structure sheaf on the real spectrum and Nash functions] (84d:14015)

Emsalem, Jacques Simplification et factorisation unique dans les produits tensoriels: quelques résultats. [Cancellation and unique factorization in tensor products: some results] (84d:13013)

Tamone, Grazia The gluing of primary ideals and the origin of certain singularities. (Italian summary) (84d:13001)

Van Oystaeyen, F. (with Verschoren, A.) On the Brauer group of a projective variety. (84d:13005)

Verschoren, A. See Van Oystaeyen, F., (84d:13005)

14A10 Varieties

Lipkovski, Aleksandar A homeomorphic extension of geometric rings is integral. (Russian) (84j:14006)

Marinari, Maria Grazia (with Raimondo, Mario) Integral morphisms and homeomorphisms of affine k -varieties. (84j:14001)

Raimondo, Mario See Marinari, Maria Grazia, (84j:14001)

secondary classifications:

Mora, Ferdinando An algorithm to compute the equations of tangent cones. (84c:13012)
Tognoli, Alberto Le problème d'algebraisation des polyèdres est local. [The problem of the algebraization of polyhedra is local] (84c:57010)

14A15 Schemes

Bellaccini, Barbara Proper morphisms, formal fibers and desingularizations. (Italian) (84c:14001)

Proper morphisms and excellent schemes. (84c:14006)

Constantinescu, Adrian Schemes dominated by algebraic varieties and applications. (84m:14005)

Verschoren, A. When is a noncommutative scheme affine? (84j:14002)

secondary classifications:

Buium, Alexandru Ritt schemes and torsion theory. (84j:13028)
Cherenack, Paul Cones and comparisons in ind-affine homotopy theory. (84k:14017)
Ferrand, Daniel Trivialisation des modules projectifs. La méthode de Kronecker. [Trivialization of projective modules. The Kronecker method] (84c:13009)

Keigher, William F. Differential schemes and premodels of differential fields. (84f:13022)

On the structure presheaf of a differential ring. (84g:13040)

Marinari, Maria Grazia (with Raimondo, Mario) Integral morphisms and homeomorphisms of affine k -varieties. (84j:14001)

Raimondo, Mario See Marinari, Maria Grazia, (84j:14001)

Verschoren, A. Les extensions et les schémas non-commutatifs. [Extensions and noncommutative schemes] (84c:16036)

14A20 Generalizations (algebraic spaces, motifs)

Cherenack, Paul A Cartesian closed extension of a category of affine schemes. (84j:14007)

Strano, Rosario On the affineness of Hensel schemes. (84c:14004)

secondary classifications:

Coste, Michel Ensembles semi-algébriques. [Semialgebraic sets] (84c:14023)

Deligne, Pierre (with Milne, James Stuart; Ogus, Arthur; Shih, Kuang-yen) ★ Hodge cycles, motives, and Shimura varieties. (84m:14046)

Milne, James Stuart See Deligne, Pierre; et al., (84m:14046)

Ogus, Arthur See Deligne, Pierre; et al., (84m:14046)

Shih, Kuang-yen See Deligne, Pierre; et al., (84m:14046)

14A25 Elementary questions

secondary classifications:

Bunge, Marta On the transfer of an abstract nullstellensatz. (84c:03074)

14A99 None of the above, but in this section

secondary classifications:

Dubois, D. W. (with Recio Muñoz, Tomás J.) Subordinate structure sheaves. (84c:14018)

Lee, Heisook (with Orzech, Morris) Brauer groups, class groups and maximal orders for a Krull scheme. (84d:13004)

Lipparini, Paolo On Hilbert's nullstellensatz in universal algebra. (Italian) (See 84c:03006)

Orzech, Morris See Lee, Heisook, (84d:13004)

Radu, Alexandru Gh. ★ Teoria topusurilor. Vol. II. (Romanian) [Theory of topoi. Vol. II] (84g:18014)

Recio Muñoz, Tomás J. See Dubois, D. W., (84c:14018)

14Bxx Local theory [See also 32Bxx.]

14B05 Singularities [See also 14E15, 32B30, 32C40, 58C27.]

Ebeling, Wolfgang Milnor lattices and geometric bases of some special singularities. (84c:14002)

Esnault, Hélène Sur l'identification de singularités apparaissant dans des groupes algébriques complexes. [On the identification of singularities appearing in complex algebraic groups] (84c:14005)

Fibre de Milnor d'un cône sur une courbe plane singulière. [Milnor fiber of a cone on a singular plane curve] (84c:14003)

Kirillov, A. N. The zeta function of the monodromy of a singular point of a complete intersection. (Russian) (84c:14007)

Langevin, Rémi Courbure, feuilletages et singularités algébriques. [Curvature, foliations and algebraic singularities] (84j:14008)

Letizia, Maurizio A relation between the Milnor numbers of the singularities of a double plane and those of the singularities of its ramification curve. (84c:14003)

Narasimhan, R. Hyperplanarity of the equimultiple locus. (84f:14001)

Orlik, Peter (with Solomon, Louis) Arrangements defined by unitary reflection groups. (84c:14006)

Pfister, Gerhard Invariants of singularities and Newton polyhedron. (84j:14009)

Séade, José A. (with Steer, Brian) The elements of π_1^* represented by invariant framings of quotients of $(SL_2(\mathbb{R}))$ by certain discrete subgroups. (84c:14001)

Soleev, A. Algorithms for calculating the Newton polyhedron in the three-dimensional case. (Russian) (84c:14003)

Solomon, Louis See Orlik, Peter, (84c:14006)

Steer, Brian See Séade, José A., (84c:14001)

Teissier, Bernard Polyèdre de Newton jacobien et équisingularité. [Jacobian Newton polyhedra and equisingularity] (84j:14007)

Vicente, José L. Zariski equisingular stratification of a variety. (Spanish) (84f:14002)

Watanabe, Keiichi Rational singularities with k^* -action. (84c:14005)

secondary classifications:

Abhyankar, Shreeram S. ★ Weighted expansions for canonical desingularization. (84m:14013)

Arnol'd, V. I. Some open problems in the theory of singularities. (84j:32011)

Bellaccini, Barbara Proper morphisms, formal fibers and desingularizations. (Italian) (84c:14001)

Brown, William C. A note on the Cohen-Macaulay type of lines in uniform position in A^{n+1} . (84k:13022)

Bruce, J. W. (with Gaffney, Terence) Simple singularities of mappings $\mathbb{C}^0 \rightarrow \mathbb{C}^2$. (84d:32012)

Chmutov, S. V. Monodromy groups of critical point of functions. (84c:32007)

Daepp, Ulrich The saturation of k -analytic rings and topological equivalence of associated analytic set germs. (84c:32006)

Dima, Alexandru (with Gibson, C. G.) Contact germs from the plane to the plane. (84j:32012)

- Durfee, Alan H. The low-dimensional topology of singularities. (84j:57003)
- Edmonds, Allan L. (with Ewing, John H.; Kalkarni, Ravi S.) Torsion free subgroups of Fuchsian groups and tessellations of surfaces. (84d:20046)
- Ewing, John H. See Edmonds, Allan L.; et al. (84d:20046)
- Fedder, Richard F -purity and rational singularity. (84h:13031)
- Gaffney, Terence See Bruce, J. W. (84d:32012)
- Gibson, C. G. See Dimca, Alexandru, (84j:32012)
- Giraud, Jean Improvement of Grauert-Riemenschneider's theorem for a normal surface. (French summary) (84f:14025)
- Goñi, J. On the multiple points of plane algebraic curves. (Spanish. English summary) (84h:14038)
- González-Sprinberg, Gerardo Résolution de Nash des points doubles rationnels. (English summary) [Nash resolution of rational double points] (84m:14014)
- Cycle maximal et invariant d'Euler local des singularités isolées de surfaces. [Maximal cycle and local Euler invariant of isolated singularities of surfaces] (84g:14033)
- Herrmann, Manfred (with Orbanz, Ulrich) Between equimultiplicity and normal flatness. (84h:13024)
- Hiura, Masayuki See Yoshinaga, Etsuo; et al. (84j:14040)
- Huneke, Craig The theory of d -sequences and powers of ideals. (84g:13021)
- Jacquemard, Alain Fibrations de Milnor pour des applications réelles. (English summary) [Milnor fibrations of real functions] (84j:32010)
- Kalkarni, Ravi S. See Edmonds, Allan L.; et al. (84d:20046)
- Langevin, Rémi Geometry of the neighbourhood of a singularity. (84i:32011)
- Loibel, G. F. See Tadini, W. M. (84k:58041)
- Luengo, Ignacio On the structure of embedded algebroid surfaces. (84j:14039)
- Martinet, Jean (with Ramis, Jean-Pierre) Problèmes de modules pour des équations différentielles non linéaires du premier ordre. [Moduli problems for first-order nonlinear differential equations] (84k:34011)
- Mather, John N. (with Yau, Stephen S.-T.) Classification of isolated hypersurface singularities by their moduli algebras. (84c:32007)
- Matsumoto, Yukio See Yamada, Akio. (84c:32015)
- Ohyana, Shigeki See Yoshinaga, Etsuo; et al. (84j:14040)
- Orbanz, Ulrich See Herrmann, Manfred. (84h:13024) and Abhyankar, Shreeram S., (84m:14013)
- Perron, Bernard Le nœud "huit" est algébrique réel. [The figure-eight knot is real algebraic] (84d:57005)
- Peskin, Barbara R. On rings of invariants with rational singularities. (84e:14036)
- Ramis, Jean-Pierre See Martinet, Jean. (84k:34011)
- Robbiano, Lorenzo On normal flatness and some related topics. (84i:13021)
- (with Valla, Giuseppe) Free resolutions for special tangent cones. (84k:13019)
- Spivakovsky, Mark A counterexample to Hironaka's "hard" polyhedra game. (84g:14014)
- Steenbrink, J. H. M. Hodge theory: analysis or geometry? (84c:58012)
- Tadini, W. M. (with Loibel, G. F.) Length of the Boardman symbol and the degree of a polynomial. (Portuguese) (84k:58041)
- Valla, Giuseppe See Robbiano, Lorenzo. (84k:13019)
- Vetter, Udo The depth of the module of differentials of a generic determinantal singularity. (84g:13025)
- Yamada, Akio (with Matsumoto, Yukio) Network induction and resolution diagrams of the Brieskorn singularities. (84k:32015)
- Yau, Stephen S.-T. See Mather, John N., (84c:32007)
- Yoshinaga, Etsuo (with Ohyana, Shigeki; Hiura, Masayuki) Remarks on maximally elliptic singularities. (84j:14040)

14B07 Deformations of singularities [See also 14D15, 32C40, 32G05, 32G11, 32G13.]

- Greuel, Gert-Martin (with Steenbrink, J. H. M.) On the topology of smoothable singularities. 84m:14006
- Iarrobino, Anthony Deforming complete intersection Artin algebras. Appendix: Hilbert function of $\mathbb{C}[x,y]/I$. 84j:14010
- O'Shea, Donal B. Finite jumps in Milnor number imply vanishing folds. 84d:14001
- Steenbrink, J. H. M. See Greuel, Gert-Martin, 84m:14006
- Wirthmüller, Klaus Deformations of fat points of Boardman type 2,0. 84h:14008

secondary classifications:

- Chang, Hai Ch'ao The existence of plane nodal curves. (84h:14011)
- Iarrobino, Anthony Deformations of zero-dimensional complete intersections after M. Granger, T. Gaffney. (84j:14012)
- Lafer, Henry B. Weak simultaneous resolution for deformations of Gorenstein surface singularities. (84k:32030)
- Lipman, Joseph Equimultiplicity, reduction, and blowing up. (84c:13023)
- Mérindol, J.-Y. Les singularités simples elliptiques, leurs déformations, les surfaces de del Pezzo et les transformations quadratiques. [Simple elliptic singularities, their deformations, the del Pezzo surfaces and quadratic transformations] (84c:14029)
- Perron, Bernard " μ constant" implique "type topologique constant" en dimension complexe trois. (English summary) [" μ constant" implies "constant topological type" in complex dimension three] (84g:32020)
- Pfister, Gerhard Invariants of singularities and Newton polyhedron. (84j:14009)
- Suzuki, Masahiko The μ -number constant stratum of a quasihomogeneous function of corank two is smooth. (84j:58028)
- Varchenko, A. N. A lower bound for the codimension of the $\mu = \text{const}$ stratum in terms of the mixed Hodge structure. (Russian. English summary) (84g:32033)
- Wahl, Jonathan M. Derivations of negative weight and nonsmoothability of certain singularities. (84h:14043)

14B10 Infinitesimal methods

secondary classifications:

- Cossart, Vincent Desingularization of embedded excellent surfaces. (84k:14011)
- Iarrobino, Anthony Deforming complete intersection Artin algebras. Appendix: Hilbert function of $\mathbb{C}[x,y]/I$. (84j:14010)

14B12 Local deformation theory, Artin approximation, etc.

- Artin, Michael (with Denef, Jan) Smoothing of a ring homomorphism along a section. 84m:14007
- Brown, Martin Lawrence A class of 2-dimensional local rings with Artin's approximation property. 84j:14011
- Denef, Jan See Artin, Michael, 84m:14007
- van den Dries, Lou A specialization theorem for analytic functions on compact sets. 84f:14003
- Iarrobino, Anthony Deformations of zero-dimensional complete intersections after M. Granger, T. Gaffney. 84j:14012

secondary classifications:

- Artin, Michael Algebraic structure of power series rings. (84h:13014)
- Becker, Joseph (with Denef, Jan; Lipsitz, L.) The approximation property for some 5-dimensional Henselian rings. (84j:13027)
- Denef, Jan See Becker, Joseph; et al. (84j:13027)
- Hoffman, Jerome William Counterexamples to the lifting problem for singularities. (84j:13027)
- Ischebeck, Friedrich Binäre Formen und Primideale. (English summary) [Binary forms and prime ideals] (84g:13003)
- Kosarew, Siegmund Konvergenz formaler komplexer Räume mit konvexem oder konkavem Normalenbündel. [Convergence of formal complex spaces with convex or concave normal bundle] (84e:14007)
- Lipsitz, L. See Becker, Joseph; et al. (84j:13027)
- Rothaus, Christel Potenzreihenweiterung und formale Fasern in lokalen Ringen mit Approximationseigenschaft. (English summary) [Power series extension and formal fibres in local rings with the approximation property] (84j:13023)
- Schemmel, Klaus-Peter Eine notwendige und hinreichende Bedingung für die Approximationseigenschaft analytischer Potenzreihenringe über einem Körper beliebiger Charakteristik. [A necessary and sufficient condition for the approximation property of analytic power series rings over a field of arbitrary characteristic] (84j:13003)

14B15 Local cohomology [See also 32C36.]

secondary classifications:

- Brodmann, Markus A lifting result for local cohomology of graded modules. (84c:13014)
- Brylinski, Jean-Luc Differential operators on the flag varieties. (84e:14035)
- Goto, Shiro Blowing-up of Buchsbaum rings. (84h:13032)
- Oishi, Akira Castelnuovo's regularity of graded rings and modules. (84m:13024)
- Sally, Judith D. Reductions, local cohomology and Hilbert functions of local rings. (84g:13037)

14B20 Formal neighborhoods

- Gordon, William John Picard groups of blowings-up of Henselian rings. 84a:14004a
- Brauer groups of local rings with conelike singularities. 84a:14004b

secondary classifications:

- Babakhanian, Ari (with Hironaka, Heisuke) Formal functions over Grassmannians. (84c:14006)
- Brezuleanu, A. (with Rothaus, Christel) Eine Bemerkung über Ringe mit geometrisch normalen formalen Fasern. [A comment on rings with geometrically normal formal fibres] (84g:13012)
- Contiglozzi Penna, Anna Maria Some properties of Veronese surfaces. (Italian) (84c:14035)
- Hironaka, Heisuke See Babakhanian, Ari. (84c:14006)
- Rothaus, Christel See Brezuleanu, A., (84g:13012)

14B25 Local structure of maps: étale, flat, etc. [See also 13-XX, 14E40.]

- Emsalem, Jacques Singularisation des courbes et passage au quotient généralisé. [Singularization of curves and passage to the generalized quotient] 84c:14002
- Herrmann, Manfred (with Orbanz, Ulrich) Two notes on flatness. 84j:14013
- Herzog, Bernd A criterion for tangential flatness. 84m:14008
- Orbanz, Ulrich See Herrmann, Manfred, 84j:14013

14B99 None of the above, but in this section

- Goze, Michel Perturbations sur une variété algébrique: application à l'étude locale de la variété des lois d'algèbres de Lie sur \mathbb{C}^n . (English summary) [Perturbations on an algebraic variety: application to the variety of Lie algebra structures] 84b:14002
- Massaza, Carla On some axiomatic aspects of Nagata's criterion. (Italian. English summary) 84d:14002

secondary classifications:

- Hopkins, Glenn An algebraic approach to Grothendieck's residue symbol. (84d:14009)

14Cxx Cycles and subschemes

14C05 Parametrization (Chow and Hilbert schemes)

- Angéniol, B. Schéma de Chow. [The Chow scheme] **84g:14004**
- Conte, Alberto. Conics on complete intersections and the Hodge conjecture for some of them. **84j:14014**
- Gotzmann, Gerd. Einige einfach-zusammenhängende Hilbertschemata. [Some simply connected Hilbert schemes] **84c:14003**
- Huibregtse, Mark E. The Albanese mapping for a punctual Hilbert scheme. II. Symmetrized differentials and singularities. **84h:14009**
- Le Barz, Patrick. Un lemme sur les fibrés normaux. (English summary) [A lemma on normal bundles] **84j:14015**
- Piense, Ragni. Degenerations of complete twisted cubics. **84h:14010**
- Plà Garcia, Héctor. The Hilbert scheme of surfaces of degree $g+1$ in \mathbb{P}^{g+2} . (Spanish. English summary) **84f:14004**
- secondary classifications:
- Coray, Daniel F. Enumerative geometry of rational space curves. **(84g:14057)**
- Iarrobino, Anthony. Deforming complete intersection Artin algebras. Appendix: Hilbert function of $\mathbb{C}[x,y]/I$. **(84j:14010)**
- Ishii, Shihoko. Moduli space of polarized del Pezzo surfaces and its compactification. **(84h:14042)**
- Józefiak, Tadeusz. (with Lascoux, Alain; Pragacz, Piotr) Classes of determinantal varieties associated with symmetric and antisymmetric matrices. **(84j:14052)**
- Lascoux, Alain. See Józefiak, Tadeusz; et al., **(84j:14052)**
- Picco Botta, Luciana. (with Verra, Alessandro) The nonrationality of the generic Enriques' threefold. **(84m:14045)**
- Pragacz, Piotr. See Józefiak, Tadeusz; et al., **(84j:14052)**
- Verra, Alessandro. See Picco Botta, Luciana, **(84m:14045)**

14C10 Equivalence relations

- Ceresa, Giuseppe. (with Collino, Alberto) Some remarks on algebraic equivalence of cycles. **84f:14006**
- C is not algebraically equivalent to C^* in its Jacobian. **84f:14005**
- Collino, Alberto. See Ceresa, Giuseppe, **84f:14006**
- Ferrer, J. (with Panyella, F.) Homology and Chern classes of smooth hypersurfaces in multiple-projective spaces. (Spanish. English summary) **84g:14005**
- Greco, Silvio. (with Valabrega, Paolo) On the theory of adjoints. II. (Italian summary) **84a:14005**
- Harris, Bruno. Homological versus algebraic equivalence in a Jacobian. **84m:14009**
- Panyella, F. See Ferrer, J., **84g:14005**
- Valabrega, Paolo. See Greco, Silvio, **84a:14005**

secondary classifications:

- Drechsler, Konrad. (with Sterz, Ulrich) Die Kohomologiering der Varietäten der p -l-Kegelschnitte und der p -l-s Kegelschnitte. [The cohomology rings of the varieties of p -l-conic sections and p -l-s conic sections] **(84k:14042)**
- Risler, Jean-Jacques. Sur l'homologie des surfaces algébriques réelles. [On the homology of real algebraic surfaces] **(84c:14019)**
- Roggero, Margherita. Sur la factorialité de l'anneau des fonctions polynomiales d'une variété réelle. (English summary) [On the factoriality of the polynomial ring on a real variety] **(84j:14019)**
- Silhol, R. A bound on the order of $H_2^{et}(X, \mathbb{Z}/2)$ on a real algebraic variety. **(84c:14024)**
- Sterz, Ulrich. See Drechsler, Konrad, **(84k:14042)**

14C15 Rational equivalence rings

- Ischebeck, Friedrich. On real one-dimensional cycles. **84h:14011**

secondary classifications:

- Ilori, Samuel A. Subvarieties of flag bundles. (Italian summary) **(84k:14040)**
- Mohan Kumar, N. (with Murthy, M. Pavaman) Algebraic cycles and vector bundles over affine three-folds. **(84d:14006)**
- Murthy, M. Pavaman. See Mohan Kumar, N., **(84d:14006)**
- Speiser, Robert. Triple contact of plane curves: Schubert's enumerative theory. **(84k:14045)**

14C17 Intersection theory

- Fulton, William. (with Lazarsfeld, Robert) Positivity and excess intersection. **84f:14007**
- Gillet, Henri. Universal cycle classes. **84j:14016**
- Lazarsfeld, Robert. See Fulton, William, **84f:14007**
- Morales, Marcelo. Une propriété asymptotique des puissances symboliques d'un idéal. Application à la théorie de l'intersection sur les surfaces normales. (English summary) [An asymptotic property of the symbolic powers of an ideal. Application to the theory of the intersection of normal surfaces] **84c:14006**

secondary classifications:

- Hiller, Howard. Combinatorics and intersections of Schubert varieties. **(84b:14028)**
- Kleiman, Steven L. Multiple point formulas for maps. **(84j:14059)**
- Lanteri, Antonio. (with Palleschi, Marino) On polarized algebraic manifolds with relative sectional genus one. (Italian summary) **(84h:14046)**
- Le Barz, Patrick. Formules multiséchant pour les courbes gauches quelconques. [Multisequant formulas for arbitrary space curves] **(84m:14063)**
- Palleschi, Marino. See Lanteri, Antonio, **(84h:14046)**

14C20 Divisors, linear systems

- Arbarello, E. (with Ciliberto, Ciro) Adjoint hypersurfaces to curves in \mathbb{P}^r following Petri. **84c:14004**
- Bădescu, Lucian. On ample divisors. II. **84c:14004**
- Bese, Ekin M. On the spannedness and very ampleness of certain line bundles on the blow-ups of \mathbb{P}_C^2 and F_r . **84g:14006**
- Buium, Alexandru. Degree of the fibres of an elliptic fibration. **84j:14017**
- Ciliberto, Ciro. See Arbarello, E., **84c:14004**
- Fujita, Takao. Theorems of Bertini type for certain types of polarized manifolds. **84d:14003**
- Ghione, Franco. La conjecture de Brill-Noether pour les surfaces réglées. [The Brill-Noether conjecture for ruled surfaces] **84c:14005**
- Green, Mark L. The canonical ring of a variety of general type. **84c:14006**
- Homma, Yuko. On projective Cohen-Macaulayness of a del Pezzo surface embedded by a complete linear system. **84b:14003**
- Martens, Gerriet. Eine Charakterisierung glatter ebener Kurven. [A characterization of smooth plane curves] **84m:14010**
- Nagata, Masayoshi. Some problems on linear systems of plane curves. **84f:14008**
- Palleschi, Marino. On divisors and hypersurfaces of the first kind of a nonsingular algebraic variety. (Italian. English summary) **84j:14018**
- Plà Garcia, Héctor. Weierstrass divisors. (Spanish. English summary) **84h:14012**
- Roggero, Margherita. Sur la factorialité de l'anneau des fonctions polynomiales d'une variété réelle. (English summary) [On the factoriality of the polynomial ring on a real variety] **84j:14019**
- Rotondaro, Giovanni. See de Vito, Paola, **84g:14007**
- de Vito, Paola. (with Rotondaro, Giovanni) Certain covariant curves of a linear system of curves. (Italian. English summary) **84g:14007**

secondary classifications:

- Esnault, Hélène. (with Viehweg, Eckart) Sur une minoration du degré d'hypersurfaces s'annulant en certains points. [A lower bound of the degree of hypersurfaces vanishing at certain points] **(84m:14023)**
- Horiuchi, Ryutaro. Gap orders of meromorphic functions on Riemann surfaces. **(84c:14020b)**
- Iskovskikh, V. A. Congruences of conics in \mathbb{P}^3 . (Russian. English summary) **(84c:14025)**
- Kawamata, Yujiro. A generalization of Kodaira-Ramanujam's vanishing theorem. **(84d:14022)**
- Martens, Gerriet. Über den Clifford-Index algebraischer Kurven. [On the Clifford index of algebraic curves] **(84c:14020a)**
- Martinengo, Chiara. On certain divisor class groups on a projective scheme. (Italian. English summary) **(84j:14049)**
- Plà Garcia, Héctor. Hyperelliptic curves in \mathbb{P}^N and certain systems of hyperquadrics. (Spanish) **(84i:14021)**
- Viehweg, Eckart. See Esnault, Hélène, **(84m:14023)**
- Wall, C. T. C. Geometric invariant theory of linear systems. **(84m:14012)**
- Wilson, P. M. H. Some questions on the canonical ring of threefolds of general type. **(84c:14033)**

14C21 Webs, nets [See also 53A60.]

secondary classifications:

- Chern, S. S. Web geometry. **(84g:53024)**
- Dye, R. H. Osculating hyperplanes and a quartic combinatorial of the nonsingular model of the Kummer and Weddle surfaces. **(84j:14057)**
- Tyurin, A. N. The structure of the variety of pairs of commuting pencils of symmetric matrices. (Russian) **(84a:14026)**

14C22 Picard groups

secondary classifications:

- Bouvier, Alain. The local class group of a Krull domain. **(84c:13023)**
- Fried, M. A note on principal ideals and smooth curves. **(84h:14041)**
- Martinengo, Chiara. On certain divisor class groups on a projective scheme. (Italian. English summary) **(84j:14049)**
- Roggenkamp, K. W. (with Scott, Leonard L.) Hecke actions on Picard groups. **(84c:12008)**
- Scott, Leonard L. See Roggenkamp, K. W., **(84c:12008)**
- Selder, Erich. Picard-Zahlen komplexer Tori. (English summary) [Picard numbers of complex tori] **(84m:32039)**
- Tannenbaum, Allen. On pole assignability over polynomial rings. **(84j:93044)**
- Verschoren, A. Exact sequences for relative Brauer groups and Picard groups. **(84c:13017)**

14C25 Zero-cycles

secondary classifications:

- Huibregtse, Mark E. The Albanese mapping for a punctual Hilbert scheme. II. Symmetrized differentials and singularities. **(84h:14009)**

14C30 Transcendental methods, Hodge theory [See also 32J25.]

- El Zein, Fouad. Complexe de Hodge mixte filtré. (English summary) [Filtered mixed Hodge complex] **84b:14004**
- Dégénérescence diagonale. I. (English summary) [Diagonal degeneration. I] **84i:14008a**
- Dégénérescence diagonale. II. (English summary) [Diagonal degeneration. II] **84i:14008b**

- Griffiths, Phillip Poincaré and algebraic geometry. **84j:14020**
 Kawamata, Yujiro Kodaira dimension of certain algebraic fiber spaces. **84g:14008**
 Sampson, J. H. Higher Jacobians and cycles on abelian varieties. **84c:14005**
 Shioda, Tetsuji What is known about the Hodge conjecture? **84k:14007**
 Tu, Loring W. Hodge theory and the local Torelli problem. **84k:14008**
 Zarkhin, Yu. G. Hodge groups of $K3$ surfaces. **84g:14009**

secondary classifications:

- Beauville, Armand Les singularités du diviseur Θ de la jacobienne intermédiaire de l'hypersurface cubique dans P^4 . [The singularities of the theta-divisor of the intermediate Jacobian of the cubic hypersurface in P^4] **(84c:14030)**
 Cattani, Eduardo (with Kaplan, Aroldo) Polarized mixed Hodge structures and the local monodromy of a variation of Hodge structure. **(84a:32046)**
 Clemens, C. Herbert Applications of mixed Hodge theory to the study of threefolds. **(84b:32040)**
 Degeneration techniques in the study of threefolds. **(84g:14048)**
 Collino, Alberto The fundamental group of the Fano surface. I, II. **(84f:14029)**
 Conte, Alberto Conics on complete intersections and the Hodge conjecture for some of them. **(84j:14014)**
 Demailly, Jean-Pierre Courants positifs extrémaux et conjecture de Hodge. [Extremal positive currents and the Hodge conjecture] **(84f:32007)**
 Dolgachev, Igor V. Cohomologically insignificant degenerations of algebraic varieties. **(84g:14010)**
 Friedman, Robert David (with Smith, Roy Campbell) Singularities of period maps and the weak global Torelli problem. **(84i:14020)**
 Hoffman, Jerome William An example in the theory of degenerating algebraic curves. (Italian summary) **(84g:14026)**
 The Hodge theory of flat vector bundles on a complex torus. **(84j:32038)**
 Kaplan, Aroldo See Cattani, Eduardo, **(84a:32046)**
 Kuga, Michio Algebraic cycles in gtfabv. **(84g:14042)**
 Ribet, Kenneth A. Generalization of a theorem of Tankeev. **(84k:14051)**
 Smith, Roy Campbell See Friedman, Robert David, **(84i:14020)**
 Steenbrink, J. H. M. Cohomologically insignificant degenerations. **(84g:14011)**
 Hodge theory: analysis or geometry? **(84c:58012)**
 Tikhomirov, A. S. Singularities of the theta-divisor of the intermediate Jacobian of the double P^3 of index two. (Russian) **(84c:14032)**
 Varchenko, A. N. A lower bound for the codimension of the $\mu = \text{const}$ stratum in terms of the mixed Hodge structure. (Russian. English summary) **(84g:32033)**

14C35 Applications of methods of algebraic K -theory [See also 14F05, 18F25.]

secondary classifications:

- Coombes, K. R. (with Srinivas, V.) Relative K -theory and vector bundles on certain singular varieties. **(84c:14015)**
 Relative algebraic K -theory. **(84c:14016)**
 Gillet, Henri Universal cycle classes. **(84j:14016)**
 Merkur'ev, A. S. (with Suslin, A. A.) K -cohomology of Severi-Brauer varieties and the norm residue homomorphism. (Russian) **(84c:12007)**
 Srinivas, V. Vector bundles on the cone over a curve. **(84c:14017)**
 See also Coombes, K. R., **(84c:14015)**
 Suslin, A. A. Algebraic K -theory. (Russian) **(84b:18006)**
 See also Merkur'ev, A. S., **(84c:12007)**

14C40 Riemann-Roch theorems [See also 14F12.]

secondary classifications:

- Bracho, J. (with Recillas Pishmish, Sevin) The Prym-canonical mapping of an algebraic curve. (Spanish) **(84c:14027)**
 Goppa, V. D. Algebraic-geometric codes. (Russian) **(84g:94011)**
 Kawamata, Yujiro A generalization of Kodaira-Ramanujam's vanishing theorem. **(84i:14022)**
 Recillas Pishmish, Sevin See Bracho, J., **(84c:14027)**

14C99 None of the above, but in this section

secondary classifications:

- Seiple, J. G. Complete conics of S_2 and their model variety $\Omega_3^{[27]}$. **(84i:14037)**

14Dxx Families, fibrations

14D05 Structure of families (Picard-Lefschetz, Picard-Fuchs theory, etc.)

- Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Multidimensional Hermite interpolation and Padé approximation. **84h:14013**
 Chudnovsky, Gregory V. See Chudnovsky, D. V., **84h:14013**
 Jimbo, Michio (with Miwa, Tetsuji) Deformation of linear ordinary differential equations. I, II. **84k:14009**
 Katz, Nicholas M. A conjecture in the arithmetic theory of differential equations. (French summary) **84h:14014a**
 Corrections to: "A conjecture in the arithmetic theory of differential equations". **84h:14014b**
 Miwa, Tetsuji See Jimbo, Michio, **84k:14009**
 Ohtsuki, Makoto On the number of apparent singularities of a linear differential equation. **84h:14015**

secondary classifications:

- Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Introduction. **(84i:14001)**
 Chudnovsky, Gregory V. See Chudnovsky, D. V., **(84i:14001)**
 Date, Etsurō (with Jimbo, Michio; Kashiwara, Masaki; Miwa, Tetsuji) Transformation groups for soliton equations. III. Operator approach to the Kadomtsev-Petviashvili equation. **(84m:58117a)**
 (with Jimbo, Michio; Kashiwara, Masaki; Miwa, Tetsuji) Transformation groups for soliton equations. IV. A new hierarchy of soliton equations of KP-type. **(84m:58117b)**
 Erugin, N. P. ★Проблема Римана. (Russian) [The Riemann problem] **(84h:34015)**
 Goldstein, Norman Ampleness in complex homogeneous spaces and a second Lefschetz theorem. **(84i:32044)**
 Greuel, Gert-Martin (with Steenbrink, J. H. M.) On the topology of smoothable singularities. **(84m:14006)**
 Harper, John R. See Mandelbaum, Richard, **(84f:14028)**
 Jimbo, Michio (with Miwa, Tetsuji; Mōri, Yasuko; Sato, Mikio) Density matrix of an impenetrable Bose gas and the fifth Painlevé transcendent. **(84k:82037)**
 See also Miwa, Tetsuji, **(84j:81081)**; Date, Etsurō; et al., **(84m:58117a)** and **(84m:58117b)**
 Kashiwara, Masaki (with Miwa, Tetsuji) Transformation groups for soliton equations. I. The τ function of the Kadomtsev-Petviashvili equation. **(84m:58119)**
 See also Date, Etsurō; et al., **(84m:58117a)** and **(84m:58117b)**
 Kimura, Hironobu On the isomonodromic deformation of a linear ordinary differential equation of the third order. **(84c:58200)**
 Kimura, Toshihisa On the isomonodromic deformation for linear ordinary differential equations of the second order. II. **(84h:34021)**
 Klein, Felix ★Vorlesungen über die hypergeometrische Funktion. (German) [Lectures on the hypergeometric function] **(84b:01060)**
 Mandelbaum, Richard (with Harper, John R.) Global monodromy of elliptic Lefschetz fibrations. **(84f:14028)**
 Mebkhout, Zoghman The Riemann-Hilbert problem in higher dimension. **(84c:32012)**
 Miwa, Tetsuji Deformation of linear ordinary differential equations. IV. **(84k:34012)**
 (with Jimbo, Michio) Theory of τ -functions. Monodromy preserving deformation and quantum field theories. (Japanese) **(84j:81081)**
 See also Jimbo, Michio; et al., **(84k:82037)**; Date, Etsurō; et al., **(84m:58117a)**; **(84m:58117b)** and Kashiwara, Masaki, **(84m:58119)**
 Morgan, John W. Topological triviality of various analytic families. **(84j:32024)**
 Mōri, Yasuko On τ functions of a class of Painlevé type equations. I. **(84h:34019)**
 See also Jimbo, Michio; et al., **(84k:82037)**
 Nguyễn Hữu Đức Systèmes de Gauss-Manin à bord et stabilité de l'interaction analytique. (English summary) **(84j:58127)**
 Porter, R. Michael Prescribed monodromy on noncompact surfaces. **(84f:32023)**
 Ramakrishnan, Dinakar On the monodromy of higher logarithms. **(84b:53049)**
 Saito, Kyoji Primitive forms for a universal unfolding of a function with an isolated critical point. **(84c:32031)**
 Sato, Mikio See Jimbo, Michio; et al., **(84k:82037)**
 Steenbrink, J. H. M. See Greuel, Gert-Martin, **(84m:14006)**
 Stiller, Peter F. On the uniformization of certain curves. **(84j:14031)**
 Ueno, Kimio The application of monodromy preserving deformation to the gravitational field equation. **(84d:83016)**
 Ulrich, Bernd The embedding dimension of the formal moduli space of certain curve singularities. **(84a:14014)**
 Waldi, Rolf ★Äquivalente Deformation monomialer Kurven. (German) [Equivariant deformation of monomial curves] **(84a:14015)**

14D10 Arithmetic ground fields (finite, local, global)

secondary classifications:

- Baldassarri, Francesco Differential modules and singular points of p -adic differential equations. **(84i:12021)**

14D15 Formal methods; deformations [See also 13D10, 14B07, 16A58, 32Gxx.]

- Babakhanian, Ari (with Hironaka, Heisuke) Formal functions over Grassmannians. **84c:14006**
 Bădescu, Lucian Hyperplane sections and deformations. (See **84a:00012**)
 Dolgachev, Igor V. Cohomologically insignificant degenerations of algebraic varieties. **84g:14010**
 Hironaka, Heisuke See Babakhanian, Ari, **84c:14006**
 Kii, K. I. A local Torelli theorem for bundles over a manifold with $K=0$. (Russian) **84i:14009**
 Kosarew, Siegmund Konvergenz formaler komplexer Räume mit konvexem oder konkavem Normalenbündel. [Convergence of formal complex spaces with convex or concave normal bundle] **84c:14007**
 Persson, Ulf (with Pinkham, Henry) Some examples of nonsmoothable varieties with normal crossings. **84k:14010**
 Pinkham, Henry See Persson, Ulf, **84k:14010**
 Ramanathan, A. Deformations of principal bundles on the projective line. **84d:14004**
 Steenbrink, J. H. M. Cohomologically insignificant degenerations. **84g:14011**

secondary classifications:

- Aleksandrov, A. G. Deformations of bouquets of quasihomogeneous one-dimensional singularities. (Russian) **(84m:32028)**
 Becker, Joseph (with Denef, Jan; Lipshitz, L.) The approximation property for some 5-dimensional Henselian rings. **(84j:13027)**
 Denef, Jan See Becker, Joseph; et al., **(84j:13027)**

- Ihara, Yasutaka Lifting curves over finite fields together with the characteristic correspondence $\Pi + \Pi'$. (84c:14023)
 Levine, Marc Stability of irrational ruled threefolds. (84c:14023)
 Lipshitz, L. See Becker, Joseph, et al., (84j:13027)
 Mazzola, Guerinio How to count the number of irreducible components of the schemes of finite-dimensional algebra structures. (84d:16039)
 Namikawa, Yukihiko "Stable" degeneration of algebraic varieties. (84d:14030)
 Schafft, Ulrich Nichtsepariertheit instabiler Rang-2-Vektorbündel auf P_2 . [Nonseparatedness of unstable rank-two vector bundles on P_2] (84f:14016)
 Schumacher, Georg Deformationen von Keimen eigentlicher, holomorpher Abbildungen. (English summary) [Deformations of germs of proper, holomorphic mappings] (84g:32036)

14D20 Algebraic moduli problems {For analytic moduli problems, see 32G13.}

- Fujita, Takao Corrections to "On L -dimension of coherent sheaves" [J. Fac. Sci. Univ. Tokyo Sect. IA Math. 28 (1981), no. 2, 215–236; MR 83d:14009]. 84g:14012
 On hyperelliptic polarized varieties. 84h:14016
 Ishii, Shihoko Global moduli of equisingular complete curves. 84a:14006
 Matsusaka, T. On polarized varieties of dimension 3. III. 84d:14005
 Wall, C. T. C. Pencils of real binary cubics. 84m:14011

secondary classifications:

- Barth, Wolf Paul Irreducibility of the space of mathematical instanton bundles with rank 2 and $c_2 = 4$. (84a:14010)
 Campana, Frédéric Réduction algébrique d'un morphisme faiblement Kähleriens propre et applications. [Algebraic reduction of a proper weakly Kähler morphism and applications] (84j:32014)
 Chang, Mei Chu Stable rank 2 reflexive sheaves on P^3 with large c_3 . (84m:14021)
 Commault, C. See Dion, J. M., (84b:93017)
 Dion, J. M. (with Commault, C.) Smith-McMillan factorizations at infinity of rational matrix functions and their control interpretation. (84b:93017)
 Drechsler, Konrad (with Sterz, Ulrich) Berührungsbedingungen für p - l -s-Kegelschnitte. [Conditions of contact for p - l -s conic sections] (84g:14056a)
 (with Sterz, Ulrich) Eine Anzahlbestimmung für mittelbar superskulierende Kegelschnitte. [A determination of number for directly supersculating conic sections] (84g:14056b)
 (with Sterz, Ulrich) Ausgeartete Berührungsbedingungen auf Kegelschnittmännigfaltigkeiten. [Degenerate contact conditions on conic section varieties] (84k:14041)
 Ellia, Philippe Faisceaux réflexifs stables: le spectre n'est pas toujours constant. (English summary) [Stable reflexive sheaves: the spectrum is not always constant] (84m:14022)
 Ellingsrud, Geir Sur l'irréductibilité du module des fibres stables sur P^2 . [Irreducibility of the moduli space of stable bundles on P^2] (84c:14021)
 Hartshorne, Robin (with Sols Lucia, Ignacio) Stable rank 2 vector bundles on P^3 with $c_1 = -1$, $c_2 = 2$. (84c:14014)
 Kazhdan, David On arithmetic varieties. II. (84h:22020)
 Lanteri, Antonio (with Palleschi, Marino) On polarized algebraic manifolds with relative sectional genus one. (Italian summary) (84h:14046)
 Levine, Marc Deformations of irregular threefolds. (84c:14028)
 Nishiguchi, Kenji Kodaira dimension is not necessarily lower semicontinuous under degenerations of surfaces. (84m:14038)
 Palleschi, Marino See Lanteri, Antonio, (84h:14046)
 Sols Lucia, Ignacio See Hartshorne, Robin, (84c:14014)
 Spindler, Heinz Holomorphe Vektorbündel auf P_n mit $c_1 = 0$ und $c_2 = 1$. (English summary) [Holomorphic vector bundles on P_n with $c_1 = 0$ and $c_2 = 1$] (84j:14024)
 Sterz, Ulrich See Drechsler, Konrad, (84g:14056a); (84g:14056b) and (84k:14041)
 Tai, Yung-Sheng On the Kodaira dimension of the moduli space of abelian varieties. (84b:10040)
 Tannenbaum, Allen Families of curves with nodes on $K3$ surfaces. (84g:14025)

14D22 Fine structure of moduli spaces

secondary classifications:

- Bertin, José (with Elencwajg, G.) Symétries des fibrés vectoriels sur P^n et nombre d'Euler. [Symmetries of vector bundles over P^n and the Euler number] (84f:14012)
 Ein, Lawrence Some stable vector bundles on P^4 and P^5 . (84c:14010)
 Elencwajg, G. See Bertin, José, (84f:14012)
 Hirschowitz, André (with Narasimhan, M. S.) Fibrés de 't Hooft spéciaux et applications. [Special 't Hooft bundles and applications] (84g:14016)
 Narasimhan, M. S. See Hirschowitz, André, (84g:14016)
 Newstead, P. E. Pencils on conic bundles. (84c:14013)
 Okonek, Christian Moduli extremer reflexiver Garben auf P^n . [Moduli of extreme reflexive sheaves on P^n] (84c:14007)
 Rego, C. J. Compactification of the space of vector bundles on a singular curve. (84f:14015)
 Rudakov, A. N. (with Zink, Thomas; Shafarevich, Igor R.) The effect of height on degenerations of algebraic $K3$ surfaces. (Russian) (84a:14018)
 Shafarevich, Igor R. See Rudakov, A. N.; et al., (84a:14018)
 Zink, Thomas See Rudakov, A. N.; et al., (84a:14018)

14D25 Geometric invariants [See also 14L30.]

- Kraft, Hanspeter Geometric methods in representation theory. 84c:14007
 Popov, V. L. Homological dimension of algebras of invariants. 84c:14012
 Wall, C. T. C. Geometric invariant theory of linear systems. 84m:14012

secondary classifications:

- Dicks, Warren (with Formanek, Edward) Poincaré series and a problem of S. Montgomery. (84c:15032)
 Fogarty, John Geometric quotients are algebraic schemes. (84m:14056)
 Formanek, Edward See Dicks, Warren, (84c:15032)
 (Gherardelli, Francesco) See Invariant theory, (84c:14004)
 Gieseker, D. ★ Lectures on moduli of curves. (84h:14035)
 Ishii, Shihoko Moduli space of polarized del Pezzo surfaces and its compactification. (84h:14042)
 Kimura, Tatsuo Remark on some combinatorial construction of relative invariants. (84g:20078)
 Nakajima, Haruhisa Relative invariants of finite groups. (84c:13006)
 Raynaud, Michel Fibrés vectoriels instables—applications aux surfaces (d'après Bogomolov). [Unstable vector bundles—applications to surfaces (after Bogomolov)] (84g:14017)
 Rotillon, Denis See Watanabe, Keiichi, (84c:13008)
 Rudin, Walter Proper holomorphic maps and finite reflection groups. (84d:32038)
 Watanabe, Keiichi (with Rotillon, Denis) Invariant subrings of $C[X, Y, Z]$ which are complete intersections. (84c:13008)
 Invariant theory ★ Invariant theory. (84c:14004)
 Montecatini ★ Invariant theory. (84c:14004)
 Session:
 CIME, invariant theory ★ Invariant theory. (84c:14004)

14D99 None of the above, but in this section

14Exx Mappings and correspondences

14E05 Rational maps, birational correspondences

- Cumino, Caterina On the order of branches. 84f:14009
 Danilov, V. I. Birational geometry of three-dimensional toric varieties. (Russian) 84c:14008
 Jasniak, Zbigniew On a certain closed chain of the twisted cubic curves C^3 received with help of involutorial cubic transformation of Cremona. 84h:14017
 Noguchi, Junjiro (with Sunada, Toshikazu) Finiteness of the family of rational and meromorphic mappings into algebraic varieties. 84c:14009
 Nurmahonov, B. N. Sequence for determining a Cremona transformation from a given pre-image and image. (Russian) 84f:14010
 Sunada, Toshikazu See Noguchi, Junjiro, 84c:14009

secondary classifications:

- Angermüller, Gerhard On some conditions for a polynomial map with constant Jacobian to be invertible. (84c:13005)
 Friedman, Robert David (with Morrison, David R.) The birational geometry of degenerations: an overview. (84g:14032)
 Itaka, Shigeru ★ Algebraic geometry. (84j:14001)
 Kawamata, Yujiro Kodaira dimension of certain algebraic fiber spaces. (84g:14008)
 Kulikov, Vik. S. Decomposition of birational mappings of three-dimensional varieties outside of codimension 2. (Russian) (84j:14022)
 Meisters, Gary H. Jacobian problems in differential equations and algebraic geometry. (84c:58048)
 Morrison, David R. See Friedman, Robert David, (84g:14032)
 Sarkisov, V. G. On conic bundle structures. (Russian) (84h:14047)
 Shpiz, G. B. Some geometric structures on algebraic varieties. (Russian) (84j:14056)

14E07 Structure of Cremona group and generalizations

- Gizatullin, M. Kh. Defining relations for the Cremona group of the plane. (Russian) 84c:14010
 Umemura, Hiroshi Maximal algebraic subgroups of the Cremona group of three variables. Imprimitive algebraic subgroups of exceptional type. 84b:14005
 On the maximal connected algebraic subgroups of the Cremona group. I. 84g:14013

secondary classifications:

- Du Val, Patrick Crystallography and Cremona transformations. (84h:52013)
 Furushima, Mikio Finite groups of polynomial automorphisms in the complex affine plane. I. (84m:14016)
 Langov, A. S. An invariant of a pair of circular curves of degree m with a common $m(-1)$ -tuple point in the geometry of cubic birational transformations. (Bulgarian. English and Russian summaries) (84j:51049)
 Shamsuddin, Ahmad On automorphisms of polynomial rings. (84h:13013)
 Syarova, A. B. A group of quadratic Cremona transformations of a special type in the space P_3 . (Bulgarian. English and Russian summaries) (84h:51056)

14E10 General correspondences

- Howard, Alan (with Sommese, Andrew John) On the orders of the automorphism groups of certain projective manifolds. 84c:14011
 Sommese, Andrew John See Howard, Alan, 84c:14011
 Spangher, Walter Degenerability of algebraic correspondences. (Italian. English summary) 84c:14008

secondary classifications:

- Greenleaf, Newcomb (with May, Coy L.) Bordered Klein surfaces with maximal symmetry. (84f:14022)
 May, Coy L. See Greenleaf, Newcomb, (84f:14022)

14E15 Global theory of singularities, resolution [See also 14B05, 32C45.]

Abhyankar, Shreeram S. ★Weighted expansions for canonical desingularization. **84m:14013**

Cossart, Vincent Desingularization of embedded excellent surfaces. **84k:14011**

González-Sprinberg, Gerardo Résolution de Nash des points doubles rationnels. (English summary) [Nash resolution of rational double points] **84m:14014**

Herrmann, Manfred (with Orbanz, Ulrich) Remark on a paper by B. Singh on certain numerical characters of singularities: "Relations between certain numerical characters of singularities" [J. Pure Appl. Algebra **16** (1980), no. 1, 99–108; MR **81m:14010**, **84k:14018**]

Hironaka, Heisuke On Nash blowing-up. **84k:14012**

Lejeune-Jalabert, Monique Désingularisation explicite des surfaces quasi-homogènes dans \mathbb{C}^3 . [Explicit desingularization of quasihomogeneous surfaces in \mathbb{C}^3] **84j:14021**

Orbanz, Ulrich See Herrmann, Manfred, **84k:14018** and Abhyankar, Shreeram S., **84m:14013**

Sakai, Fumio Normal Gorenstein surfaces and blowing ups. **84k:14013**

(Singh, Balwant) See Herrmann, Manfred; et al., **84k:14018**

Spivakovsky, Mark A counterexample to Hironaka's "hard" polyhedra game. **84g:14014**

Xu, Sen Lin The estimate $s \leq 2^n - 1$ of the number s of steps in the splitting by rank process for an algebraic variety in \mathbb{C}^n or \mathbb{R}^n is the best possible. (Chinese summary) **84k:14011**

secondary classifications:

Ancona, Vincenzo (with Tomassini, Giuseppe) ★Modifications analytiques. (French) [Analytic modifications] (**84g:32022**)

Bellaccini, Barbara Proper morphisms, formal fibers and desingularizations. (Italian) (**84k:14001**)

Proper morphisms and excellent schemes. (**84k:14006**)

Demushkin, A. S. Combinatorial invariance of toric singularities. (Russian. English summary) (**84f:14036**)

Giraud, Jean Improvement of Grauert-Riemenschneider's theorem for a normal surface. (French summary) (**84f:14025**)

González-Sprinberg, Gerardo Cycle maximal et invariant d'Euler local des singularités isolées de surfaces. [Maximal cycle and local Euler invariant of isolated singularities of surfaces] (**84g:14033**)

Goresky, R. Mark (with MacPherson, Robert D.) Stratified Morse theory. (**84k:58017**)

Ishii, Shihoko A characterization of hyperplane cuts of smooth complete intersections. (**84f:14033**)

Laufer, Henry B. Weak simultaneous resolution for deformations of Gorenstein surface singularities. (**84k:32030**)

MacPherson, Robert D. See Goresky, Mark, (**84k:58017**)

Matsumoto, Yukio See Yamada, Akio, (**84k:32015**)

Matsumura, Hideyuki Recent developments in the theory of excellent rings. (**84k:13007**)

Peskin, Barbara R. Quotient-singularities and wild p -cyclic actions. (**84k:13018**)

Robbiano, Lorenzo On normal flatness and some related topics. (**84k:13021**)

Rudolph, Lee Algebraic functions and closed braids. (**84e:57012**)

Steenbrink, J. H. M. Hodge theory: analysis or geometry? (**84e:58012**)

Tomassini, Giuseppe See Ancona, Vincenzo, (**84g:32022**)

Vicente, José L. Zariski equisingular stratification of a variety. (Spanish) (**84f:14002**)

Yamada, Akio (with Matsumoto, Yukio) Network induction and resolution diagrams of the Brieskorn singularities. (**84k:32015**)

14E20 Coverings, fundamental group

Esnault, Hélène (with Viehweg, Eckart) Revêtements cycliques. [Cyclic coverings] **84m:14015**

Furushima, Mikio Finite groups of polynomial automorphisms in the complex affine plane. I. **84m:14016**

Kambayashi, T. (with Srinivas, V.) On étale coverings of the affine space. **84m:14017**

Moh, T. T. On the Jacobian conjecture and the configurations of roots. **84m:14018**

Srinivas, V. See Kambayashi, T., **84m:14017**

Viehweg, Eckart See Esnault, Hélène, **84m:14015**

Vistoli, Angelo Glueing of closed points and the algebraic and topological fundamental group. (Italian) **84m:14019**

secondary classifications:

Angermüller, Gerhard On some conditions for a polynomial map with constant Jacobian to be invertible. (**84k:13005**)

Bass, Hyman The Jacobian conjecture and inverse degrees. (**84k:13007**)

Collino, Alberto The fundamental group of the Fano surface. I, II. (**84f:14029**)

Connell, E. (with van den Dries, Lou) Injective polynomial maps and the Jacobian conjecture. (**84m:13006**)

Douai, Jean-Claude (with Touibi, C.) Courbes définies sur les corps de séries formelles et loi de réciprocité. [Curves defined over fields of formal power series, and a reciprocity law] (**84i:12010**)

van den Dries, Lou See Connell, E., (**84m:13006**)

Gurjar, Rajendra V. Varieties dominated by \mathbb{C}^* . (**84a:32024**)

Kashiwara, Masaki Quasi-unipotent constructible sheaves. (**84f:32009**)

Khashin, S. I. On the irregularity of double planes. (Russian) (**84m:14041**)

Libgober, Anatoly S. Alexander polynomial of plane algebraic curves and cyclic multiple planes. (**84g:14030**)

Nousiainen, Pekka (with Sweedler, Moss E.) Automorphisms of polynomial and power series rings. (**84i:13004**)

Platte, Erich Nicht-ausgetartete reguläre Überlagerungen. [Nondegenerate regular coverings] (**84a:13024**)

Raynaud, Michel Sections des fibrés vectoriels sur une courbe. (English summary)

[Sections of vector bundles over a curve] (**84a:14009**)

Sweedler, Moss E. See Nousiainen, Pekka, (**84i:13004**)

Touibi, C. See Douai, Jean-Claude, (**84i:12010**)

14E22 Ramification problems [See also 12B10.]

Ein, Lawrence The ramification divisors for branched coverings of \mathbb{P}_k^n . **84c:14009**

Zak, F. L. Projections of algebraic varieties. (Russian) **84k:14012**

secondary classifications:

Mednykh, A. D. On the solution of the Hurwitz problem on the number of nonequivalent coverings over a compact Riemann surface. (Russian) (**84c:14024**)

Peskin, Barbara R. Quotient-singularities and wild p -cyclic actions. (**84k:13018**)

14E25 Imbeddings

Mohan Kumar, N. (with Murthy, M. Pavaman) Curves with negative self-intersection on rational surfaces. **84e:14012**

Murthy, M. Pavaman See Mohan Kumar, N., **84e:14012**

Rudolph, Lee Embeddings of the line in the plane. **84k:14019**

secondary classifications:

Babakhanian, Ari (with Hironaka, Heisuke) Formal functions over Grassmannians. (**84k:14006**)

Chen, Bang-yen (with Kuan, Wei Eihn) Sous-variétés produits et plongement de Segre. (English summary) [Product submanifolds and the Segre imbedding] (**84m:53066**)

Fujita, Takao On the topology of noncomplete algebraic surfaces. (**84g:14035**)

Hironaka, Heisuke See Babakhanian, Ari, (**84k:14006**)

Kuan, Wei Eihn See Chen, Bang-yen, (**84m:53066**)

Papantonopoulou, A. Embeddings in $G(1,3)$. (**84k:14030**)

Zak, F. L. Projections of algebraic varieties. (Russian) (**84k:14012**)

14E30 Minimal models

14E35 Results in dimension ≤ 3

Kulikov, Vik. S. Decomposition of birational mappings of three-dimensional varieties outside of codimension 2. (Russian) **84j:14022**

secondary classifications:

Danilov, V. I. Birational geometry of three-dimensional toric varieties. (Russian) (**84k:14008**)

Mori, Shigefumi Threefolds whose canonical bundles are not numerically effective. (**84k:14031**)

Threefolds whose canonical bundles are not numerically effective. (**84k:14032**)

Nurmakhanov, B. N. Sequence for determining a Cremona transformation from a given pre-image and image. (Russian) (**84f:14010**)

Stanilova, L. R. Transformation of the rulings of a three-dimensional surface with a double plane. (Bulgarian. English and Russian summaries) (**84k:51054**)

14E40 Local structure of maps: étale, flat, etc. [See also 13–XX, 14B25.]

secondary classifications:

Constantinescu, Adrian Schemes dominated by algebraic varieties and applications. (**84m:14005**)

Emmalem, Jacques Singularisation des courbes et passage au quotient généralisé. [Singularization of curves and passage to the generalized quotient] (**84k:14002**)

14E99 None of the above, but in this section

secondary classifications:

Fujita, Takao Theorems of Bertini type for certain types of polarized manifolds. (**84k:14003**)

14Fxx Cohomology theory [See also 13Dxx.]

14F05 Vector bundles, sheaves, related constructions [See also 18F20, 46M20.]

Aupetit, Hubert Principaux résultats sur les fibrés stables de rang 2 sur $\mathbb{P}_1(\mathbb{C})$. (See **84j:14026**)

Fibrés stables de rang 2 sur $\mathbb{P}^2 \mathbb{C}$ avec $c_1 = 0$, $c_2 = 2$. (See **84j:14026**)

Baldassarri Ghezzi, S. (with Chiaruttini, S.) The representation of certain \tilde{A} -modules. (Italian) **84k:14013**

Ballico, Edoardo (with Oliverio, Paolo) Automorphisms of rank-3 bundles over a curve. (Italian. English summary) **84f:14011**

Barth, Wolf Paul Stable vector bundles on \mathbb{P}_1 , some experimental data. (See **84j:14026**)

Bertin, José (with Elencwajg, G.) Symétries des fibrés vectoriels sur \mathbb{P}^n et nombre d'Euler. [Symmetries of vector bundles over \mathbb{P}^n and the Euler number] **84f:14012**

Brun, Jérôme (with Hirschowitz, André) Droites de saut des fibrés stables de rang élevé sur \mathbb{P}_2 . [Jump lines of stable bundles of high rank over \mathbb{P}_2] **84k:14007**

Des fibrés instantons ayant beaucoup de plans instables. (English summary)

[Instanton bundles with many unstable planes] **84m:14020**

Chang, Mei Chu Stable rank 2 reflexive sheaves on \mathbb{P}^3 with large c_1 . **84m:14021**

A bound on the order of jumping lines. **84g:14015**

Chiaruttini, S. See Baldassarri Ghezzi, S., **84k:14013**

Decker, Wolfram Über den Modul-Raum für stabile 2-Vektorbündel über \mathbb{P}_3 mit $c_1 = -1$, $c_2 = 2$. (English summary) [On the moduli space for stable 2-vector bundles over \mathbb{P}_3 with $c_1 = -1$, $c_2 = 2$] **84k:14020**

- Douady, Adrien** Construction de Horrocks et critère de Barth. (See 84j:14026)
Théorème d'annulation. (See 84j:14026)
See also Yang-Mills equations. 84j:14006
- Ein, Lawrence** Some stable vector bundles on P^4 and P^5 . 84c:14010
(with Hartshorne, Robin; Vogelaar, Hans) Restriction theorems for stable rank 3 vector bundles on P^n . 84b:14006
- Elençwaj, G.** See Bertin, José. 84f:14012
- Elia, Philippe** Faisceaux réflexifs stables: le spectre n'est pas toujours constant. (English summary) [Stable reflexive sheaves: the spectrum is not always constant] 84m:14022
- Ellingsrud, Geir** Sur l'irréductibilité du module des fibrés stables sur P^2 . [Irreducibility of the moduli space of stable bundles on P^2] 84c:14021
- Esnault, Hélène** (with Viehweg, Eckart) Sur une minoration du degré d'hypersurfaces s'annulant en certains points. [A lower bound of the degree of hypersurfaces vanishing at certain points] 84m:14023
- Ferrand, Daniel** Constructions de fibrés de rang deux. (See 84j:14026)
- Griffith, Phillip** Simple bundles of rank three. 84a:14008
- Hartshorne, Robin** (with Sols Lucia, Ignacio) Stable rank 2 vector bundles on P^3 with $c_1 = -1$, $c_2 = 2$. 84c:14014
(with Hirschowitz, André) Cohomology of a general instanton bundle. 84c:14011
See also Ein, Lawrence; et al. 84b:14006 and Aupetit, Hubert. (See 84j:14026)
- Hirschowitz, André** (with Narasimhan, M. S.) Fibrés de 't Hooft spéciaux et applications. [Special 't Hooft bundles and applications] 84g:14016
See also Brun, Jérôme. 84a:14007 and Hartshorne, Robin. 84c:14011
- Horrocks, Geoffrey** Construction of bundles on P^n . (See 84j:14026)
- Ishimura, Sadao** On a generalization of Schwarzenberger's theorem. (Japanese) 84f:14013
A descent problem of vector bundles and its applications. 84f:14014
- Kapranov, M. M.** The derived category of coherent sheaves on Grassmann varieties. (Russian) 84c:14014
- Knus, Max-Albert** (with Ojanguren, Manuel; Parimala, Raman) Positive-definite quadratic bundles over the plane. 84h:14022
- Mohan Kumar, N.** (with Murthy, M. Pavaman) Algebraic cycles and vector bundles over affine three-folds. 84d:14006
- Murthy, M. Pavaman** See Mohan Kumar, N. 84d:14006
- Narasimhan, M. S.** See Hirschowitz, André. 84g:14016
- Newstead, P. E.** Pencils on conic bundles. 84i:14013
- Ojanguren, Manuel** (with Parimala, Raman; Sridharan, R.) Indecomposable quadratic bundles of rank 4n over the real affine plane. 84j:14023
See also Knus, Max-Albert; et al. 84h:14022
- Okonek, Christian** Moduli extremer reflexiver Garben auf P^n . [Moduli of extreme reflexive sheaves on P^n] 84d:14007
- Oliverio, Paolo** See Ballico, Edoardo. 84f:14011
- Parimala, Raman** See Knus, Max-Albert; et al. 84h:14022 and Ojanguren, Manuel; et al. 84j:14023
- Raynaud, Michel** Fibrés vectoriels instables—applications aux surfaces (d'après Bogomolov). [Unstable vector bundles—applications to surfaces (after Bogomolov)] 84g:14017
Sections des fibrés vectoriels sur une courbe. (English summary) [Sections of vector bundles over a curve] 84a:14009
- Rego, C. J.** Compactification of the space of vector bundles on a singular curve. 84f:14015
- Schafft, Ulrich** Nichtsepariertheit instabiler Rang-2-Vektorbündel auf P_2 . [Nonseparateness of unstable rank-two vector bundles on P_2] 84f:14016
- Sols Lucia, Ignacio** See Hartshorne, Robin. 84c:14014
- Spindler, Heinz** Holomorphe Vektorbündel auf P_n mit $c_1 = 0$ und $c_2 = 1$. (English summary) [Holomorphic vector bundles on P_n with $c_1 = 0$ and $c_2 = 1$] 84j:14024
- Sridharan, R.** See Ojanguren, Manuel; et al. 84j:14023
- Stiller, Peter F.** Certain reflexive sheaves on P^n and a problem in approximation theory. 84j:14025
- Suslin, A. A.** Cancellation for affine varieties. (Russian) 84c:14012
- Tognoli, Alberto** Coherent algebraic sheaves in real algebraic geometry. 84h:14007
- Trautmann, Günther** Lectures on Yang-Mills fields and vector bundles. (See 84h:81003)
- Tyurin, A. N.** The instanton equations for $(n+1)$ -superpositions of marked $\text{ad } T P^3 \rightarrow \text{ad } T P^3$. 84h:14023
(Verdier, Jean-Louis) See Yang-Mills equations. 84j:14026
- Viehweg, Eckart** See Esnault, Hélène. 84m:14023
- Vogelaar, Hans** See Ein, Lawrence; et al. 84b:14006
- Wahl, Jonathan M.** A cohomological characterization of P^n . 84h:14024
- Astérisque** ★ Les équations de Yang-Mills. (French) [Yang-Mills equations] 84j:14026
- Yang-Mills equations** ★ Les équations de Yang-Mills. (French) [Yang-Mills equations] 84j:14026

secondary classifications:

- Atiyah, Michael** Gauge theory and algebraic geometry. (See 84i:00020)
- Bourguignon, Jean-Pierre** Opérateurs différentiels et théorèmes d'annulation. (See 84j:14026)
- Brumati, Paulo Roberto** (with Lequain, Yves) Number of generators of a module over a ring of polynomials. (84g:13018)
- Cline, Edward T.** (with Parshall, Brian J.; Scott, Leonard L.) A Mackey imprimitivity theory for algebraic groups. (84j:14046)
- Elençwaj, G.** (with Narasimhan, M. S.) Projective bundles on a complex torus. (84h:32034)
- Faltings, Gerd** Verschwindungssätze und Untermannigfaltigkeiten kleiner Kodimension des komplex-projektiven Raumes. [Vanishing theorems and submanifolds of small codimension of the complex-projective space] (84g:14052)
- Gelfand, S. I.** (with MacPherson, Robert D.) Verma modules and Schubert cells: a dictionary. (84h:17004)
- González, Miguel** (with Sols Lucia, Ignacio) On the genus of varieties of codimension 2 in projective space. (84k:14038)
- Griffith, Walter Lawrence, Jr.** $H^*(G/B, L)$ for G of semisimple rank 2. (84i:14033)

- Grinevich, P. G.** See Novikov, S. P. (84c:34036)
- Gubeladze, I. Dzh.** Generalized Serre problem for affine rings generated by monomials. (Russian. English and Georgian summaries) (84h:13009)
- Hitchin, N. J.** Monopoles and geodesics. (84i:53071)
- Holme, Audun** Computation of some projective invariants. (84j:14027)
- Horrocks, Geoffrey** The rank of a module. (84i:13009)
- Iliopoulos, J.** Les équations de Yang-Mills dans la physique des particules élémentaires. (See 84j:14026)
- Iori, Samuel A.** Subvarieties of flag bundles. (Italian summary) (84i:14040)
- Itoh, Mitsuhiro** On the moduli space of anti-self-dual Yang-Mills connections on Kähler surfaces. (84c:58209)
- Knus, Max-Albert** Quaternionen über Polynomringen, quadratischen Formen über $R[x, y]$ und Vektorbündel über $P^2(C)$. [Quaternions over polynomial rings, quadratic forms over $R[x, y]$ and vector bundles over $P^2(C)$] (84m:13012)
- Le Bruyn, Lieven** Homogenization of sheaves and kernel functors. (84f:16003)
- Lequain, Yves** See Brumati, Paulo Roberto. (84g:13018)
- MacPherson, Robert D.** See Gelfand, S. I. (84h:17004)
- Nahm, Werner** The algebraic geometry of multimonomials. (See 84c:00008)
- Narasimhan, M. S.** See Elençwaj, G. (84h:32034)
- Novikov, S. P.** (with Grinevich, P. G.) On the spectral theory of commuting operators of rank 2 with periodic coefficients. (Russian) (84c:34036)
- Novikov, V. A.** See Vainshtein, A. I.; et al. (84c:81056)
- Ogawa, Roy H.** On the surjectivity of $\Gamma(E) \otimes \Gamma(F) \rightarrow \Gamma(E \otimes F)$. (84a:32048)
- Okonek, Christian** 3-Mannigfaltigkeiten im P^3 und ihre zugehörigen stabilen Garben. (English summary) [3-folds in P^3 and their associated stable sheaves] (84g:14039)
- O'Riarteaigh, L.** (with Rouhani, S.; Singh, Lambodar P.) Explicit solution of the Corrigan-Goddard conditions for n monopoles for small values of the parameters. (84j:81083)
- Osborn, Hugh** On the Atiyah-Drinfel'd-Hitchin-Manin construction for self-dual gauge fields. (84h:81073)
- Parshall, Brian J.** See Cline, Edward T.; et al. (84j:14046)
- Ramanathan, A.** Deformations of principal bundles on the projective line. (84d:14004)
- Rouhani, S.** See O'Riarteaigh, L.; et al. (84j:81083)
- Scott, Leonard L.** See Cline, Edward T.; et al. (84j:14046)
- Shifman, M. A.** See Vainshtein, A. I.; et al. (84c:81056)
- Singh, Lambodar P.** See O'Riarteaigh, L.; et al. (84j:81083)
- Sols Lucia, Ignacio** See González, Miguel. (84k:14038)
- Stora, Raymond** See Iliopoulos, J. (See 84j:14026)
- Vainshtein, A. I.** (with Zakharov, V. I.; Novikov, V. A.; Shifman, M. A.) ABC of instantons. (84c:81056)
- Verdier, Jean-Louis** Instantons. (See 84j:14026)
- Vogt, Christian** Line bundles on toroidal groups. (84f:32034)
- Yuan, Hsi Shih** On elliptic fiber bundles. (84a:32047)
- Zakharov, V. I.** See Vainshtein, A. I.; et al. (84c:81056)

14F07 Weierstrass points in one and several variables; gap sheaves

- Engber, Michael** On the Noether gap theorem. 84f:14017
- Kameda, Jiryo** On Weierstrass points whose first nongaps are four. 84k:14015
- Rohrlich, David E.** Some remarks on Weierstrass points. 84d:14008

secondary classifications:

- Duma, Andrei** Die 3-Weierstrass-Punkte über dem Teichmüller-Raum T_2 . (English summary) [The 3-Weierstrass points over the Teichmüller space T_2] (84a:32033)
- Huibregtse, Mark E.** The Albanese mapping for a punctual Hilbert scheme. II. Symmetrized differentials and singularities. (84h:14009)
- Lax, R. F.** Independence of normal Weierstrass points under deformation. (84a:14013)
- Pla García, Hector** N -foliations and Weierstrass points. (Spanish. English summary) (84j:14032)
- Vermeulen, Alexius Maria** ★ Weierstrass points of weight two on curves of genus three. (84j:14036)

14F10 Differentials and other special sheaves

- Guillen Santos, F.** (with Pascual Gainza, P.) On a theorem of Rosenlicht. (Spanish) 84i:14014
- Hopkins, Glenn** An algebraic approach to Grothendieck's residue symbol. 84d:14009
- Pascual Gainza, P.** See Guillén Santos, F. 84i:14014

secondary classifications:

- Esnault, Hélène** (with Viehweg, Eckart) Revêtements cycliques. [Cyclic coverings] (84m:14015)
- Goresky, R. Mark** (with MacPherson, Robert D.) Intersection homology. II. (84i:57012)
- MacPherson, Robert D.** See Goresky, R. Mark. (84i:57012)
- Viehweg, Eckart** See Esnault, Hélène. (84m:14015)

14F12 Riemann-Roch problems [See mainly 14C40, also 32L10, 57R20.]

- Baum, Paul** Fixed point formula for singular varieties. 84j:14018
- Holme, Audun** Computation of some projective invariants. 84j:14027

secondary classifications:

- (Bukhshtaber, V. M.) See Fulton, William; et al. (84m:55001)
- Fulton, William** (with MacPherson, Robert D.) ★ Категорический подход к изучению пространств с особенностями. (Russian) [Categorical framework for the study of singular spaces] (84m:55001)
- Holzappel, R.-P.** Invariants of arithmetic ball quotient surfaces. (84i:14025)
- Kempf, George R.** The elementary theory of correspondences. (84i:14019)

- MacPherson, Robert D. See Fulton, William, (84m:55001)
 Matsusaka, T. On polarized varieties of dimension 3. III. (84d:14005)
 Merkur'ev, A. S. (with Suslin, A. A.) K -cohomology of Severi-Brauer varieties and the norm residue homomorphism. (Russian) (84i:12007)
 (Shokurov, A. V.) See Fulton, William; et al., (84m:55001)
 (Shokurov, V. V.) See Fulton, William; et al., (84m:55001)
 Suslin, A. A. See Merkur'ev, A. S., (84i:12007)

14F15 Serre cohomology, K -theory [See also 13D15, 18F25.]

- Coombes, K. R. (with Srinivas, V.) Relative K -theory and vector bundles on certain singular varieties. (84e:14015)
 Relative algebraic K -theory. (84e:14016)
 Dwyer, William (with Friedlander, Eric M.; Snaith, Victor Percy; Thomason, Robert) Algebraic K -theory eventually surjects onto topological K -theory. (84i:14015)
 Friedlander, Eric M. See Dwyer, William; et al., (84i:14015)
 Gimigliano, Alessandro Complete intersections in products of projective spaces. (Italian. English summary) (84i:14013)
 Grayson, Daniel R. Finite generation of K -groups of a curve over a finite field (after Daniel Quillen). (84i:14018)
 Merkur'ev, A. S. (with Suslin, A. A.) K -cohomology of Severi-Brauer varieties and the norm residue homomorphism. (Russian) (84i:14025)
 Snaith, Victor Percy See Dwyer, William; et al., (84i:14015)
 Srinivas, V. Vector bundles on the cone over a curve. (84e:14017)
 See also Coombes, K. R., (84i:14015)
 Suslin, A. A. See Merkur'ev, A. S., (84i:14025)
 Thomason, Robert See Dwyer, William; et al., (84i:14015)

secondary classifications:

- Brodmann, Markus A lifting result for local cohomology of graded modules. (84c:13014)
 Faltings, Gerd Verschwindungssätze und Untermannigfaltigkeiten kleiner Kodimension des komplex-projektiven Raumes. [Vanishing theorems and submanifolds of small codimension of the complex-projective space] (84g:14052)
 Merkur'ev, A. S. (with Suslin, A. A.) K -cohomology of Severi-Brauer varieties and the norm residue homomorphism. (Russian) (84i:12007)
 Orecchia, Ferruccio The conductor of some one-dimensional rings and the computation of their K -theory groups. (84i:14018)
 Panin, I. A. Fields with vanishing K_2 . Torsion in $H^i(X, \mathbb{Z}_2)$ and $\text{Ch}^2(X)$. (Russian) (84g:12012)
 Stienstra, Jan Operations in the higher K -theory of endomorphisms. (84d:14012)
 Suslin, A. A. Quaternion homomorphism for the field of functions on a conic. (Russian) (84c:12030)
 See also Merkur'ev, A. S., (84i:12007)
 Thomason, R. W. The Lichtenbaum-Quillen conjecture for $K/I_*[\beta^{-1}]$. (84f:18024)
 Wahl, Jonathan M. A cohomological characterization of P^n . (84h:14024)

14F20 Grothendieck cohomology and topology [See also 18F10.]

- Barth, Wolf Paul Irreducibility of the space of mathematical instanton bundles with rank 2 and $c_2 = 4$. (84c:14010)
 Berthelot, P. Le théorème de dualité plate pour les surfaces (d'après J. S. Milne). [The flat duality theorem for surfaces (according to J. S. Milne)] (84j:14028)
 Breen, Lawrence Extensions du groupe additif sur le site parfait. [Extensions of the additive group on the perfect site] (84j:14029)
 Douai, Jean-Claude Suites exactes déduites de la suite spectrale de Leray en cohomologie non abélienne. [Exact sequences derived from the Leray spectral sequences in nonabelian cohomology] (84c:14014)

secondary classifications:

- Douai, Jean-Claude (with Toubi, C.) Courbes définies sur les corps de séries formelles et loi de réciprocité. [Curves defined over fields of formal power series, and a reciprocity law] (84i:12010)
 Dwyer, William (with Friedlander, Eric M.; Snaith, Victor Percy; Thomason, Robert) Algebraic K -theory eventually surjects onto topological K -theory. (84i:14015)
 El Zein, Fouad Complexe de Hodge mixte filtré. (English summary) [Filtered mixed Hodge complex] (84b:14004)
 Ettesse, Jean-Yves Cohomologie du complexe de de Rham-Witt à coefficients dans un F -cristal unité et dualité plate pour les surfaces. (English summary) [Cohomology of the de Rham-Witt complex with coefficients in a unit F -crystal, and flat duality for surfaces] (84g:14019)
 Friedlander, Eric M. See Dwyer, William; et al., (84i:14015)
 Gordon, William John Picard groups of blowings-up of Henselian rings. (84a:14004a)
 Brauer groups of local rings with conelike singularities. (84a:14004b)
 Gotzmann, Gerd Einige einfach-zusammenhängende Hilbertschemata. [Some simply connected Hilbert schemes] (84c:14003)
 Snaith, Victor Percy See Dwyer, William; et al., (84i:14015)
 Suslin, A. A. Cancellation for affine varieties. (Russian) (84c:14012)
 Thomason, Robert See Dwyer, William; et al., (84i:14015)
 Toubi, C. See Douai, Jean-Claude, (84i:12010)
 Verschoren, A. The cohomological Brauer group of a projective variety. (84g:13008)

14F25 Classical real and complex cohomology

- Schiemann, Günther Berechnung der Homologiegruppen singularitätenfreier algebraischer Hyperflächen und Konstruktion von Repräsentanten ihrer Erzeugenden. [Computation of the homology groups of nonsingular algebraic hypersurfaces and construction of representatives of their generators] (84c:14016)

secondary classifications:

- Akyildiz, Ersan (with Carrell, James B.; Lieberman, D. I.; Sommese, Andrew John) On the graded rings associated to holomorphic vector fields with exactly one zero. (84i:14029)
 Brooks, Robert The \hat{A} -genus of complex hypersurfaces and complete intersections. (84i:53062)
 Carrell, James B. See Akyildiz, Ersan; et al., (84i:14029)
 Lieberman, D. I. See Akyildiz, Ersan; et al., (84i:14029)
 Shiota, Masahiro Real algebraic realization of characteristic classes. (84g:14023)
 Sommese, Andrew John See Akyildiz, Ersan; et al., (84i:14029)

14F30 p -adic cohomology, crystalline cohomology

- Ettesse, Jean-Yves Cohomologie du complexe de de Rham-Witt à coefficients dans un F -cristal unité et dualité plate pour les surfaces. (English summary) [Cohomology of the de Rham-Witt complex with coefficients in a unit F -crystal, and flat duality for surfaces] (84g:14019)
 Fontaine, Jean-Marie Sur certains types de représentations p -adiques du groupe de Galois d'un corps local; construction d'un anneau de Barsotti-Tate. [On certain types of p -adic representations of the Galois group of a local field; construction of a Barsotti-Tate ring] (84d:14010)
 Nygaard, Niels O. Slopes of powers of Frobenius on crystalline cohomology. (84d:14011)
 Stienstra, Jan Operations in the higher K -theory of endomorphisms. (84d:14012)

secondary classifications:

- Berthelot, P. Le théorème de dualité plate pour les surfaces (d'après J. S. Milne). [The flat duality theorem for surfaces (according to J. S. Milne)] (84j:14028)
 Deligne, Pierre (with Milne, James Stuart; Ogus, Arthur; Shih, Kuang-yeen) ★ Hodge cycles, motives, and Shimura varieties. (84m:14046)
 Katz, Nicholas M. A conjecture in the arithmetic theory of differential equations. (French summary) (84h:14014a)
 Corrections to: "A conjecture in the arithmetic theory of differential equations". (84h:14014b)
 Milne, James Stuart See Deligne, Pierre; et al., (84m:14046)
 Ogus, Arthur See Deligne, Pierre; et al., (84m:14046)
 Shih, Kuang-yeen See Deligne, Pierre; et al., (84m:14046)
 Zarkhin, Yu. G. Cohomology of algebraic varieties and representations of semisimple Lie algebras. (Russian) (84d:17009)

14F35 Homotopy theory

- Cherenack, Paul Cones and comparisons in ind-affine homotopy theory. (84c:14017)

secondary classifications:

- Bertin, José Sur la topologie des surfaces affines réglées. [On the topology of ruled affine surfaces] (84c:14018)
 Cherenack, Paul A Cartesian closed extension of a category of affine schemes. (84j:14007)
 Finashin, S. M. Topology of the complement of a real algebraic curve in \mathbb{CP}^2 . (Russian. English summary) (84a:14016)
 Friedlander, Eric M. ★ Étale homotopy of simplicial schemes. (84h:55012)
 Morava, Jack Cohomology of some improper group actions. (84b:55035)
 Sommese, Andrew John Complex subspaces of homogeneous complex manifolds. II. Homotopy results. (84d:32040)
 Vistoli, Angelo Glueing of closed points and the algebraic and topological fundamental group. (Italian) (84m:14019)

14F40 de Rham cohomology [See also 14C30, 32C35, 32L10.]

secondary classifications:

- Kita, Michitake (with Noumi, Masatoshi) On the structure of cohomology groups attached to the integral of certain many-valued analytic functions. (84m:32040)
 Noumi, Masatoshi See Kita, Michitake, (84m:32040)

14F45 Topological properties

- Bertin, José Sur la topologie des surfaces affines réglées. [On the topology of ruled affine surfaces] (84c:14018)
 Fidler, T. Pencils of lines and the topology of real algebraic curves. (Russian) (84e:14019)
 Zvonilov, V. I. Complex orientations of real algebraic curves with singularities. (Russian) (84g:14020)

secondary classifications:

- Coste, Michel Ensembles semi-algébriques. [Semialgebraic sets] (84c:14023)
 Delfs, Hans (with Knebusch, Manfred) Zur Theorie der semialgebraischen Wege und Intervalle über einem reell abgeschlossenen Körper. [On the theory of semialgebraic paths and intervals over a real-closed field] (84f:14020)
 Ferrer, J. (with Panyella, F.) Homology and Chern classes of smooth hypersurfaces in multiple-projective spaces. (Spanish. English summary) (84g:14005)
 Fujita, Takao On the topology of noncomplete algebraic surfaces. (84g:14035)
 Hamu, Helmut A. Zur Homotopietyp Steinscher Räume. [On the homotopy type of Stein spaces] (84i:32021)
 Ishikawa, Goo On degrees of nonroughness of real projective varieties. (84m:14031)
 Knebusch, Manfred See Delfs, Hans, (84f:14020)
 Panyella, F. See Ferrer, J., (84g:14005)
 Risler, Jean-Jacques Sur l'homologie des surfaces algébriques réelles. [On the homology of real algebraic surfaces] (84c:14019)

- Schiemann, Günther Homologiegruppen von Schnitten zweier Quadriken des P_4 und Repräsentanten ihrer Erzeugenden. [Homology groups of intersections of two quadrics of the P_4 and representatives of their generators] (84m:14043)
- Silhol, R. A bound on the order of $H_2^{et}(X, \mathbb{Z}/2)$ on a real algebraic variety. (84e:14024)
- Zvonilov, V. I. Complex topological characteristics of real algebraic curves on a surface. (Russian) (84h:14033)

14F99 None of the above, but in this section

secondary classifications:

- Delfs, Hans (with Knebusch, Manfred) On the homology of algebraic varieties over real closed fields. (84b:14010)
- Knebusch, Manfred See Delfs, Hans. (84b:14010)
- Papadima, Ștefan Homotopie rationnelle des espaces de Thom et problèmes de lissage. (English summary) [Rational homotopy of Thom spaces and smoothing problems] (84c:55012)
- Strano, Rosario On the affineness of Hensel schemes. (84e:14004)
- Van Oystaeyen, F. (with Verschoren, A.) On the Brauer group of a projective curve. (84g:13005)
- Verschoren, A. See Van Oystaeyen, F., (84g:13005)

14Gxx Special ground fields, arithmetic problems {For complex multiplication, see 10D25, 14K22. For automorphic and modular functions and forms, see also 10Dxx, 14K15.}

14G05 Rationality questions

- Platonov, V. P. Birational properties of spinor varieties. (Russian) (84b:14008)
- Sansuc, Jean-Jacques Descente et principe de Hasse pour certaines variétés rationnelles. [Descent and Hasse principle for certain rational varieties] (84h:14026)
- Tamagawa, Tsuneo On regularly closed fields. (84m:14024)

secondary classifications:

- Borovoi, M. V. The Hodge group and the algebra of endomorphisms of an abelian variety. (Russian) (84m:14047)
- Brattström, Gudrun Jacobi-sum Hecke characters of a totally real abelian field. (84m:12014)
- Bremner, Andrew (with Morton, Patrick) A new characterization of the integer 5906. (84i:10016)
- Cassels, J. W. S. (with Schinzel, Andrzej) Selmer's conjecture and families of elliptic curves. (84d:14028)
- Kamienny, S. Points of order p on elliptic curves over $\mathbb{Q}(\sqrt{p})$. (84g:14047)
- Kani, Ernst Nonstandard methods in Diophantine geometry. (See 84c:10003)
- Kunyavskii, B. E. (with Tsfasman, M. A.) The Néron-Severi torus of a rational surface. (Russian) (84c:14025)
- Morton, Patrick See Bremner, Andrew. (84i:10016)
- Schinzel, Andrzej See Cassels, J. W. S., (84d:14028)
- Small, Charles On the equation $xyz = x + y + z = 1$. (84c:14038)
- Tsfasman, M. A. See Kunyavskii, B. E., (84c:14025)

14G10 Zeta functions and related questions [See also 12A70, 12B30.]

- Boutot, Jean-François (with Breen, Lawrence; Gérardin, Paul; Giraud, Jean; Labesse, Jean-Pierre; Milne, James Stuart; Soule, Christophe) Variétés de Shimura et fonctions L . (French) [Shimura varieties and L -functions] (84m:14025)
- Breen, Lawrence See Boutot, Jean-François; et al., (84m:14025)
- Gérardin, Paul See Boutot, Jean-François; et al., (84m:14025)
- Giraud, Jean See Boutot, Jean-François; et al., (84m:14025)
- Gross, Benedict H. On the conjecture of Birch and Swinnerton-Dyer for elliptic curves with complex multiplication. (84e:14020)
- Kamienny, S. On $J_1(p)$ and the conjecture of Birch and Swinnerton-Dyer. (84j:14030)
- (with Stevens, G.) Special values of L -functions attached to $X_1(N)$. (84g:14021)
- Labesse, Jean-Pierre See Boutot, Jean-François; et al., (84m:14025)
- Milne, James Stuart See Boutot, Jean-François; et al., (84m:14025)
- Rapoport, M. (with Zink, Thomas) Über die lokale Zetafunktion von Shimuravarietäten. Monodromiefiltration und verschwindende Zyklen in ungleicher Charakteristik. [On the local zeta function of Shimura varieties. Monodromy filtration and vanishing cycles in unequal characteristic] (84i:14016)
- Schneider, Peter On the values of the zeta function of a variety over a finite field. (84h:14027)
- Soule, Christophe See Boutot, Jean-François; et al., (84m:14025)
- Stevens, G. See Kamienny, S., (84g:14021)
- Zink, Thomas The local L -factor of a Shimura variety at a bad prime. (84c:14018)
- See also Rapoport, M., (84i:14016)

secondary classifications:

- Anderson, Greg W. Logarithmic derivatives of Dirichlet L -functions and the periods of abelian varieties. (84j:10041)
- Bremner, Andrew (with Morton, Patrick) A new characterization of the integer 5906. (84i:10016)
- Goldfeld, Dorian Sur les produits partiels eulériens attachés aux courbes elliptiques. (English summary) [On the partial Euler products associated with elliptic curves] (84d:14031)
- Goldstein, Catherine Courbes elliptiques et théorie d'Iwasawa. (French) [Elliptic curves and Iwasawa theory] (84h:14049)
- Hooley, C. On exponential sums and certain of their applications. (84h:10053)

- Mazur, Barry C. (with Wiles, Andrew) Analogies between function fields and number fields. (84g:12003)

- Moreno, Carlos J. ★Advanced analytic number theory. Part I. (84j:12015)
- Morita, Yasuo Reduction modulo \mathfrak{P} of Shimura curves. (84c:10039)
- Morton, Patrick See Bremner, Andrew. (84i:10016)
- Murty, V. Kumar On the Sato-Tate conjecture. (84e:14021)
- Perrin-Riou, Bernadette Descente infinie et hauteur p -adique sur une courbe elliptique. [Infinite descent and p -adic height on an elliptic curve] (84m:14048)
- Rakhimov, I. S. Decomposition of the Jacobi variety of a Fermat curve. (Russian) (84i:14020)
- Rubenthaler, Hubert Espaces préhomogènes de type parabolique. [Prehomogeneous spaces of parabolic type] (84j:17009)
- Rubin, Karl (with Wiles, Andrew) Mordell-Weil groups of elliptic curves over cyclotomic fields. (84h:12017)
- Congruences for special values of L -functions of elliptic curves with complex multiplication. (84h:12018)
- (Schappacher, Norbert) See Goldstein, Catherine. (84h:14049)
- Schneider, Peter Zur Vermutung von Birch und Swinnerton-Dyer über globale Funktionenkörper. [On the conjecture of Birch and Swinnerton-Dyer over global function fields] (84i:14027)
- Soulé, Christophe On K -theory and values of zeta functions. (84j:12012)
- Stark, H. M. The Coates-Wiles theorem revisited. (84c:14039)
- Wiles, Andrew See Mazur, Barry C., (84g:12003) and Rubin, Karl. (84h:12017)
- Yager, Rodney I. On two variable p -adic L -functions. (84b:14020)

14G13 Weil-Tate conjectures [See also 14Cxx.]

- Murty, V. Kumar On the Sato-Tate conjecture. (84e:14021)

secondary classifications:

- Glazunov, N. M. A mathematical machine that is oriented towards the study of Diophantine equations. III. (Russian) (84c:10001)
- Ihara, Yasutaka Some remarks on the number of rational points of algebraic curves over finite fields. (84c:14016)
- Manin, Yu. I. What is the maximum number of points on a curve over \mathbb{F}_q ? (84c:14015)
- Schneider, Peter On the values of the zeta function of a variety over a finite field. (84h:14027)
- Zimmer, Horst G. Untergruppen der rationalen Punktgruppe einer elliptischen Kurve. [Subgroups of the group of rational points of an elliptic curve] (84g:14043)

14G15 Finite ground fields

- Ihara, Yasutaka Some remarks on the number of rational points of algebraic curves over finite fields. (84c:14016)
- Manin, Yu. I. What is the maximum number of points on a curve over \mathbb{F}_q ? (84c:14015)
- Matthews, C. R. Some arithmetic problems on automorphisms of algebraic varieties. (84c:14022)

secondary classifications:

- Bartocci, Umberto (with Ughi, Emanuela) Triplets of consecutive squares in a Galois field. (Italian. English summary) (84h:12030)
- Drinfel'd, V. G. Two-dimensional t -adic representations of the fundamental group of a curve over a finite field and automorphic forms on $GL(2)$. (84c:12011)
- Goss, David On a new type of L -function for algebraic curves over finite fields. (84g:12017)
- Grayson, Daniel R. Finite generation of K -groups of a curve over a finite field (after Daniel Quillen). (84f:14018)
- Ihara, Yasutaka Congruence relations and fundamental groups. (84c:14022)
- Lifting curves over finite fields together with the characteristic correspondence $\Pi + \Pi'$. (84c:14023)
- Keedwell, Anthony Donald Comment on: "When is a (k, n) -arc of $PG(2, q)$ embeddable in a unique algebraic plane curve of order n ?" [Rend. Mat. (6) 12 (1979), no. 3-4, 397-410; MR 81g:51006] (Italian summary) (84d:51018)
- Magasumov, G. S. See Rozenfel'd, B. A., (84g:14055)
- Mazur, Barry C. (with Wiles, Andrew) Analogies between function fields and number fields. (84g:12003)
- Menghini, Marta A class of blocking sets in $PG(2, q)$. (Italian. English summary) (84f:51029)
- Rozenfel'd, B. A. (with Magasumov, G. S.) Cell decompositions of manifolds of forms of simplicity. (Russian) (84g:14055)
- Schneider, Peter On the values of the zeta function of a variety over a finite field. (84h:14027)
- Small, Charles On the equation $xyz = x + y + z = 1$. (84c:14038)
- Ughi, Emanuela See Bartocci, Umberto. (84h:12030)
- Wiles, Andrew See Mazur, Barry C., (84g:12003)
- Yu, Jing Transcendental numbers arising from Drinfel'd modules. (84c:10030)

14G20 p -adic ground fields (local fields)

- Herrlich, Frank p -adisch diskontinuierlich einbettbare Graphen von Gruppen. [p -adically discontinuously embeddable graphs of groups] (84d:14013)
- Kanevskii, D. S. On an example of Manin. (84h:14028)
- Néron, A. Fonctions theta p -adiques. [p -adic theta-functions] (84h:14029)
- van der Put, Marius Étale coverings of a Mumford curve. (84m:14026)
- Strauss, Leon Poles of a two-variable p -adic complex power. (84c:14019)
- Van Steen, Guido Non-Archimedean Schottky groups and hyperelliptic curves. (84h:14030)

secondary classifications:

- (Adolphson, Alan) See Dwork, Bernard M., (84g:12031)
- Anderson, Greg W. Logarithmic derivatives of Dirichlet L -functions and the periods of abelian varieties. (84j:10041)
- Berzijs, A. A p -adic analogue of Tate height. (Russian) (84g:14046)
- Dwork, Bernard M. ★ Lectures on p -adic differential equations. (84g:12031)
- Fontaine, Jean-Marc Sur certains types de représentations p -adiques du groupe de Galois d'un corps local; construction d'un anneau de Barsotti-Tate. [On certain types of p -adic representations of the Galois group of a local field; construction of a Barsotti-Tate ring] (84d:14010)
- Gerritzen, L. Die Jacobi-Abbildung über dem Raum der Mumfordkurven. [The Jacobi mapping over the space of Mumford curves] (84f:14021)
- Lütkebohmert, Werner Ein globaler Starrheitssatz für Mumfordkurven. [A global rigidity theorem for Mumford curves] (84h:14036)
- van der Put, Marius Revêtements étales d'une courbe de Mumford. [Étale coverings of a Mumford curve] (See 84c:10004)
- Robba, P. Sur les équations différentielles linéaires p -adiques. II. [On p -adic linear differential equations. II] (84d:12017)
- Rudakov, A. N. (with Zink, Thomas; Shafarevich, Igor R.) The effect of height on degenerations of algebraic $K3$ surfaces. (Russian) (84a:14018)
- Shafarevich, Igor R. See Rudakov, A. N.; et al., (84a:14018)
- Zarkhin, Yu. G. Cohomology of algebraic varieties and representations of semisimple Lie algebras. (Russian) (84d:17009)
- Zelevinskii, A. V. The p -adic analogue of the Kazhdan-Lusztig conjecture. (Russian) (84g:22039)
- Zink, Thomas See Rudakov, A. N.; et al., (84a:14018)

14G25 Global ground fields

- Gross, Benedict H. Heegner points on $X_0(11)$. 84f:14019
- Kunyavskii, B. E. Arithmetic properties of three-dimensional algebraic tori. (Russian) 84m:14027
- McCallum, William G. The degenerate fibre of the Fermat curve. 84m:14028
- Rakhimov, I. S. Decomposition of the Jacobi variety of a Fermat curve. (Russian) 84c:14020
- Rohrich, David E. Elliptic curves with good reduction everywhere. 84c:14017
- Rubin, Karl Iwasawa theory and elliptic curves: supersingular primes. (See 84c:10003)
- Shioda, Tetsuji Geometry of Fermat varieties. (See 84a:10004)
- Zimmer, Horst G. Lokale und globale Höhenfunktionen auf elliptischen Kurven. [Local and global height functions on elliptic curves] 84c:14021

secondary classifications:

- Bertrand, Daniel Valeurs de fonctions thêta et hauteurs p -adiques. [Values of theta functions and p -adic heights] (See 84h:10005)
- Bombieri, Enrico On Weil's "théorème de décomposition". (84g:14029)
- Cassels, J. W. S. The Mordell-Weil group of curves of genus 2. (84c:14032)
- Coray, Daniel F. The Hasse principle for pairs of quadratic forms. (See 84c:10003)
- Douai, Jean-Claude (with Touibi, C.) Courbes définies sur les corps de séries formelles et loi de réciprocité. [Curves defined over formal power series, and a reciprocity law] (84i:12010)
- Suites exactes déduites de la suite spectrale de Leray en cohomologie non abélienne. [Exact sequences derived from the Leray spectral sequences in nonabelian cohomology] (84c:14014)
- Gekeler, Ernst-Ulrich Zur Arithmetik von Drinfel'd-Moduln. [On the arithmetic of Drinfel'd modules] (84j:12010)
- Goldstein, Catherine Un théorème à la manière de Damerell. [A theorem of Damerell type] (See 84c:10004)
- Gross, Benedict H. Minimal models for elliptic curves with complex multiplication. (84j:14044)
- Jacquinot, Olivier Théorie de Kummer sur une extension d'une courbe elliptique par G_m . [Kummer theory on an extension of an elliptic curve by G_m] (84m:14049)
- Kamienny, S. On $J_1(p)$ and the conjecture of Birch and Swinnerton-Dyer. (84j:14030)
- Points of order p on elliptic curves over $\mathbb{Q}(\sqrt{p})$. (84g:14047)
- (with Stevens, G.) Special values of L -functions attached to $X_1(N)$. (84g:14021)
- Kani, Ernst Nonstandard methods in Diophantine geometry. (See 84c:10003)
- Kenku, M. A. On the number of Q -isomorphism classes of elliptic curves in each Q -isogeny class. (84c:14036)
- Kubert, Daniel S. (with Lang, Serge) ★ Modular units. (84h:12009)
- Lang, Serge See Kubert, Daniel S., (84h:12009)
- Laska, Michael An algorithm for finding a minimal Weierstrass equation for an elliptic curve. (84e:14033)
- Matthews, C. R. Some arithmetic problems on automorphisms of algebraic varieties. (84e:14022)
- Merkur'ev, A. S. (with Suslin, A. A.) K -cohomology of Severi-Brauer varieties and the norm residue homomorphism. (Russian) (84i:12007)
- Mestre, Jean-François Construction d'une courbe elliptique de rang ≥ 12 . (English summary) [Construction of an elliptic curve of rank ≥ 12] (84h:14019)
- Perrin-Riou, Bernadette Descente infinie et hauteur p -adique sur une courbe elliptique. [Infinite descent and p -adic height on an elliptic curve] (84m:14048)
- Raynaud, Michel Courbes sur une variété abélienne et points de torsion. [Curves on an abelian variety and torsion points] (84c:14021)
- Schneider, Peter Height pairings in the Iwasawa theory of abelian varieties. (84m:14050)
- p -adic height pairings. I. (84e:14034)
- Silverman, Joseph H. The cubic Thue equation. (See 84a:10004)
- Integer points on curves of genus 1. (84g:10033)
- Heights and the specialization map for families of abelian varieties. (84k:14033)
- Sprindzhuk, V. G. Diophantine equations with prime unknowns. (Russian) (84d:12001)
- Stark, H. M. The Coates-Wiles theorem revisited. (84c:14039)

Stevens, G. See Kamienny, S., (84g:14021)

Suslin, A. A. See Merkur'ev, A. S., (84i:12007)

Tate, John Variation of the canonical height of a point depending on a parameter. (84h:14034)

Touibi, C. See Douai, Jean-Claude, (84i:12010)

Waldschmidt, Michel Diophantine properties of the periods of the Fermat curve. (See 84a:10004)

Sous-groupes analytiques de groupes algébriques. [Analytic subgroups of algebraic groups] (84j:10046)

Yamazaki, Tadashi A Poisson formula for a quasihomogeneous polynomial. (84h:12023)

14G30 Real ground fields [See also 32C05. Must also be assigned at least one other number referring to the specific type of problem considered.]

Bröcker, Ludwig Real spectra and distributions of signatures. 84d:14014

Brumfiel, G. W. Real valuation rings and ideals. 84g:14022

Coste, Michel (with Coste-Roy, Marie-Françoise) Le spectre réel et la topologie des variétés algébriques sur un corps réel clos. [The real spectrum and the topology of algebraic varieties over a real-closed field] (See 84c:14002)

Ensembles semi-algébriques. [Semialgebraic sets] 84c:14023

See also Coste-Roy, Marie-Françoise, 84h:14009

Coste-Roy, Marie-Françoise (with Coste, Michel) Le spectre réel et la topologie des variétés algébriques sur un corps réel clos. [The real spectrum and the topology of algebraic varieties over a real-closed field] 84h:14009

Faisceau structural sur le spectre réel et fonctions de Nash. [Structure sheaf on the real spectrum and Nash functions] 84d:14015

See also Coste, Michel, (See 84c:14002)

Delfs, Hans (with Knebusch, Manfred) Zur Theorie der semialgebraischen Wege und Intervalle über einem reell abgeschlossenen Körper. [On the theory of semialgebraic paths and intervals over a real-closed field] 84f:14020

(with Knebusch, Manfred) On the homology of algebraic varieties over real closed fields. 84h:14010

van den Dries, Lou Some applications of a model theoretic fact to (semi-) algebraic geometry. 84m:14029

Dubois, D. W. (with Recio Muñoz, Tomás J.) Subordinate structure sheaves. 84c:14018

Fiedler, Thomas Eine Beschränkung für die Lage von reellen ebenen algebraischen Kurven. [A restriction on the position of real plane algebraic curves] 84h:14031

Houdebine, Jean (with Mahé, Louis) Séparation des composantes connexes réelles dans le cas des variétés projectives. [Separation of the real connected components in the case of projective varieties] 84m:14030

Ishikawa, Goo On degrees of nonroughness of real projective varieties. 84m:14031

Knebusch, Manfred Isoalgebraic geometry: first steps. 84e:14017

See also Delfs, Hans, 84h:14010 and 84f:14020

Mahé, Louis Signatures et composantes connexes. [Signatures and connected components] 84c:14011

See also Houdebine, Jean, 84m:14030

Marin, Alexis Quelques remarques sur les courbes algébriques planes réelles. [Some remarks on real plane algebraic curves] 84c:14022

Nikulin, V. V. Involutions of integer quadratic forms and their applications to real algebraic geometry. (Russian) 84h:14032

Recio Muñoz, Tomás J. See Dubois, D. W., 84c:14018

Risler, Jean-Jacques Sur l'homologie des surfaces algébriques réelles. [On the homology of real algebraic surfaces] 84c:14019

Schülting, Heinz-Werner Real holomorphy rings in real algebraic geometry. 84d:14016

Schwartz, Niels The strong topology on real algebraic varieties. 84a:14012

Shiota, Masahiro Real algebraic realization of characteristic classes. 84g:14023

Silhol, R. A bound on the order of $H_n^*(X, \mathbb{Z}/2)$ on a real algebraic variety. 84e:14024

Zvonilov, V. I. Complex topological characteristics of real algebraic curves on a surface. (Russian) 84h:14033

secondary classifications:

Alling, Norman L. ★ Real elliptic curves. (84d:14027)

Andradas, C. Normal decompositions of semi-algebraic sets. (84j:32010)

Arason, J. K. (with Pfister, Albrecht) Supplement to the work: "Quadratic forms over affine algebras and an algebraic proof of the Borsuk-Ulam theorem" [J. Reine Angew. Math. 331 (1982), 181-184; MR 83d:10023]. (German) (84h:10027)

Becker, Eberhard Valuations and real places in the theory of formally real fields. (84f:12011)

The real holomorphy ring and sums of $2n$ th powers. (84g:12032)

Benedetti, Riccardo (with Tognoli, Alberto) Théorèmes d'approximation en géométrie algébrique réelle. [Approximation theorems in real algebraic geometry] (See 84e:14002)

(with Tognoli, Alberto) Approximation theorems in real algebraic geometry. (Italian summary) (84h:58004)

Bochnak, Jacek Topology of real analytic sets—some open problems. (84a:32014)

(with Efroymsen, Gustave A.) An introduction to Nash functions. (84b:32013)

(with Kucharz, Wojciech; Shiota, Masahiro) The divisor class groups of some rings of global real analytic, Nash or rational regular functions. (84c:32010)

Bujalance, Emilio NEC groups and Klein surfaces. (84g:30045)

Choi, Man Duen (with Knebusch, Manfred; Lam, Tsit Yuen; Reznick, Bruce) Transversal zeros and positive semidefinite forms. (84h:10027)

(with Dai, Zong Duo; Lam, Tsit Yuen; Reznick, Bruce) The Pythagoras number of some affine algebras and local algebras. (84f:12012)

Constantinescu, Alexandru A proof of Cartan's theorems A and B for Klein surfaces. (84i:32015)

Craven, Thomas C. (with Csordas, George) On the number of real roots of polynomials. (84b:30006)

Csordas, George See Craven, Thomas C., (84b:30006)

- Dai, Zong Duo. See Choi, Man Duen; et al., (84f:12012)
- Durfee, Alan H. Neighborhoods of algebraic sets. (84m:32013)
- Elroyson, Gustave A. See Bochnak, Jacek, (84b:32013)
- Fidler, T. Pencils of lines and the topology of real algebraic curves. (Russian) (84c:14019)
- Finashin, S. M. Topology of the complement of a real algebraic curve in \mathbb{CP}^2 . (Russian. English summary) (84a:14016)
- Godkov, D. A. A fifth-order curve with five cusps. (Russian) (84g:14031)
- Ischebeck, Friedrich. On real one-dimensional cycles. (84h:14011)
- Ivanov, N. V. Approximation of smooth manifolds by real algebraic sets. (Russian) (84i:57029)
- Jacquemard, Alain. Fibrations de Milnor pour des applications réelles. (English summary) [Milnor fibrations of real functions] (84i:32010)
- Kharlamov, V. M. Rigid classification up to isotopy of real plane curves of degree 5. (Russian) (84a:14017)
- Knebusch, Manfred. See Choi, Man Duen; et al., (84b:10027)
- Knus, Max-Albert (with Ojanguren, Manuel; Parimala, Raman) Positive-definite quadratic bundles over the plane. (84h:14022)
- Kucharz, Wojciech. See Bochnak, Jacek; et al., (84k:32010)
- Lam, Tsit Yuen. See Choi, Man Duen; et al., (84b:10027) and (84f:12012)
- Ojanguren, Manuel (with Parimala, Raman; Sridharan, R.) Indecomposable quadratic bundles of rank $4n$ over the real affine plane. (84j:14023)
- See also Knus, Max-Albert; et al., (84h:14022)
- Parimala, Raman. See Knus, Max-Albert; et al., (84h:14022) and Ojanguren, Manuel; et al., (84j:14023)
- Pfister, Albrecht. See Arason, J. K., (84h:10027)
- Reznick, Bruce. See Choi, Man Duen; et al., (84b:10027) and (84f:12012)
- Roggero, Margherita. Sur la factorialité de l'anneau des fonctions polynomiales d'une variété réelle. (English summary) [On the factoriality of the polynomial ring of a real variety] (84j:14019)
- Seppälä, Mika. Real structures of Teichmüller spaces. (84d:32032)
- Shiota, Masahiro. See Bochnak, Jacek; et al., (84k:32010)
- Sridharan, R. See Ojanguren, Manuel; et al., (84j:14023)
- Tognoli, Alberto. Algebraic approximation in differential topology. (See 84b:00011)
- See also Benedetti, Riccardo, (84h:58004) and (See 84c:14002)
- Zvonilov, V. I. Complex orientations of real algebraic curves with singularities. (Russian) (84j:14020)
- Paris. ★ Séminaire sur la Géométrie Algébrique Réelle. (French) [Seminar on Real Algebraic Geometry] (84c:14002)
- Seminar: Real Algebraic Geometry. ★ Séminaire sur la Géométrie Algébrique Réelle. (French) [Seminar on Real Algebraic Geometry] (84c:14002)

14G99 None of the above, but in this section

secondary classifications:

- Fried, M. A note on principal ideals and smooth curves. (84h:14041)
- Riebeschl, Dieter. Hyperbolische komplexe Räume und die Vermutung von Mordell. [Hyperbolic complex spaces and Mordell's conjecture] (84b:32035)
- Waldschmidt, Michel. Dépendance de logarithmes dans les groupes algébriques. [Dependence of logarithms in algebraic groups] (84k:10032)
- Wüstholz, G. Nullstellenabschätzungen auf Varietäten. [Zero estimates on varieties] (See 84b:10005)

14Hxx Curves

- Chenciner, Alain. ★ Courbes algébriques planes. (French) [Plane algebraic curves] (84c:14023)
- (Eisenbud, David) See Harris, Joseph Daniel, 84g:14024
- Harris, Joseph Daniel. ★ Curves in projective space. 84g:14024
- Lang, Serge. ★ Introduction to algebraic and abelian functions. 84m:14032

14H05 Algebraic functions [See also 14K20, 32G20.]

- Davenport, James Harold. ★ On the integration of algebraic functions. 84c:14024
- Horiuchi, Ryutaro. Meromorphic functions on 2-hyperelliptic Riemann surfaces. 84m:14033

secondary classifications:

- Baldassarri, Francesco. On algebraic solutions of Lamé's differential equation. (84a:34006)
- Engber, Michael. On the Noether gap theorem. (84f:14017)
- Hilliker, David Lee (with Straus, E. G.) On Puiseux series whose curves pass through an infinity of algebraic lattice points. (84a:10016)
- Mason, R. C. The hyperelliptic equation over function fields. (84h:10023)
- Saltman, David J. Generic Galois extensions and problems in field theory. (84a:13007)
- Seyama, Atsushi. On the curves of genus g with automorphisms of prime order $2g+1$. (84b:14012)
- Straus, E. G. See Hilliker, David Lee. (84a:10016)
- Valentini, Robert C. Representations of automorphisms on differentials of function fields of characteristic p . (84j:12013)
- Van Oystaeyen, F. (with Verschoren, A.) On the Brauer group of a projective curve. (84g:13005)
- Verschoren, A. See Van Oystaeyen, F., (84g:13005)
- Washio, Tadashi. On class numbers of hyperelliptic function fields. III. (84j:12014)

14H10 Families, moduli (algebraic)

- Biggers, R. See Fried, M., 84h:14034
- Chang, Hai Ch'ao. The existence of plane nodal curves. 84h:14011
- Fried, M. (with Biggers, R.) Moduli spaces of covers and the Hurwitz monodromy group. 84h:14034a
- (with Biggers, R.) Correction to the paper: "Moduli spaces of covers and the Hurwitz monodromy group". 84h:14034b
- Gieseker, D. ★ Lectures on moduli of curves. 84h:14035
- Gruson, Laurent (with Peskine, Christian) Théorème de spécialité. (See 84j:14026)
- Horiuchi, Ryutaro. Gap orders of meromorphic functions on Riemann surfaces. 84c:14020b
- Iskovskikh, V. A. Congruences of conics in \mathbb{P}^3 . (Russian. English summary) 84c:14025
- Lütkebohmert, Werner. Ein globaler Starrheitssatz für Mumfordkurven. [A global rigidity theorem for Mumford curves] 84h:14036
- Martens, Gerriet. Über den Clifford-Index algebraischer Kurven. [On the Clifford index of algebraic curves] 84c:14020a
- Peskine, Christian. See Gruson, Laurent, (See 84j:14026)
- Seyama, Atsushi. On the curves of genus g with automorphisms of prime order $2g+1$. 84b:14012
- Tannenbaum, Allen. Families of curves with nodes on $K3$ surfaces. 84g:14025

secondary classifications:

- Angermüller, Gerhard (with Barth, Wolf Paul) Elliptic fibres on Enriques surfaces. (84a:14020)
- Barth, Wolf Paul. See Angermüller, Gerhard, (84a:14020)
- Buium, Alexandru. Degree of the fibres of an elliptic fibration. (84j:14017)
- Herrlich, Frank. p -adisch diskontinuierlich einbettbare Graphen von Gruppen. [p -adic discontinuously embeddable graphs of groups] (84d:14013)
- Kuribayashi, Akikazu (with Kuribayashi, Izumi) On subgroups of automorphism groups of hyperelliptic Riemann surfaces of genus three. (84b:14015)
- Kuribayashi, Izumi. See Kuribayashi, Akikazu, (84b:14015)
- Nagata, Masayoshi. Some problems on linear systems of plane curves. (84f:14008)
- Plà Garcia, Héctor. Weierstrass divisors. (Spanish. English summary) (84h:14012)
- N-foliations and Weierstrass points. (Spanish. English summary) (84j:14032)

14H15 Families, moduli (analytic) [See also 30F10, 32G15, 32G20.]

- Freitag, Eberhard. Die Irreduzibilität der Schottkyrelation (Bemerkung zu einem Satz von J. Igusa). [The irreducibility of the Schottky relation (remarks on a theorem of J. Igusa)] 84m:14034
- Gerritzen, L. Die Jacobi-Abbildung über dem Raum der Mumfordkurven. [The Jacobi mapping over the space of Mumford curves] 84f:14021
- Hoffman, Jerome William. An example in the theory of degenerating algebraic curves. (Italian summary) 84g:14026
- Kuribayashi, Akikazu. See Kuribayashi, Izumi, 84m:14035
- Kuribayashi, Izumi (with Kuribayashi, Akikazu) On Eichler trace formula and automorphisms of Riemann surfaces (in case of genus 3). 84m:14035
- Lax, R. F. Independence of normal Weierstrass points under deformation. 84a:14013
- Stiller, Peter F. On the uniformization of certain curves. 84j:14031

secondary classifications:

- Ehlers, Fritz (with Knörrer, Horst) An algebro-geometric interpretation of the Bäcklund-transformation for the Korteweg-de Vries equation. (84b:14022)
- Knörrer, Horst. See Ehlers, Fritz, (84b:14022)
- Kulkarni, Ravi S. Surface-symmetries, holomorphic maps, and tessellations. (See 84d:53002)
- Nag, Subhashish. The Torelli spaces of punctured tori and spheres. (84b:32031)
- Vermeulen, Alexius Maria. ★ Weierstrass points of weight two on curves of genus three. (84j:14036)

14H20 Singularities, local rings [See also 13Hxx.]

- Achilles, Rüdiger (with Schenzel, Peter) A degree bound for the defining equations of one-dimensional tangent cones. 84g:14027
- Aroca Hernández-Ros, José Manuel. Problems of the classification of singularities of algebroid curves over fields of positive characteristic. (Spanish) 84b:14013
- García, Arnaldo. Semigroups associated to singular points of plane curves. 84h:14037
- Gohi, J. On the multiple points of plane algebraic curves. (Spanish. English summary) 84h:14038
- Kiyek, Karl-Heinz. Multiplicity sequence and value semigroup. 84h:14039
- Lejeune-Jalabert, Monique. Le théorème " $AF+BG$ " de Max Noether. [The " $AF+BG$ " theorem of Max Noether] 84g:14028
- Orecchia, Ferruccio. The conductor of some one-dimensional rings and the computation of their K -theory groups. 84b:14018
- Sacchiero, Gianni. Une classe de courbes gauches qui n'admettent pas de projection unibranche. (English summary) [A class of space curves that do not admit a unibranch projection] 84c:14026
- Schenzel, Peter. See Achilles, Rüdiger, 84g:14027
- Tamone, Grazia. Blowing-up and glueings in one-dimensional rings. 84d:14017
- Ulrich, Bernd. The embedding dimension of the formal moduli space of certain curve singularities. 84a:14014
- Waldi, Rolf. ★ Äquivariante Deformation monomialer Kurven. (German) [Equivariant deformation of monomial curves] 84a:14015
- Watanabe, Masayuki. On projective normality of space curves on a nonsingular cubic surface in \mathbb{P}^3 . 84h:14040

secondary classifications:

- Chiarli, Nadia A short algebraic proof of the generalized Plücker's formula. (Italian summary) (84j:14058)
- Esnault, Hélène (with Viehweg, Eckart) Revêtements cycliques. [Cyclic coverings] (84m:14015)
- Geramita, Anthony V. (with Orecchia, Ferruccio) Minimally generating ideals defining certain tangent cones. (84e:13028)
- Guillén Santos, F. (with Pascual Gainza, P.) On a theorem of Rosenlicht. (Spanish) (84i:14014)
- Gupta, Surender K. (with Roberts, Leslie G.) Cartesian squares and ordinary singularities of curves. (84h:13036)
- Onoda, Nobuharu Remarks on one-dimensional seminormal rings. (84c:13020)
- Orecchia, Ferruccio Maximal Hilbert functions of one-dimensional local rings. (84h:13035)
- See also Geramita, Anthony V., (84c:13028)
- Pascual Gainza, P. See Guillén Santos, F., (84i:14014)
- Roberts, Leslie G. See Gupta, Surender K., (84h:13036)
- Rudolph, Lee Embeddings of the line in the plane. (84h:14019)
- Tamone, Grazia The gluing of primary ideals and the origin of certain singularities. (Italian. English summary) (84d:13001)
- Tannenbaum, Allen Families of curves with nodes on $K3$ surfaces. (84g:14025)
- Teissier, Bernard Polyèdre de Newton jacobien et équisingularité. [Jacobian Newton polyhedra and equisingularity] (84h:14007)
- Viehweg, Eckart See Esnault, Hélène, (84m:14015)
- Yoshihara, Hisao Rational curve with one cusp. (84j:14037)

14H25 Arithmetic ground fields [See also 10Bxx, 14Gxx.]

- Bombieri, Enrico On Weil's "théorème de décomposition". 84g:14029
- van der Put, Marius Revêtements étales d'une courbe de Mumford. [Étale coverings of a Mumford curve] (See 84c:10004)
- Raynaud, Michel Courbes sur une variété abélienne et points de torsion. [Curves on an abelian variety and torsion points] 84c:14021

secondary classifications:

- Bremner, Andrew (with Morton, Patrick) A new characterization of the integer 5906. (84i:10016)
- Cassels, J. W. S. The Mordell-Weil group of curves of genus 2. (84k:14032)
- Douai, Jean-Claude (with Touibi, C.) Courbes définies sur les corps de séries formelles et loi de réciprocité. [Curves defined over fields of formal power series, and a reciprocity law] (84i:12010)
- Fried, M. A note on principal ideals and smooth curves. (84h:14041)
- Ihara, Yasutaka Some remarks on the number of rational points of algebraic curves over finite fields. (84c:14016)
- Congruence relations and fundamental groups. (84c:14022)
- Lifting curves over finite fields together with the characteristic correspondence $\Pi + \Pi'$. (84c:14023)
- Kanienny, S. On $J_1(p)$ and the conjecture of Birch and Swinnerton-Dyer. (84j:14030)
- Lütkebohmert, Werner Ein globaler Starrheitssatz für Mumfordkurven. [A global rigidity theorem for Mumford curves] (84h:14036)
- Manin, Yu. I. What is the maximum number of points on a curve over F_2 ? (84c:14015)
- Morton, Patrick See Bremner, Andrew, (84i:10016)
- Rakhimov, I. S. Decomposition of the Jacobi variety of a Fermat curve. (Russian) (84h:14020)
- Touibi, C. See Douai, Jean-Claude, (84i:12010)
- Van Steen, Guido Non-Archimedean Schottky groups and hyperelliptic curves. (84h:14030)

14H30 Coverings, fundamental group

- Del Centina, Andrea (with Recillas Pishmish, Sevin) On a gonality problem for unbranched 2-sheeted covers. (Italian summary) 84b:14014
- Finashin, S. M. Topology of the complement of a real algebraic curve in \mathbb{CP}^2 . (Russian. English summary) 84c:14016
- Greenleaf, Newcomb (with May, Coy L.) Bordered Klein surfaces with maximal symmetry. 84f:14022
- Ihara, Yasutaka Congruence relations and fundamental groups. 84c:14022
- Lifting curves over finite fields together with the characteristic correspondence $\Pi + \Pi'$. 84c:14023
- Kuribayashi, Akikazu (with Kuribayashi, Izumi) On subgroups of automorphism groups of hyperelliptic Riemann surfaces of genus three. 84b:14015
- Kuribayashi, Izumi See Kuribayashi, Akikazu, 84b:14015
- Libgober, Anatoly S. Alexander polynomial of plane algebraic curves and cyclic multiple planes. 84g:14030
- May, Coy L. See Greenleaf, Newcomb, 84f:14022
- Mednykh, A. D. On the solution of the Hurwitz problem on the number of nonquivalent coverings over a compact Riemann surface. (Russian) 84c:14024
- Plá García, Hector N -foliations and Weierstrass points. (Spanish. English summary) 84j:14032
- Recillas Pishmish, Sevin See Del Centina, Andrea, 84b:14014
- Rosen, Michael The norm map on Jacobians. 84b:14016

secondary classifications:

- Biggers, R. See Fried, M., (84h:14034a) and (84h:14034b)
- Bracho, J. (with Recillas Pishmish, Sevin) The Prym-canonical mapping of an algebraic curve. (Spanish) (84e:14027)
- Cherednik, I. V. Integrable differential equations and coverings of elliptic curves. (Russian) (84h:58069)

- Esnault, Hélène (with Viehweg, Eckart) Revêtements cycliques. [Cyclic coverings] (84m:14015)
- Fried, M. (with Biggers, R.) Moduli spaces of covers and the Hurwitz monodromy group. (84h:14034a)
- (with Biggers, R.) Correction to the paper: "Moduli spaces of covers and the Hurwitz monodromy group". (84h:14034b)
- Horiuchi, Ryutaro Meromorphic functions on 2-hyperelliptic Riemann surfaces. (84m:14033)
- Kanev, V. I. Quadratic Pfaffian singularities of the theta-divisor of a Prym variety. (Russian) (84h:14053)
- Kashiwara, Masaki Quasi-unipotent constructible sheaves. (84f:32009)
- Kuribayashi, Akikazu See Kuribayashi, Izumi, (84m:14035)
- Kuribayashi, Izumi (with Kuribayashi, Akikazu) On Eichler trace formula and automorphisms of Riemann surfaces (in case of genus 3). (84m:14035)
- Letizia, Maurizio A relation between the Milnor numbers of the singularities of a double plane and those of the singularities of its ramification curve. (84g:14003)
- Libgober, Anatoly S. Alexander modules of plane algebraic curves. (84h:57002)
- Ohtsuki, Makoto On the number of apparent singularities of a linear differential equation. (84h:14015)
- van der Put, Marius Étale coverings of a Mumford curve. (84m:14026)
- Recillas Pishmish, Sevin See Bracho, J., (84c:14027)
- Van Steen, Guido Galois coverings of the non-Archimedean projective line. (84c:10024)
- Viehweg, Eckart See Esnault, Hélène, (84m:14015)

14H35 Correspondences [See also 14Exx.]

- Kempf, George R. The elementary theory of correspondences. 84i:14019

14H40 Jacobians [See also 32G0.]

- Beauville, Arnaud Diviseurs spéciaux et intersection de cycles dans la jacobienne d'une courbe algébrique. [Special divisors and intersection of cycles in the Jacobian of an algebraic curve] 84m:14036
- Bracho, J. (with Recillas Pishmish, Sevin) The Prym-canonical mapping of an algebraic curve. (Spanish) 84c:14027
- Farkas, Hershel M. Relations between holomorphic quadratic differentials. II. 84c:14025
- Fried, M. A note on principal ideals and smooth curves. 84h:14041
- Friedman, Robert David (with Smith, Roy Campbell) Singularities of period maps and the weak global Torelli problem. 84i:14020
- Recillas Pishmish, Sevin See Bracho, J., 84c:14027
- Smith, Roy Campbell See Friedman, Robert David, 84i:14020

secondary classifications:

- Adler, M. (with van Moerbeke, P.) The algebraic integrability of geodesic flow on $SO(4)$. (84g:58048)
- Ceresa Genet, Giuseppe C is not algebraically equivalent to C^- in its Jacobian. (84f:14005)
- Dybrovin, B. A. (with Novikov, S. P.) Algebrogeometric Poisson brackets for real finite-range solutions of the sine-Gordon and nonlinear Schrödinger equations. (Russian) (84j:58066)
- Freitag, Eberhard Die Irreduzibilität der Schottkyrelation (Bemerkung zu einem Satz von J. Igusa). [The irreducibility of the Schottky relation (remarks on a theorem of J. Igusa)] (84m:14034)
- Gerritzen, L. Die Jacobi-Abbildung über dem Raum der Mumfordkurven. [The Jacobi mapping over the space of Mumford curves] (84f:14021)
- Haine, L. Geodesic flow on $SO(4)$ and abelian surfaces. (84k:14031)
- Harris, Bruno Homological versus algebraic equivalence in a Jacobian. (84m:14009)
- Hoffman, Jerome William An example in the theory of degenerating algebraic curves. (Italian summary) (84g:14026)
- Kanev, V. I. Quadratic Pfaffian singularities of the theta-divisor of a Prym variety. (Russian) (84h:14053)
- McCallum, William G. The degenerate fibre of the Fermat curve. (84m:14028)
- van Moerbeke, P. See Adler, M., (84g:58048) and Raju, Tudor, (84h:58086)
- Novikov, S. P. See Veselov, A. P., (84j:58065) and Dybrovin, B. A., (84j:58066)
- Raju, Tudor (with van Moerbeke, P.) The Lagrange rigid body motion. (French summary) (84k:58086)
- Veselov, A. P. (with Novikov, S. P.) Poisson brackets that are compatible with the algebraic geometry and the dynamics of the Korteweg-de Vries equation on the set of finite-gap potentials. (Russian) (84j:58065)

14H45 Special curves

- Craigheo, P. C. Remarks on some examples of curves in the space A_k^3 that are isomorphic to lines. (Italian. English summary) 84j:14033
- Gruson, Laurent (with Peskine, Christian) Genre des courbes de l'espace projectif. II. [Genus of curves in projective space. II] 84j:14034
- Harthorne, Robin Genre de courbes algébriques dans l'espace projectif (d'après L. Gruson et C. Peskine). [Genus of algebraic curves in projective space (after L. Gruson and C. Peskine)] 84f:14023
- Kharlamov, V. M. Rigid classification up to isotopy of real plane curves of degree 5. (Russian) 84c:14017
- Peskine, Christian See Gruson, Laurent, 84j:14034
- Plá García, Hector Hyperelliptic curves in P^n and certain systems of hyperquadrics. (Spanish) 84i:14021
- Seidenberg, Abraham Existence of a nonsingular curve of order 7 and genus 4 in 3-space. (Italian summary) 84j:14035
- Vermeeulen, Alexius Maria ★ Weierstrass points of weight two on curves of genus three. 84j:14036
- Yoshihara, Hisao Rational curve with one cusp. 84j:14037

secondary classifications:

- Bresinsky, Henrik** (with Stücker, Jürgen; Renschuch, Bodo) Mengentheoretisch vollständige Durchschnitte verschiedener rationaler Raumkurven im P^3 über Körpern von Primzahlcharakteristik. [Set-theoretic complete intersections of several rational space curves in P^3 over fields of prime characteristic] (84j:14051)
- Cherednik, I. V.** Integrable differential equations and coverings of elliptic curves. (Russian) (84h:58069)
- Dubrov, B. A.** (with Natanzon, S. M.) Real two-zone solutions of the sine-Gordon equation. (Russian) (84a:58048)
- Ganong, R.** Plane Frobenius sandwiches. (84h:13026)
- Gruson, Laurent** (with Peskine, Christian) Courbes de l'espace projectif: variétés de sécantes. [Curves in projective space: secant varieties] (84m:14061)
- Herrlich, Frank** p -adisch diskontinuierlich einbettbare Graphen von Gruppen. [p -adic discontinuously embeddable graphs of groups] (84d:14013)
- Hitchin, N. J.** Monopoles and geodesics. (84i:3071)
- Izergin, A. G.** (with Korepin, V. E.) The lattice sine-Gordon model. (Russian. English summary) (84a:35262)
- Komeda, Jiryo** On Weierstrass points whose first nongaps are four. (84i:14015)
- Korepin, V. E.** See Izergin, A. G., (84a:35262)
- Kuribayashi, Akikazu** See Kuribayashi, Izumi, (84m:14035)
- Kuribayashi, Izumi** (with Kuribayashi, Akikazu) On Eichler trace formula and automorphisms of Riemann surfaces (in case of genus 3). (84m:14035)
- Livshits, I. S.** A property of hyperelliptic curves. (Russian) (84d:32033)
- Natanzon, S. M.** See Dubrov, B. A., (84a:58048)
- Peskine, Christian** See Gruson, Laurent, (84m:14061)
- Ran, Ziv** A united-set formula. (84f:14038)
- Renschuch, Bodo** See Bresinsky, Henrik; et al., (84j:14051)
- Robbiano, Lorenzo** (with Valla, Giuseppe) Some curves in P^3 are set-theoretic complete intersections. (84m:14059)
- Rohrich, David E.** Some remarks on Weierstrass points. (84d:14008)
- Schelter, William F.** Affine rings satisfying a polynomial identity. (84c:16020)
- Stücker, Jürgen** See Bresinsky, Henrik; et al., (84j:14051)
- Valla, Giuseppe** See Robbiano, Lorenzo, (84m:14059)
- Waterhouse, William C.** Real classification of complex quadrics. (84b:10028)

14H99 None of the above, but in this section

- Gudkov, D. A.** A fifth-order curve with five cusps. (Russian) 84g:14031

secondary classifications:

- Chen, Huai Hui** On Abel's theorem for open surfaces. (Chinese. English summary) (84c:30064)
- Fiedler, Thomas** Eine Beschränkung für die Lage von reellen ebenen algebraischen Kurven. [A restriction on the position of real plane algebraic curves] (84b:14031)
- Gruson, Laurent** (with Peskine, Christian) Section plane d'une courbe gauche: postulation. [Plane section of a space curve: postulation] (84c:14045)
- Kuribayashi, Akikazu** (with Kuribayashi, Izumi) On subgroups of automorphism groups of hyperelliptic Riemann surfaces of genus three. (84b:14015)
- Kuribayashi, Izumi** See Kuribayashi, Akikazu, (84b:14015)
- Patra, Kuntala** On determination of the marks of some alternating groups of small degree. (84i:30059)
- Peskine, Christian** See Gruson, Laurent, (84c:14045)
- Zvonilov, V. I.** Complex topological characteristics of real algebraic curves on a surface. (Russian) (84b:14033)

14Jxx Surfaces and higher-dimensional varieties

14J05 Picard group

- Buium, Alexandru** Sur le nombre de Picard des revêtements doubles des surfaces algébriques. (English summary) [On the Picard number of double coverings of algebraic surfaces] 84j:14038
- Kunyavskii, B. È.** (with Tsfasman, M. A.) The Néron-Severi torus of a rational surface. (Russian) 84c:14025
- Persson, Ulf** Horikawa surfaces with maximal Picard numbers. 84d:14018
- Tsfasman, M. A.** See Kunyavskii, B. È., 84c:14025

secondary classifications:

- Gushel, N. P.** Fano varieties of genus 6. (Russian) (84f:14030)
- Kawamata, Yujiro** On degeneration of rational surfaces. (84d:14022)
- Mohan Kumar, N.** (with Murthy, M. Pavaman) Curves with negative self-intersection on rational surfaces. (84c:14012)
- Murre, J. P.** Classification of Fano threefolds according to Fano and Iskovskih. (84f:14031)
- Murthy, M. Pavaman** See Mohan Kumar, N., (84c:14012)

14J10 Families, moduli, classification: algebraic theory

- Catanese, F.** Moduli of surfaces of general type. 84k:14026
- Ciliberto, Ciro** Canonical surfaces with $p_g = p_a = 5$ and $K^2 = 10$. 84c:14026a
Errata: "Canonical surfaces with $p_g = p_a = 5$ and $K^2 = 10$ ". 84c:14026b
- Esnaault, Hélène** Classification des variétés de dimension 3 et plus (d'après T. Fujita, S. Itaka, Y. Kawamata, K. Ueno, E. Viehweg). [Classification of varieties of dimension 3 and higher (after T. Fujita, S. Itaka, Y. Kawamata, K. Ueno, E. Viehweg)] 84c:14028
- Friedman, Robert David** (with Morrison, David R.) The birational geometry of degenerations: an overview. 84g:14032
- Hirzebruch, F.** Arrangements of lines and algebraic surfaces. 84m:14037

- Horikawa, Eiji** Algebraic surfaces of general type with small c_1^2 . V. 84d:14019
- Ishii, Shihoko** Moduli space of polarized del Pezzo surfaces and its compactification. 84h:14042
- Kato, Mitsuo** (with Naruki, Isao) Depth of rational double points on quartic surfaces. 84c:14027
- Kawamata, Yujiro** A generalization of Kodaira-Ramanujam's vanishing theorem. 84i:14022
- Kurke, Herbert** ★ Vorlesungen über algebraische Flächen. (German) [Lectures on algebraic surfaces] 84c:14029
- Levine, Marc** Deformations of irregular threefolds. 84c:14028
Stability of irrational ruled threefolds. 84c:14023
- (Looijenga, Eduard)** See Naruki, Isao, 84d:14020
- Mabuchi, Toshiaki** Invariant β and uniruled threefolds. 84c:14030
- Mérindol, J.-Y.** Les singularités simples elliptiques, leurs déformations, les surfaces de del Pezzo et les transformations quadratiques. [Simple elliptic singularities, their deformations, del Pezzo surfaces and quadratic transformations] 84c:14029
- Miranda, Rick** Smooth models for elliptic threefolds. 84f:14024
- Morrison, David R.** See Friedman, Robert David, 84g:14032
- Naruki, Isao** Cross ratio variety as a moduli space of cubic surfaces. 84d:14020
See also Kato, Mitsuo, 84c:14027
- Nishiguchi, Kenji** Kodaira dimension is not necessarily lower semicontinuous under degenerations of surfaces. 84m:14038
- Rudakov, A. N.** (with Zink, Thomas; Shafarevich, Igor R.) The effect of height on degenerations of algebraic $K3$ surfaces. (Russian) 84a:14018
- Sakai, Fumio** Anti-Kodaira dimension of ruled surfaces. 84a:14019
- Shafarevich, Igor R.** See Rudakov, A. N.; et al., 84a:14018
- Ueno, Kenji** Bimeromorphic geometry of algebraic and analytic threefolds. 84c:14017
- Zink, Thomas** See Rudakov, A. N.; et al., 84a:14018

secondary classifications:

- Beauville, Arnaud** Les singularités du diviseur Θ de la jacobienne intermédiaire de l'hypersurface cubique dans P^4 . [The singularities of the theta-divisor of the intermediate Jacobian of the cubic hypersurface in P^4] (84c:14030)
- Blass, Piotr** Some geometric applications of a differential equation in characteristic $p > 0$ to the theory of algebraic surfaces. (See 84a:00007)
- Homma, Yuko** On projective Cohen-Macaulayness of a del Pezzo surface embedded by a complete linear system. (84b:14003)
- Kawamata, Yujiro** Kodaira dimension of certain algebraic fiber spaces. (84g:14006)
- Kobayashi, Shoshichi** (with Ochiai, Takushiro) Holomorphic structures modeled after hyperquadrics. (84b:32039)
- (Lang, Jeffrey)** See Blass, Piotr, (See 84a:00007)
- Miyazaki, Masayoshi** On affine-ruled irrational surfaces. (84c:14031)
Regular subrings of a polynomial ring. II. (84g:14036)
- Namikawa, Yukihiko** "Stable" degeneration of algebraic varieties. (84d:14030)
- Ochiai, Takushiro** See Kobayashi, Shoshichi, (84b:32039)
- Pla Garcia, Hector** The Hilbert scheme of surfaces of degree $g+1$ in P^{g+2} . (Spanish. English summary) (84f:14004)
- Sarkisov, V. G.** On conic bundle structures. (Russian) (84b:14047)
- (Sturmfeld, James)** See Blass, Piotr, (See 84a:00007)
- Tikhomirov, A. S.** The Fano surface of the Veronese double cone. (Russian) (84i:14026)
- Wilson, P. M. H.** Some questions on the canonical ring of threefolds of general type. (84c:14033)
- Zarkhin, Yu. G.** Hodge groups of $K3$ surfaces. (84g:14009)

14J15 Moduli, classification: analytic theory [See also 32J15.]

- Friedman, Robert David** Base change, automorphisms, and stable reduction for type III $K3$ surfaces. 84m:14039
A degenerating family of quintic surfaces with trivial monodromy. 84c:14027
- Shepherd-Barron, N. I.** Extending polarizations on families of $K3$ surfaces. 84m:14040
- Usui, Sampa** Torelli theorem for surfaces with $p_g = c_1^2 = 1$ and K ample and with certain type of automorphism. 84d:14021

secondary classifications:

- Catanese, F.** Moduli of surfaces of general type. (84k:14026)
- Esnaault, Hélène** Classification des variétés de dimension 3 et plus (d'après T. Fujita, S. Itaka, Y. Kawamata, K. Ueno, E. Viehweg). [Classification of varieties of dimension 3 and higher (after T. Fujita, S. Itaka, Y. Kawamata, K. Ueno, E. Viehweg)] (84c:14028)
- Noguchi, Junjiro** (with Sunada, Toshikazu) Finiteness of the family of rational and meromorphic mappings into algebraic varieties. (84c:14009)
- Siu, Yum Tong** Every $K3$ surface is Kähler. (84j:32036)
- Sunada, Toshikazu** See Noguchi, Junjiro, (84c:14009)
- Tu, Loring W.** Hodge theory and the local Torelli problem. (84c:14008)
- Zarkhin, Yu. G.** Hodge groups of $K3$ surfaces. (84g:14009)

14J17 Singularities of surfaces

- Di Sante, Alessandro** More on improper double points of a surface in P^4 . (Italian. English summary) 84b:14018
- Giraud, Jean** Improvement of Grauert-Riemenschneider's theorem for a normal surface. (French summary) 84f:14025
- Gonzalez-Sprinberg, Gerardo** Cycle maximal et invariant d'Euler local des singularités isolées de surfaces. [Maximal cycle and local Euler invariant of isolated singularities of surfaces] 84g:14033
- Higuchi, Teichi** See Takahashi, Tadashi; et al., 84g:14034
- Hiura, Masayuki** See Yoshinaga, Etsuo; et al., 84j:14040
- Luengo, Ignacio** On the structure of embedded algebroid surfaces. 84j:14039
- Ohtanagi, Shigeki** See Yoshinaga, Etsuo; et al., 84j:14040

- Séade, José A. A cobordism invariant for surface singularities. **84c:14028**
 Takahashi, Tadashi (with Watanabe, Kimio; Higuchi, Teichi) On the classification of quartic surfaces with triple point. I, II. **84g:14034**
 Urabe, Tokuake On singularities on degenerate del Pezzo surfaces of degree 1, 2. **84c:14024**
 Wahl, Jonathan M. Derivations of negative weight and nonsmoothability of certain singularities. **84c:14043**
 Watanabe, Kimio See Takahashi, Tadashi; et al., **84g:14034**
 Yoshinaga, Etsuo (with Ohyanagi, Shigeki; Hiura, Masayuki) Remarks on maximally elliptic singularities. **84j:14040**

secondary classifications:

- Brenton, Lawrence (with Drucker, Daniel S.; Prins, Geert C. E.) Graph theoretic techniques in algebraic geometry. I. The extended Dynkin diagram \bar{E}_8 and minimal singular compactifications of \mathbb{C}^2 . (**84c:32026a**)
 (with Drucker, Daniel S.; Prins, Geert C. E.) Graph theoretic techniques in algebraic geometry. II. Construction of singular complex surfaces of the rational cohomology type of $\mathbb{C}P^2$. (**84c:32026b**)
 Drucker, Daniel S. See Brenton, Lawrence; et al., (**84c:32026a**) and (**84c:32026b**)
 Esnault, Hélène Sur l'identification de singularités apparaissant dans des groupes algébriques complexes. [On the identification of singularities appearing in complex algebraic groups] (**84c:14005**)
 Gonzalez-Sprinberg, Gerardo Résolution de Nash des points doubles rationnels. (English summary) [Nash resolution of rational double points] (**84m:14014**)
 Kato, Mitsuo (with Naruki, Isao) Depth of rational double points on quartic surfaces. (**84c:14027**)
 Mierimol, J.-Y. Les singularités simples elliptiques, leurs déformations, les surfaces de del Pezzo et les transformations quadratiques. [Simple elliptic singularities, their deformations, del Pezzo surfaces and quadratic transformations] (**84c:14029**)
 Narasimhan, R. Hyperplanarity of the equimultiple locus. (**84f:14001**)
 Naruki, Isao See Kato, Mitsuo, (**84c:14027**)
 Neumann, Walter D. A calculus for plumbing applied to the topology of complex surface singularities and degenerating complex curves. (**84c:32015**)
 Prins, Geert C. E. See Brenton, Lawrence; et al., (**84c:32026a**) and (**84c:32026b**)
 Sakai, Fumio Normal Gorenstein surfaces and blowing ups. (**84c:14013**)
 Séade, José A. Singular points of complex surfaces and homotopy. (**84g:57028**)
 Srinivas, V. Vector bundles on the cone over a curve. (**84c:14017**)
 Stagnaro, Ezio On Basset's limitations for the maximum number of isolated singularities on an algebraic surface. (**84g:14058**)

14J20 Arithmetic ground fields [See also 10Bxx, 14Gxx.]

- Coray, Daniel F. The Hasse principle for pairs of quadratic forms. (See **84c:10003**)
 Feustel, Jan-Michael Die negative K^2 -Kontribution der Picardschen Modulflächen. [The negative K^2 -contribution of Picard modular surfaces] **84j:14041**

secondary classifications:

- Hausmann, Wilfried The fixed points of the symmetric Hilbert modular group of a real quadratic field with arbitrary discriminant. (**84j:10036**)
 Holzapfel, R.-P. Invariants of arithmetic ball quotient surfaces. (**84i:14025**)
 Kawamata, Yujiro On degeneration of rational surfaces. (**84c:14022**)
 Kunyavskii, B. É. (with Tsfasman, M. A.) The Néron-Severi torus of a rational surface. (Russian) (**84c:14025**)
 Müller, Werner ★Signature defects of cusps of Hilbert modular varieties and values of L -series at $s=1$. (**84j:10037**)
 Tsfasman, M. A. See Kunyavskii, B. É., (**84c:14025**)

14J25 Special surfaces [For Hilbert modular surfaces, see 10D21.]

- Angermüller, Gerhard (with Barth, Wolf Paul) Elliptic fibres on Enriques surfaces. **84c:14020**
 Barth, Wolf Paul See Angermüller, Gerhard, **84c:14020**
 (Beauville, Arnaud) See Debarre, O., **84f:14026**
 Blass, Piotr Some geometric applications of a differential equation in characteristic $p > 0$ to the theory of algebraic surfaces. (See **84c:00007**)
 Craighero, P. C. Cubic surfaces of A_1^2 that are isomorphic to a plane, to a quadric cylinder and to a quadric cone. (Italian. English summary) **84h:14044**
 Debarre, O. Inégalités numériques pour les surfaces de type général. (English summary) [Numerical inequalities for surfaces of general type] **84f:14026**
 de Finis, Massimo (with de Resmini, Mariauisa J.) On cubic surfaces over a field of characteristic 3. **84c:14045**
 Fujita, Takao On the topology of noncomplete algebraic surfaces. **84g:14035**
 Harper, John R. See Mandelbaum, Richard, **84f:14028**
 Holzapfel, R.-P. Invariants of arithmetic ball quotient surfaces. **84i:14025**
 Katsura, Toshiyuki A note on Enriques' surfaces in characteristic 2. **84f:14027**
 Kawamata, Yujiro On degeneration of rational surfaces. **84c:14022**
 Khashin, S. I. On the irregularity of double planes. (Russian) **84m:14041**
 (Lang, Jeffrey) See Blass, Piotr, (See **84c:00007**)
 Lanteri, Antonio (with Turrini, Cristina) On the automorphisms of the elliptic ruled surfaces. (Italian summary) **84m:14042**
 Mandelbaum, Richard (with Harper, John R.) Global monodromy of elliptic Lefschetz fibrations. **84f:14028**
 Some new surfaces of general type. **84c:14029**
 Miyazishi, Masayoshi On affine-ruled irrational surfaces. **84c:14031**
 Regular subrings of a polynomial ring. II. **84g:14036**
 Papantoniopoulou, A. Embeddings in $G(1,3)$. **84c:14030**
 de Resmini, Mariauisa J. See de Finis, Massimo, **84c:14045**

- Schiemann, Günther Homologiegruppen von Schnitten zweier Quadriken des P_4 und Repräsentanten ihrer Erzeugenden. [Homology groups of intersections of two quadrics of the P_4 and representatives of their generators] **84m:14043**
 (Sturmfeld, James) See Blass, Piotr, (See **84c:00007**)
 Tikhomirov, A. S. The Fano surface of the Veronese double cone. (Russian) **84c:14026**
 Turrini, Cristina On a projective generation of elliptic scrolls by means of multisections. (Italian. English summary) **84g:14037**
 See also Lanteri, Antonio, **84m:14042**
 Vorontsov, S. P. Automorphisms of even lattices arising in connection with automorphisms of algebraic $K3$ -surfaces. (Russian. English summary) **84g:14038**

secondary classifications:

- Bertin, José Sur les automorphismes des variétés algébriques non complètes. (English summary) [On automorphisms of noncomplete algebraic varieties] (**84b:14026**)
 Pincaux de droites et automorphismes des surfaces affines. [Pencils of lines and automorphisms of affine surfaces] (**84f:14035**)
 Blass, J. (with Blass, Piotr) Computation of the conductor of the algebraic surface $Z^2 = X^2 Y^2$. (**84d:13007**)
 Blass, Piotr See Blass, J., (**84d:13007**)
 Buim, Alexandru Degree of the fibres of an elliptic fibration. (**84j:14017**)
 Casazza, Enrica (with Valenti, Enrico) Cubic surfaces in P^3 with some set-theoretic complete intersection curves. (Italian. English summary) (**84c:14042**)
 Ciliberto, Ciro Canonical surfaces with $p_g = p_a = 5$ and $K^2 = 10$. (**84c:14026a**)
 Errata: "Canonical surfaces with $p_g = p_a = 5$ and $K^2 = 10$ ". (**84c:14026b**)
 Cox, David A. Mordell-Weil groups of elliptic curves over $\mathbb{C}(t)$ with $p_g = 0$ or 1. (**84c:14029**)
 Feustel, Jan-Michael Die negative K^2 -Kontribution der Picardschen Modulflächen. [The negative K^2 -contribution of Picard modular surfaces] (**84j:14041**)
 Ghione, Franco La conjecture de Brill-Noether pour les surfaces réglées. [The Brill-Noether conjecture for ruled surfaces] (**84c:14005**)
 Higuchi, Teichi See Takahashi, Tadashi; et al., (**84g:14034**)
 Hirzebruch, F. Arrangements of lines and algebraic surfaces. (**84m:14037**)
 Horikawa, Eiji Algebraic surfaces of general type with small c_1^2 . V. (**84d:14019**)
 Ignatenko, V. F. The general equation of an algebraic surface with the symmetry group of the polyhedron 2_{21} . (Russian) (**84c:51030**)
 (Looijenga, Eduard) See Naruki, Isao, (**84d:14020**)
 Mohan Kumar, N. (with Murthy, M. Pavaman) Curves with negative self-intersection on rational surfaces. (**84c:14012**)
 Murthy, M. Pavaman See Mohan Kumar, N., (**84c:14012**)
 Namikawa, Yukihiko "Stable" degeneration of algebraic varieties. (**84d:14030**)
 Naruki, Isao Cross ratio variety as a moduli space of cubic surfaces. (**84d:14020**)
 Persson, Ulf Horikawa surfaces with maximal Picard numbers. (**84d:14018**)
 Pla García, Héctor The Hilbert scheme of surfaces of degree $g+1$ in P^{g+2} . (Spanish. English summary) (**84f:14004**)
 Raynaud, Michel Fibrés vectoriels instables—applications aux surfaces (d'après Bogomolov). [Unstable vector bundles—applications to surfaces (after Bogomolov)] (**84g:14017**)
 Sakai, Fumio Normal Gorenstein surfaces and blowing ups. (**84c:14013**)
 Takahashi, Tadashi (with Watanabe, Kimio; Higuchi, Teichi) On the classification of quartic surfaces with triple point. I, II. (**84g:14034**)
 Tannenbaum, Allen Families of curves with nodes on $K3$ surfaces. (**84g:14025**)
 Valenti, Enrico See Casazza, Enrica, (**84c:14042**)
 Watanabe, Kimio See Takahashi, Tadashi; et al., (**84g:14034**)

14J30 Special 3-folds [See also 14E05.]

- Beauville, Arnaud Les singularités du diviseur Θ de la jacobienne intermédiaire de l'hypersurface cubique dans P^4 . [The singularities of the theta-divisor of the intermediate Jacobian of the cubic hypersurface in P^4] **84c:14030**
 Collino, Alberto The fundamental group of the Fano surface. I, II. **84f:14029**
 Del Centina, Andrea (with Verdi, Luisella) Certain conic bundles in $P^2 \times P^2$, some of which are unirational and not rational. (Italian. English summary) **84j:14042**
 Fujita, Takao Projective threefolds with small secant varieties. **84d:14023**
 Gushel, N. P. Fano varieties of genus 6. (Russian) **84f:14030**
 Fano varieties of genus 8. (Russian) **84m:14044**
 Mori, Shigefumi Threefolds whose canonical bundles are not numerically effective. **84c:14031**
 Threefolds whose canonical bundles are not numerically effective. **84c:14032**
 Murre, J. P. Classification of Fano threefolds according to Fano and Iskovskih. **84f:14031**
 Okonek, Christian 3-Mannigfaltigkeiten im P^5 und ihre zugehörigen stabilen Garben. (English summary) [3-folds in P^5 and their associated stable sheaves] **84g:14039**
 Picco Botta, Luciana (with Verra, Alessandro) The nonrationality of the generic Enriques' threefold. **84m:14045**
 Puts, Pierre J. On some Fano-threefolds that are sections of Grassmannians. **84d:14024**
 Serpico, Maria Ezia Fano varieties that are hyperplane sections of $P_2 \times P_2$. (Italian. English summary) **84j:14043**
 Tikhomirov, A. S. Singularities of the theta-divisor of the intermediate Jacobian of the double P^3 of index two. (Russian) **84c:14032**
 Verdi, Luisella See Del Centina, Andrea, **84j:14042**
 Verra, Alessandro See Picco Botta, Luciana, **84m:14045**
 Wilson, P. M. H. Some questions on the canonical ring of threefolds of general type. **84c:14033**

secondary classifications:

- Ceresa, Giuseppe (with Collino, Alberto) Some remarks on algebraic equivalence of cycles. (**84f:14006**)

Clemens, C. Herbert Applications of mixed Hodge theory to the study of threefolds. (84b:32040)

Degeneration techniques in the study of threefolds. (84g:14048)

Collino, Alberto See Ceresa, Giuseppe, (84f:14006)

van der Geer, G. On the geometry of a Siegel modular threefold. (84a:10028)

Kleiman, Steven L. Plane forms and multiple-point formulas. (84d:14035)

Levine, Marc Deformations of irregular threefolds. (84c:14028)

Mabuchi, Toshiaki Invariant β and uniruled threefolds. (84e:14030)

Matsusaka, T. On polarized varieties of dimension 3. III. (84d:14005)

Miranda, Rick Smooth models for elliptic threefolds. (84f:14024)

Ueno, Kenji Bimeromorphic geometry of algebraic and analytic threefolds. (84b:14017)

Welters, G. E. \star Abel-Jacobi isogenies for certain types of Fano threefolds. (84k:14035)

14J35 Special 4-folds [See also 14E05.]

14J40 Special n -folds

Ciliberto, Ciro Algebraic hypersurfaces with parabolic points and related Hessians. (Italian. English summary) 84c:14034

Lanteri, Antonio (with Pallese, Marino) On k -dimensional elliptic scrolls. (Italian summary) 84d:14025

A characterization of k -dimensional scrolls. (Italian summary) 84g:14040

(with Pallese, Marino) On polarized algebraic manifolds with relative sectional genus one. (Italian summary) 84b:14046

Newstead, P. E. On the plane sections of a quadric hypersurface. 84f:14032

Pallese, Marino See Lanteri, Antonio, 84d:14025 and 84b:14046

Sarkisov, V. G. On conic bundle structures. (Russian) 84h:14047

Tango, Hiroshi Remark on varieties with small secant varieties. 84d:14026

secondary classifications:

Conte, Alberto Conics on complete intersections and the Hodge conjecture for some of them. (84j:14014)

Green, Mark L. The canonical ring of a variety of general type. (84k:14006)

Kurke, Herbert Applications of algebraic geometry to twistor spaces. (84j:32040)

Sasaki, Ryuji On the equations defining Kummer varieties. (84d:14032)

Vainsencher, Israel Schubert calculus for complete quadrics. (84m:14064)

14J99 None of the above, but in this section

secondary classifications:

Gizatullin, M. Kh. Defining relations for the Cremona group of the plane. (Russian) (84e:14010)

Huibregtse, Mark E. The Albanese mapping for a punctual Hilbert scheme. II. Symmetrized differentials and singularities. (84h:14009)

14Kxx Abelian varieties and schemes

Deligne, Pierre (with Milne, James Stuart; Ogus, Arthur; Shih, Kuang-yen) \star Hodge cycles, motives, and Shimura varieties. 84m:14046

Lang, Serge \star Abelian varieties. 84g:14041

Milne, James Stuart See Deligne, Pierre; et al., 84m:14046

Ogus, Arthur See Deligne, Pierre; et al., 84m:14046

Shih, Kuang-yen See Deligne, Pierre; et al., 84m:14046

14K05 Algebraic theory

Borovoi, M. V. The Hodge group and the algebra of endomorphisms of an abelian variety. (Russian) 84m:14047

Kuga, Michio Algebraic cycles in gtfabv. 84g:14042

secondary classifications:

Tai, Yung-Sheng On the Kodaira dimension of the moduli space of abelian varieties. (84b:10040)

14K07 Elliptic curves, one-dimensional theory

Alling, Norman L. \star Real elliptic curves. 84d:14027

Cassels, J. W. S. (with Schinzel, Andrzej) Selmer's conjecture and families of elliptic curves. 84d:14028

Cox, David A. Mordell-Weil groups of elliptic curves over $\mathbb{C}(t)$ with $p_E=0$ or 1. 84d:14029

Dem'yanenko, V. A. The different of torsion points. (Russian) 84h:14048

Goldstein, Catherine \star Courbes elliptiques et théorie d'Iwasawa. (French) [Elliptic curves and Iwasawa theory] 84h:14049

Hadano, Toshihiro Elliptic curves with a rational point of finite order. 84c:14035

Ito, Hideji On the division equations of elliptic curves dissatisfying Hasse principle. 84h:14050

Kenku, M. A. On the number of \mathbb{Q} -isomorphism classes of elliptic curves in each \mathbb{Q} -isogeny class. 84c:14036

Mestre, Jean-François Construction d'une courbe elliptique de rang ≥ 12 . (English summary) [Construction of an elliptic curve of rank ≥ 12] 84b:14019

Perrin-Riou, Bernadette Descente infinie et hauteur p -adique sur une courbe elliptique. [Infinite descent and p -adic height on an elliptic curve] 84m:14048

(Schappacher, Norbert) See Goldstein, Catherine, 84h:14049

Schinzel, Andrzej See Cassels, J. W. S., 84d:14028

Yager, Rodney I. On two variable p -adic L -functions. 84b:14020

Zimmer, Horst G. Untergruppen der rationalen Punktgruppe einer elliptischen Kurve. [Subgroups of the group of rational points of an elliptic curve] 84g:14043

secondary classifications:

Berzips, A. A p -adic analogue of Tate height. (Russian) 84g:14046

Cherednik, I. V. Integrable differential equations and coverings of elliptic curves. (Russian) (84h:58069)

Goldfeld, Dorian Sur les produits partiels eulériens attachés aux courbes elliptiques. (English summary) [On the partial Euler products associated with elliptic curves] (84d:14031)

Goldstein, Catherine Un théorème à la manière de Damerell. [A theorem of Damerell type] (See 84c:10004)

Gross, Benedict H. Heegner points on $X_0(11)$. (84f:14019)

Kanienny, S. (with Stevens, G.) Special values of L -functions attached to $X_1(N)$. (84g:14021)

Laska, Michael An algorithm for finding a minimal Weierstrass equation for an elliptic curve. (84e:14033)

Mestre, Jean-François Courbes elliptiques et groupes de classes d'idéaux de certains corps quadratiques. [Elliptic curves and ideal class groups of certain quadratic fields] (84m:12004)

Montgomery, Hugh L. (with Rohrlich, David E.) On the L -functions of canonical Hecke characters of imaginary quadratic fields. II. (84e:12014)

Oshikawa, Keiichi On formal groups over complete discrete valuation rings. III.

Applications to elliptic curves. (84b:14024c)

Rohrlich, David E. Elliptic curves with good reduction everywhere. (84c:14017)

See also Montgomery, Hugh L., (84e:12014)

Rubin, Karl Iwasawa theory and elliptic curves: supersingular primes. (See 84c:10003)

Schoof, R. J. Class groups of complex quadratic fields. (84b:12005)

Small, Charles On the equation $xyz = x + y + z = 1$. (84c:14038)

Stevens, G. See Kanienny, S., (84g:14021)

Zimmer, Horst G. Lokale und globale Höhenfunktionen auf elliptischen Kurven. [Local and global height functions on elliptic curves] (84k:14021)

14K10 Algebraic moduli, classification

Dodson, B. Fibrations of quasiabelian varieties. 84g:14044

van der Geer, G. (with Ueno, Kenji) Families of abelian surfaces with real multiplication over Hilbert modular surfaces. 84g:14045

Haine, L. Geodesic flow on $SO(4)$ and abelian surfaces. 84k:14031

Moret-Bailly, Laurent Variétés abéliennes polarisées sur les corps de fonctions. (English summary) [Polarized abelian varieties over function fields] 84c:14037

Namikawa, Yukihiko "Stable" degeneration of algebraic varieties. 84d:14030

Ueno, Kenji See van der Geer, G., 84g:14045

secondary classifications:

Berndt, Rolf Meromorphe Funktionen auf Mumfords Kompaktifizierung der universellen elliptischen Kurve N -ter Stufe. [Meromorphic functions on Mumford's compactification of the universal level N elliptic curve] (84h:10029b)

Boutot, Jean-François (with Breen, Lawrence; Gérardin, Paul; Giraud, Jean; Labesse, Jean-Pierre; Milne, James Stuart; Soule, Christophe) \star Variétés de Shimura et fonctions L . (French) [Shimura varieties and L -functions] (84m:14025)

Breen, Lawrence See Boutot, Jean-François; et al., (84m:14025)

Ehlers, Fritz (with Knörrer, Horst) An algebro-geometric interpretation of the Bäcklund-transformation for the Korteweg-de Vries equation. (84b:14022)

Gérardin, Paul See Boutot, Jean-François; et al., (84m:14025)

Giraud, Jean See Boutot, Jean-François; et al., (84m:14025)

Knörrer, Horst See Ehlers, Fritz, (84b:14022)

Labesse, Jean-Pierre See Boutot, Jean-François; et al., (84m:14025)

Milne, James Stuart See Boutot, Jean-François; et al., (84m:14025)

Soule, Christophe See Boutot, Jean-François; et al., (84m:14025)

Tate, John Variation of the canonical height of a point depending on a parameter. (84k:14034)

14K15 Arithmetic ground fields [See also 10Bxx, 10Dxx, 14Gxx.]

Berzips, A. A p -adic analogue of Tate height. (Russian) 84g:14046

Cassels, J. W. S. The Mordell-Weil group of curves of genus 2. 84k:14032

Goldfeld, Dorian Sur les produits partiels eulériens attachés aux courbes elliptiques. (English summary) [On the partial Euler products associated with elliptic curves] (84d:14031)

Jacquinot, Olivier Théorie de Kummer sur une extension d'une courbe elliptique par G_m . [Kummer theory on an extension of an elliptic curve by G_m] 84m:14049

Kanienny, S. Points of order p on elliptic curves over $\mathbb{Q}(\sqrt{p})$. 84g:14047

Laska, Michael An algorithm for finding a minimal Weierstrass equation for an elliptic curve. 84e:14033

Schneider, Peter Height pairings in the Iwasawa theory of abelian varieties. 84m:14050

p -adic height pairings. I. 84e:14034

Zur Vermutung von Birch und Swinnerton-Dyer über globalen

Funktionenkörpern. [On the conjecture of Birch and Swinnerton-Dyer over global

function fields] 84i:14027

Silverman, Joseph H. Heights and the specialization map for families of abelian varieties. 84k:14033

Small, Charles On the equation $xyz = x + y + z = 1$. 84c:14038

Tate, John Variation of the canonical height of a point depending on a parameter. (84k:14034)

Zarkhin, Yu. G. Homomorphisms of abelian varieties and points of finite order over fields of finite characteristic. (Russian) 84m:14051

secondary classifications:

Cox, David A. Mordell-Weil groups of elliptic curves over $\mathbb{C}(t)$ with $p_E=0$ or 1. (84d:14029)

- Davenport, James Harold ★ On the integration of algebraic functions. (84k:14024)
- Dem'yanenko, V. A. The different of torsion points. (Russian) (84k:14048)
- Dodson, B. Fibrations of quasibelian varieties. (84g:14044)
- Elstrodt, J. (with Grunewald, Fritz J.; Mennicke, J.) On the group $\mathrm{PSL}_2(\mathbb{Z}[i])$. (84j:10024)
- Gekker, Ernst-Ulrich Zur Arithmetik von Drinfel'd-Moduln. [On the arithmetic of Drinfel'd modules] (84j:12010)
- Goldfeld, Dorian (with Hoffstein, J.; Patterson, S. J.) On automorphic functions of half-integral weight with applications to elliptic curves. (84i:10031)
- Goldstein, Catherine ★ Courbes elliptiques et théorie d'Iwasawa. (French) [Elliptic curves and Iwasawa theory] (84k:14049)
- Grunewald, Fritz J. See Elstrodt, J.; et al., (84j:10024)
- Hadano, Toshihiro Elliptic curves with a rational point of finite order. (84c:14035)
- Hoffstein, J. See Goldfeld, Dorian; et al., (84i:10031)
- Ito, Hideji On the division equations of elliptic curves dissatisfying Hasse principle. (84c:14050)
- Kamienny, S. (with Stevens, G.) Special values of L -functions attached to $X_1(N)$. (84g:14021)
- Kuga, Michio Algebraic cycles in gfabv. (84g:14042)
- Mennicke, J. See Elstrodt, J.; et al., (84j:10024)
- Mohanty, S. P. (with Ramasamy, A. M. S.) On the number of coprime integral solutions of $y^2 = x^3 + k$. (84k:10012)
- Morita, Yasuo Reduction modulo \mathfrak{p} of Shimura curves. (84h:10039)
- Murty, V. Kumar On the Sato-Tate conjecture. (84c:14021)
- Néron, A. Fonctions thêta p -adiques. [p -adic theta-functions] (84h:14029)
- Opolka, Hans Eine Bemerkung zur Konstruktion von Galoisdarstellungen. [A remark on the construction of Galois representations] (84f:12004)
- Oshikawa, Keiichi On formal groups over complete discrete valuation rings with application to a theorem of Lutz. (84h:14056)
- Patterson, S. J. See Goldfeld, Dorian; et al., (84i:10031)
- Ramasamy, A. M. S. See Mohanty, S. P., (84k:10012)
- Rapoport, M. (with Zink, Thomas) Über die lokale Zetafunktion von Shimuravarietäten. Monodromiefiltration und verschwindende Zyklen in ungleicher Charakteristik. [On the local zeta function of Shimura varieties. Monodromy filtration and vanishing cycles in unequal characteristic] (84i:14016)
- Raynaud, Michel Courbes sur une variété abélienne et points de torsion. [Curves on an abelian variety and torsion points] (84c:14021)
- Rumely, Robert S. On the grössencharacter of an abelian variety in a parametrized family. (84i:14028)
- (Schappacher, Norbert) See Goldstein, Catherine, (84h:14049)
- Silverman, Joseph H. Integer points on curves of genus 1. (84g:10033)
- Stevens, G. See Kamienny, S., (84g:14021)
- Zimmer, Horst G. Untergruppen der rationalen Punktgruppe einer elliptischen Kurve. [Subgroups of the group of rational points of an elliptic curve] (84g:14043)
- Zink, Thomas See Rapoport, M., (84i:14016)

14K20 Analytic theory; abelian integrals and differentials

secondary classifications:

- Alling, Norman L. ★ Real elliptic curves. (84d:14027)
- Berndt, Rolf Zur Arithmetik der elliptischen Funktionenkörper höherer Stufe. [On the arithmetic of elliptic function fields of higher level] (84h:10029)
- Beukers, F. Irrationality of π^2 , periods of an elliptic curve and $\Gamma_1(5)$. (84j:10025)
- Dybrovin, B. A. (with Novikov, S. P.) Algebrogeometric Poisson brackets for real finite-range solutions of the sine-Gordon and nonlinear Schrödinger equations. (Russian) (84j:58066)
- Hano, Jun-ichi The complex Laplace-Beltrami operator canonically associated to a polarized abelian variety. (84h:22015)
- Harris, Bruno Harmonic volumes. (84c:2032)
- Hirota, Ryogo See Satsuma, Junkichi, (84g:58057)
- Hoffman, Jerome William The Hodge theory of flat vector bundles on a complex torus. (84j:32038)
- Krichever, Ios. M. The Peierls model. (Russian) (84c:81083)
- Kuribayashi, Akikazu See Kuribayashi, Izumi, (84m:14035)
- Kuribayashi, Izumi (with Kuribayashi, Akikazu) On Eichler trace formula and automorphisms of Riemann surfaces (in case of genus 3). (84m:14035)
- Lang, Serge ★ Introduction to algebraic and abelian functions. (84m:14032)
- Laurent, Michel Transcendence de périodes d'intégrales elliptiques. II. [Transcendence of the periods of elliptic integrals. II] (84f:10046)
- Levitin, B. M. Inverse problem for the Sturm-Liouville operator in the case of finite-range and infinite-range potentials. (Russian) (84j:34011)
- Livshits, I. S. A property of hyperelliptic curves. (Russian) (84d:32033)
- Novikov, S. P. See Veselov, A. P., (84j:58065) and Dybrovin, B. A., (84j:58066)
- Robert, Alain Michel Introduction aux variétés abéliennes complexes. [Introduction to complex abelian varieties] (84c:14040)
- Sampson, J. H. Higher Jacobians and cycles on abelian varieties. (84c:14005)
- Sasaki, Ryuji On the equations defining Kummer varieties. (84d:14032)
- Satsuma, Junkichi (with Hirota, Ryogo) A coupled KdV equation is one case of the four-reduction of the KP hierarchy. (84g:58057)
- Veselov, A. P. (with Novikov, S. P.) Poisson brackets that are compatible with the algebraic geometry and the dynamics of the Korteweg-de Vries equation on the set of finite-gap potentials. (Russian) (84j:58065)

14K22 Complex multiplication [See also 10D25.]

- Gross, Benedict H. Minimal models for elliptic curves with complex multiplication. (84j:14044)
- Ribet, Kenneth A. Generalization of a theorem of Tankeev. (84h:14051)

- Rumely, Robert S. On the grössencharacter of an abelian variety in a parametrized family. (84i:14028)
- Stark, H. M. The Coates-Wiles theorem revisited. (84c:14039)

secondary classifications:

- Anderson, Greg W. Logarithmic derivatives of Dirichlet L -functions and the periods of abelian varieties. (84j:10041)
- Deligne, Pierre (with Milne, James Stuart; Ogus, Arthur; Shih, Kuang-yen) ★ Hodge cycles, motives, and Shimura varieties. (84m:14046)
- Goldfeld, Dorian (with Hoffstein, J.; Patterson, S. J.) On automorphic functions of half-integral weight with applications to elliptic curves. (84i:10031)
- Gross, Benedict H. On the conjecture of Birch and Swinnerton-Dyer for elliptic curves with complex multiplication. (84c:14020)
- Hoffstein, J. See Goldfeld, Dorian; et al., (84i:10031)
- Kuga, Michio Algebraic cycles in gfabv. (84g:14042)
- Laurent, Michel Transcendence de périodes d'intégrales elliptiques. II. [Transcendence of the periods of elliptic integrals. II] (84f:10046)
- Milne, James Stuart See Deligne, Pierre; et al., (84m:14046)
- Ogus, Arthur See Deligne, Pierre; et al., (84m:14046)
- Patterson, S. J. See Goldfeld, Dorian; et al., (84i:10031)
- Rubin, Karl (with Wiles, Andrew) Mordell-Weil groups of elliptic curves over cyclotomic fields. (84c:12017)
- Congruences for special values of L -functions of elliptic curves with complex multiplication. (84h:12018)
- Schappacher, Norbert Une classe de courbes elliptiques à multiplication complexe. [A class of elliptic curves with complex multiplication] (See 84h:10005)
- Rationalité de valeurs spéciales de certaines fonctions L . [Rationality of special values of certain L -functions] (84j:10042)
- Shih, Kuang-yen See Deligne, Pierre; et al., (84m:14046)
- Wiles, Andrew See Rubin, Karl, (84h:12017)
- Yager, Rodney I. On two variable p -adic L -functions. (84h:14020)

14K25 Theta functions

- Doria, Mauro M. Addition formula for the $Z_N \times Z_N$ symmetric solutions of the factorization equations. (84h:14021)
- Ehlers, Fritz (with Knörrer, Horst) An algebro-geometric interpretation of the Bäcklund-transformation for the Korteweg-de Vries equation. (84b:14022)
- Igusa, Jun-ichi On the variety associated with the ring of theta nullwerte. (84h:14023)
- Multiplicity one theorem and problems related to Jacobi's formula. (84h:14052)
- Kanev, V. I. Quadratic Pfaffian singularities of the theta-divisor of a Prym variety. (Russian) (84h:14053)
- Kashiwara, Masaki See Sato, Mikio; et al., (84h:14054)
- Kawai, Takahiro See Sato, Mikio; et al., (84h:14054)
- Knörrer, Horst See Ehlers, Fritz, (84b:14022)
- Robert, Alain Michel Introduction aux variétés abéliennes complexes. [Introduction to complex abelian varieties] (84c:14040)
- Sasaki, Ryuji On the equations defining Kummer varieties. (84d:14032)
- Sato, Mikio (with Kashiwara, Masaki; Kawai, Takahiro) Linear differential equations of infinite order and theta functions. (84h:14054)
- Watanabe, Osamu Some remarks on theta functions of infinitely many variables. II. (84m:14052)

secondary classifications:

- Bertrand, Daniel Valeurs de fonctions thêta et hauteurs p -adiques. [Values of theta functions and p -adic heights] (See 84h:10005)
- Bijlsma, Alex Algebraic points of abelian functions in two variables. (French summary) (84g:10064)
- Bobenko, A. I. (with Matveev, V. B.; Sall', M. A.) Nonlocal analogues of the Korteweg-de Vries and Kadomtsev-Petviashvili equations. (Russian) (84c:35095)
- The Landau-Lifshits equation. The "dressing" procedure. Elementary excitations. (Russian. English summary) (84h:35139)
- Boon, M. H. (with Glasser, M. L.; Zak, Joshua; Zucker, I. J.) Additive decompositions of θ -functions of multiple arguments. (84h:10035)
- (with Zak, Joshua; Zucker, I. J.) Rational von Neumann lattices. (84h:81044)
- Bovier, Anton Factorized S matrices and generalized Baxter models. (84c:81072)
- Brazovskii, S. A. (with Dzyaloshinskii, I. E.; Krichever, Ios. M.) Exactly soluble Peierls models. (84c:82009)
- Cherednik, I. V. Regularity of "finite-zone" solutions of integrable matrix differential equations. (Russian) (84f:35123)
- Coble, Arthur B. ★ Algebraic geometry and theta functions. (84m:14001)
- Dahlberg, B. E. J. (with Trubowitz, E.) A remark on two-dimensional periodic potentials. (84h:35119)
- Date, Etsurō (with Jimbo, Michio; Kashiwara, Masaki; Miwa, Tetsuji) Landau-Lifshitz equation: solitons, quasiperiodic solutions and infinite-dimensional Lie algebras. (84h:58070)
- Dubrovin, B. A. (with Natanzon, S. M.) Real two-zone solutions of the sine-Gordon equation. (Russian) (84c:58048)
- Dzyaloshinskii, I. E. See Brazovskii, S. A.; et al., (84c:82009)
- Farkas, Hershel M. Relations between holomorphic quadratic differentials. II. (84c:14025)
- Glasser, M. L. See Boon, M. H.; et al., (84h:10035)
- Hano, Jun-ichi The complex Laplace-Beltrami operator canonically associated to a polarized abelian variety. (84h:22015)
- Infeld, E. Three-dimensional stability of Korteweg-de Vries waves and solitons. III. Lagrangian methods, K-de V with positive dispersion. (84d:35134)
- Jaworski, M. (with Zagrozdinski, J.) Quasiperiodic solutions of the sine-Gordon equation. (84c:35097)
- Jimbo, Michio See Date, Etsurō; et al., (84h:58070)

- Kashiwara, Masaki See Date, Etsurō; et al., (84b:58070)
 (Kirillov, A. A.) See Lion, Gérard; et al., (84m:58145)
 Kotlyarov, V. P. Finite-range solutions of the Heisenberg equation. (Russian) (84b:58054)
 Krichever, Ios. M. See Brazovskii, S. A.; et al., (84c:82009)
 Krive, I. V. Quantum and thermodynamic fluctuations of fermion fields in finite volume. (Russian. English summary) (84g:81041)
 Kuznetsov, E. A. (with Turitsyn, S. K.) Two- and three-dimensional solitons in weakly dispersive media. (84b:76061)
 Lin, Ts'ung Yuan An elementary proof of the identity $\theta_0^4 = \theta_{10}^4 + \theta_{01}^4$. (84b:10036)
 Lion, Gérard (with Vergne, Michèle) ★Преставление Вейля, индекс Маслова и θ -сери́. (Russian) [The Weil representation, Maslov index and theta series] (84m:58145)
 Matveev, V. B. See Bobenko, A. I.; et al., (84c:35095)
 Miwa, Tetsuji See Date, Etsurō; et al., (84b:58070)
 Natanzon, S. M. See Dubrovnik, B. A., (84c:58048)
 Neron, A. Fonctions θ - p -adiques. [p -adic theta-functions] (84b:14029)
 Rumely, Robert S. On the grössencharacter of an abelian variety in a parametrized family. (84i:14028)
 Saermark, K. Solutions to generalized double sine-Gordon equations. (84b:35153)
 Sall, M. A. See Bobenko, A. I.; et al., (84c:35095)
 Shrock, Robert E. On completely X -symmetric factorizable S -matrices corresponding to theta functions. (84f:81105)
 Trubowitz, E. See Dahlberg, B. E. J., (84b:35119)
 Turitsyn, S. K. See Kuznetsov, E. A., (84b:76061)
 Vergne, Michèle See Lion, Gérard, (84m:58145)
 Vogt, Christian Two remarks concerning toroidal groups. (84b:32041)
 Zăgărescu, M. Orthogonal system of fields, the hyper-elliptic gauge. (84b:81085)
 Zagrodzinski, J. Dispersion equations and a comparison of different quasiperiodic solutions of the sine-Gordon equation. (84c:35098)
 Direct approach to the periodic solutions of the multidimensional sine-Gordon equation. (84f:35142)
 See also Jaworski, M., (84c:35097)
 Zak, Joshua See Boon, M. H.; et al., (84b:10035) and (84f:81044)
 Zucker, I. J. See Boon, M. H.; et al., (84b:10035) and (84f:81044)

14K30 Picard schemes, higher Jacobians

- Clemens, C. Herbert Degeneration techniques in the study of threefolds. 84g:14048
 Welters, G. E. ★Abel-Jacobi isogenies for certain types of Fano threefolds. 84c:14035

secondary classifications:

- Beauville, Arnaud Les singularités du diviseur Θ de la jacobienne intermédiaire de l'hypersurface cubique dans P^4 . [The singularities of the theta-divisor of the intermediate Jacobian of the cubic hypersurface in P^4] (84c:14030)
 Clemens, C. Herbert Applications of mixed Hodge theory to the study of threefolds. (84b:32040)
 Collino, Alberto The fundamental group of the Fano surface. I, II. (84f:14029)
 Friedman, Robert David (with Smith, Roy Campbell) Singularities of period maps and the weak global Torelli problem. (84c:14020)
 Griffiths, Phillip Poincaré and algebraic geometry. (84j:14020)
 Harris, Bruno Homological versus algebraic equivalence in a Jacobian. (84m:14009)
 Puts, Pierre J. On some Fano-threefolds that are sections of Grassmannians. (84c:14024)
 Sampson, J. H. Higher Jacobians and cycles on abelian varieties. (84c:14005)
 Smith, Roy Campbell See Friedman, Robert David, (84c:14020)
 Tikhomirov, A. S. The Fano surface of the Veronese double cone. (Russian) (84i:14026)
 Singularities of the theta-divisor of the intermediate Jacobian of the double P^3 of index two. (Russian) (84c:14032)

14K99 None of the above, but in this section

secondary classifications:

- Adler, M. (with van Moerbeke, P.) The algebraic integrability of geodesic flow on $SO(4)$. (84g:58048)
 Huibregtse, Mark E. The Albanese mapping for a punctual Hilbert scheme. II. Symmetrized differentials and singularities. (84b:14009)
 van Moerbeke, P. See Adler, M., (84g:58048)

14Lxx Group schemes [For linear algebraic groups, see 20Gxx. For Lie algebras, see 17B45.]

14L05 Formal groups, p -divisible groups [See also 17B50.]

- Fossum, Robert M. Decompositions revisited. 84b:14055
 Kneppers, H. A. W. M. ★The covariant classification of two-dimensional smooth commutative formal groups over an algebraically closed field of positive characteristic. 84m:14053
 Nichols, Warren D. (with Weisfeiler, Boris) Differential formal groups of J. F. Ritt. 84j:14045
 Oshikawa, Keiichi On formal groups over complete discrete valuation rings with application to a theorem of Lutz. 84b:14056
 On formal groups over complete discrete valuation rings. I. 84b:14024a
 On formal groups over complete discrete valuation rings. II. Generic formal group and specializations. 84b:14024b
 On formal groups over complete discrete valuation rings. III. Applications to elliptic curves. 84b:14024c
 Weisfeiler, Boris See Nichols, Warren D., 84j:14045

secondary classifications:

- Baldassarri, Francesco On inseparable descent. (84j:13022)
 Coleman, Robert F. The dilogarithm and the norm residue symbol. (French summary) (84j:12017)
 The arithmetic of Lubin-Tate division towers. (84c:12010)
 Fontaine, Jean-Marc Sur certains types de représentations p -adiques du groupe de Galois d'un corps local; construction d'un anneau de Barsotti-Tate. [On certain types of p -adic representations of the Galois group of a local field; construction of a Barsotti-Tate ring] (84d:14010)
 Philippon, Patrice Sous-groupes à n paramètres et indépendance algébrique. [n -parameter subgroups and algebraic independence] (See 84c:10003)
 Skowroński, Andrzej Projective abelian Hopf algebras over a field. (84f:16013)
 Souto Menéndez, José Manuel On the extensions of local fields generated by the torsion points of some formal groups. (84c:12007)
 Vostokov, S. V. The Hilbert symbol for Lubin-Tate formal groups. I. (Russian) (84f:12007)

14L10 Group varieties

- Masser, D. W. Interpolation on group varieties. 84m:14054

secondary classifications:

- Cline, Edward T. (with Parshall, Brian J.; Scott, Leonard L.) Detecting rational cohomology of algebraic groups. (84j:20046)
 Kurtzke, John F., Jr. Centralizers of irregular elements in reductive algebraic groups. (84f:20050)
 O'Halloran, Joyce A vanishing theorem for the cohomology of Borel subgroups. (84j:20047)
 Parshall, Brian J. See Cline, Edward T.; et al., (84j:20046)
 Popov, V. L. Homological dimension of algebras of invariants. (84i:14010)
 Scott, Leonard L. See Cline, Edward T.; et al., (84j:20046)
 Spaltenstein, Nicolas On unipotent and nilpotent elements of groups of type E_6 . (84f:20034)
 Waldschmidt, Michel Sous-groupes analytiques de groupes algébriques. [Analytic subgroups of algebraic groups] (84j:10046)

14L15 Group schemes

- Cline, Edward T. (with Parshall, Brian J.; Scott, Leonard L.) A Mackey imprimitivity theory for algebraic groups. 84j:14046
 Parshall, Brian J. See Cline, Edward T.; et al., 84j:14046
 Scott, Leonard L. See Cline, Edward T.; et al., 84j:14046
 Shafarevich, Igor R. On some infinite-dimensional groups. II. (Russian) 84a:14021
 Soule, Christophe Présentation finie des groupes de Chevalley à coefficients dans un anneau. [Finite presentation of Chevalley groups with coefficients in a ring] 84b:14025
 Takeuchi, Mitsuhiro On coverings and hyperalgebras of affine algebraic groups. III. 84d:14033

secondary classifications:

- Berthelot, P. Le théorème de dualité plate pour les surfaces (d'après J. S. Milne). [The flat duality theorem for surfaces (according to J. S. Milne)] (84j:14028)
 Breen, Lawrence Extensions du groupe additif sur le site parfait. [Extensions of the additive group on the perfect site] (84j:14029)
 Douai, Jean-Claude Suites exactes déduites de la suite spectrale de Leray en cohomologie non abélienne. [Exact sequences derived from the Leray spectral sequences in nonabelian cohomology] (84c:14014)
 Kreimer, H. F. Quadratic Hopf algebras and Galois extensions. (84b:16039)
 Newman, Kenneth Sequences of divided powers in characteristic p . (84a:16015)
 Philippon, Patrice Sous-groupes à n paramètres et indépendance algébrique. [n -parameter subgroups and algebraic independence] (See 84c:10003)
 Shigano, Hiroshi On observable and strongly observable Hopf ideals. (84j:16006)
 Takeuchi, Mitsuhiro Commutative Hopf algebras and cocommutative Hopf algebras in positive characteristic. (84a:16017)
 Waldschmidt, Michel Groupes algébriques et indépendance linéaire. [Algebraic groups and linear independence] (See 84c:10004)

14L17 Affine algebraic groups, hyperalgebra constructions [See also 17B45, 18D35.]

- Poletti, Mario (with Volpi, Aldo) π -homomorphisms and their representation. (Italian) 84b:14057
 Volpi, Aldo See Poletti, Mario, 84b:14057

secondary classifications:

- Baldassarri, Francesco On inseparable descent. (84j:13022)
 Sullivan, John Brendan Quasi-affine homogeneous spaces. (84g:20088)

14L20 Finite group schemes

14L25 Pro-algebraic group schemes

14L30 Group actions on varieties or schemes [See also 14D25.]

- Akyildiz, Ersan On the G_m -decomposition of G/P . 84b:14058
 (with Carrell, James B.; Lieberman, D. I.; Sommese, Andrew John) On the graded rings associated to holomorphic vector fields with exactly one zero. 84c:14029

- Almkvist, Gert Some formulas in invariant theory. **84i:14030**
- Bass, Hyman (with Lubotzky, Alexander) Automorphisms of groups and of schemes of finite type. **84i:14031**
- Bertin, José Sur les automorphismes des variétés algébriques non complètes. (English summary) [On automorphisms of noncomplete algebraic varieties] **84b:14026**
- Brion, Michel Sur certaines représentations des groupes semi-simples. (English summary) [On some representations of semisimple groups] **84b:14027**
- Surfaces quotients par un groupe unipotent. [Quotient surfaces by a unipotent group] **84m:14055**
- Brylinski, Jean-Luc Differential operators on the flag varieties. **84e:14035**
- Carrell, James B. See Akyildiz, Ersan; et al., **84i:14029**
- Djoković, Dragomir Z. Closures of equivalence classes of trivectors of an eight-dimensional complex vector space. **84b:14059**
- Fauntleroy, A. Categorical quotients of certain algebraic group actions. **84d:14034**
- Fogarty, John Geometric quotients are algebraic schemes. **84m:14056**
- Kempken, Gisela ★Eine Darstellung des Köchers \tilde{A}_k . (German) [A representation of the quiver \tilde{A}_k] **84i:14022**
- Kopský, Vojtěch The concept of extended integrity bases. **84i:14023**
- Lieberman, D. I. See Akyildiz, Ersan; et al., **84i:14029**
- Lubotzky, Alexander See Bass, Hyman, **84i:14031**
- Lusztig, George (with Vogan, David A., Jr.) Singularities of closures of K -orbits on flag manifolds. **84i:14060**
- Pauer, Franz Glatte Einbettungen von G/U . [Smooth embeddings of G/U] **84i:14032**
- Peskin, Barbara R. On rings of invariants with rational singularities. **84e:14036**
- Procesi, Claudio Computing with matrices. (See **84c:00012**)
- Sommese, Andrew John See Akyildiz, Ersan; et al., **84i:14029**
- Spaltenstein, Nicolas ★Classes unipotentes et sous-groupes de Borel. (French) [Unipotent classes and Borel subgroups] **84i:14024**
- Tanisaki, Toshiyuki Defining ideals of the closures of the conjugacy classes and representations of the Weyl groups. **84g:14049**
- Vogan, David A., Jr. See Lusztig, George, **84i:14060**

secondary classifications:

- Avramov, Luchezar L. Invariants d'un groupe fini engendré par des pseudo-reflexions, opérant sur un anneau local. [Invariants of a finite group generated by pseudoreflections, acting on a local ring] **(84i:13020)**
- Ballico, Edoardo (with Dikranjan, Dikran) Invariant ideals and the variety of complexes. (Italian summary) **(84i:14055)**
- Beklemishev, N. D. Classification of quaternary cubic forms in nongeneral position. (Russian) **(84i:10028)**
- Bertin, José (with Elencwajg, G.) Symétries des fibrés vectoriels sur P^n et nombre d'Euler. [Symmetries of vector bundles over P^n and the Euler number] **(84i:14012)**
- Pinceaux de droites et automorphismes des surfaces affines. [Pencils of lines and automorphisms of affine surfaces] **(84i:14035)**
- Browder, William (with Katz, Nicholas M.) Free actions of finite groups on varieties. I. **(84f:57023a)**
- (with Katz, Nicholas M.) Free actions of finite groups on varieties. II. **(84f:57023b)**
- (with Katz, Nicholas M.) Erratum: "Free actions of finite groups on varieties. II." **(84f:57023c)**
- (Carrell, James B.) See Group actions and vector fields, **(84f:32001)**
- De Concini, Corrado Characteristic free-"decomposition" of the coordinate ring of the symplectic group. (Italian summary) **(84j:20041)**
- Demushkin, A. S. Combinatorial invariance of toric singularities. (Russian. English summary) **(84f:14036)**
- Dikranjan, Dikran See Ballico, Edoardo, **(84i:14055)**
- Djoković, Dragomir Z. Classification of trivectors of an eight-dimensional real vector space. **(84f:15036)**
- Elencwajg, G. See Bertin, José, **(84i:14012)**
- Gordeev, N. L. Stanley's conjecture and classification of finite groups whose algebra of invariants is a complete intersection. (Russian) **(84m:14058)**
- Subgroups of a finite group whose algebra of invariants is a complete intersection. (Russian) **(84b:20045)**
- Happel, Dieter Relative invariants and subgeneric orbits of quivers of finite and tame type. **(84a:16052)**
- Katsylo, P. I. Sections of sheets in a reductive algebraic Lie algebra. (Russian) **(84k:17005)**
- Katz, Nicholas M. See Browder, William, **(84f:57023a)**; **(84f:57023b)** and **(84f:57023c)**
- Kraft, Hanspeter Geometric methods in representation theory. **(84c:14007)**
- (Kung, Joseph P. S.) See Young tableaux in combinatorics, invariant theory, and algebra. **(84b:05006)**
- Lukatskii, A. M. Maximality of the action of an orthogonal group on an affine quadric. (Russian) **(84a:32049)**
- Nakajima, Haruhisa Class groups of localities of rings of invariants of reductive algebraic groups. **(84j:20043)**
- Peskin, Barbara R. Quotient-singularities and wild p -cyclic actions. **(84k:13018)**
- Popov, A. M. Some theorems on the existence of stationary subgroups in general position. (Russian) **(84m:22023)**
- Procesi, Claudio Symmetry on tensor spaces; some consequences. (Italian summary) **(84i:15029)**
- Teissier, Bernard Variétés toriques et polyèdres. [Toric varieties and polytopes] **(84b:52013)**
- Wall, C. T. C. Geometric invariant theory of linear systems. **(84m:14012)**
- Group actions and vector fields ★Group actions and vector fields. **(84f:32001)**
- Seminar:
- Polish-North American, Group Actions and Vector Fields ★Group actions and vector fields. **(84f:32001)**
- Vancouver, B.C. ★Group actions and vector fields. **(84f:32001)**
- Young tableaux in combinatorics, invariant theory, and algebra ★Young tableaux in combinatorics, invariant theory, and algebra. **(84b:05006)**

14L35 Classical groups (geometric aspects)

- Kimura, Tatsuo On the construction of some relative invariants for $GL(n)$ ($n=6,7,8$) by the decomposition of the Young diagrams. **84j:14047**
- secondary classifications:
- Huneke, Craig (with Lakshmbai, V.) On the normality of the rings of Schubert varieties. **(84e:14037)**
- Iwamoto, Takashi Conjugacy classes in classical groups. **(84m:20052)**
- Lakshmbai, V. See Huneke, Craig, **(84e:14037)**
- Proctor, Robert A. Classical Bruhat orders and lexicographic shellability. **(84j:20044)**
- Salzberg, Betty Buildings and shadows. **(84m:20047)**

14L40 Other algebraic groups (geometric aspects)

- Onishechik, A. L. On inclusions between transitive algebraic groups. (Russian) **84j:14048**
- secondary classifications:

Waterhouse, William C. Automorphisms of quotients of $[[GL(n_i)]$. **(84m:20050)**

14L99 None of the above, but in this section

secondary classifications:

- Donkin, Stephen A note on decomposition numbers of reductive algebraic groups. **(84i:20017)**
- Winter, David J. The Fitting and Jordan structure of affine semigroups. **(84d:20073)**
- Wüstholz, G. Nullstellenabschätzungen auf Varietäten. [Zero estimates on varieties] (See **84b:10005**)

14Mxx Special varieties

14M05 Varieties defined by ring conditions (factorial, Macaulay)

- Cavaliere, Maria Pia (with Niesi, Gianfranco) On monomial curves and Cohen-Macaulay type. **84i:14061**
- Cumino, Caterina (with Greco, Silvio; Manaresi, Mirella) Bertini theorems for weak normality. **84k:14036**
- Greco, Silvio See Cumino, Caterina; et al., **84k:14036**
- Manaresi, Mirella See Cumino, Caterina; et al., **84k:14036**
- Marchionna, Ermanno On regular Cohen-Macaulay varieties. (Italian) **84g:14050**
- Martengo, Chiara On certain divisor class groups on a projective scheme. (Italian. English summary) **84j:14049**
- Nielsen, H. Andreas Free resolutions of tensor forms. **84i:14062**
- Niesi, Gianfranco See Cavaliere, Maria Pia, **84i:14061**
- Oneto, Anna (with Zatini, Elsa) Finite morphisms of Gorenstein curves. **84g:14051**
- Treger, Robert On equations defining arithmetically Cohen-Macaulay schemes. II. **84j:14050b**
- On equations defining arithmetically Cohen-Macaulay schemes. I. **84j:14050a**
- Zatini, Elsa See Oneto, Anna, **84g:14051**

secondary classifications:

- Avramov, Luchezar L. Pseudoreflection group actions on local rings. **(84k:13020)**
- Baldassarri Ghezzi, S. (with Chiaruttini, S.) The representation of certain \tilde{A} -modules. (Italian) **(84e:14013)**
- Casazza, Enrica (with Valenti, Enrico) Cubic surfaces in P^3 with some set-theoretic complete intersection curves. (Italian. English summary) **(84c:14042)**
- Chiaruttini, S. See Baldassarri Ghezzi, S., **(84e:14013)**
- Fiorentini, Mario Intersections résiduelles dans les anneaux de Cohen-Macaulay et un critère de régularité relative. [Residual intersections in Cohen-Macaulay rings and a criterion for relative regularity] **(84k:13023)**
- Geramita, Anthony V. Remarks on the number of generators of some homogeneous ideals. (French summary) **(84b:13027)**
- Goto, Shiro Blowing-up of Buchsbaum rings. **(84i:13032)**
- Gruson, Laurent (with Peskine, Christian) Courbes de l'espace projectif: variétés de sécantes. [Curves in projective space: secant varieties] **(84m:14061)**
- Huneke, Craig Strongly Cohen-Macaulay schemes and residual intersections. **(84m:13023)**
- Ngô Việt Trung Classification of the double projections of Veronese varieties. **(84d:13017)**
- Ooishi, Akira Castelnuovo's regularity of graded rings and modules. **(84m:13024)**
- Peskine, Christian See Gruson, Laurent, **(84m:14061)**
- Proctor, Robert A. Classical Bruhat orders and lexicographic shellability. **(84j:20044)**
- Rossi, Maria Evelina The Rees and symmetric algebras of an ideal. (Italian. English summary) **(84f:13021)**
- Schenzel, Peter A note on almost complete intersections. **(84g:13035)**
- Notes on liaison and duality. **(84a:13012)**
- Stückrad, Jürgen (with Vogel, Wolfgang) On the number of equations defining an algebraic set of zeros in n -space. **(84m:14060)**
- Valenti, Enrico See Casazza, Enrica, **(84c:14042)**
- Vogel, Wolfgang See Stückrad, Jürgen, **(84m:14060)**

14M07 Low-codimension problems [See also 14Cxx.]

- Ciliberto, Ciro Remarks on some classical unirationality theorems for hypersurfaces and projective algebraic complete intersections. (Italian. English summary) **84k:14037**
- Faltings, Gerd Verschwindungssätze und Untermannigfaltigkeiten kleiner Kodimension des komplex-projektiven Raumes. [Vanishing theorems and submanifolds of small codimension of the complex-projective space] **84g:14052**

- González, Miguel (with Sols Lucía, Ignacio) On the genus of varieties of codimension 2 in projective space. **84c:14038**
 Sols Lucía, Ignacio See González, Miguel, **84c:14038**
 Xambó, S. Scrolls and quartics. **84c:14041**

secondary classifications:

- Ciliberto, Ciro Algebraic hypersurfaces with parabolic points and related Hessians. (Italian. English summary) **(84c:14034)**
 Ferrer, J. (with Panyella, F.) Homology and Chern classes of smooth hypersurfaces in multiple-projective spaces. (Spanish. English summary) **(84g:14005)**
 Fujita, Takao Projective threefolds with small secant varieties. **(84d:14023)**
 Panyella, F. See Ferrer, J., **(84g:14005)**
 Zak, F. L. Projections of algebraic varieties. (Russian) **(84i:14012)**

14M10 Complete intersections

- Bresinsky, Henrik (with Stückrad, Jürgen; Renschuch, Bodo) Mengentheoretisch vollständige Durchschnitte verschiedener rationaler Raumkurven im P^3 über Körpern von Primzahlcharakteristik. [Set-theoretic complete intersections of several rational space curves in P^3 over fields of prime characteristic] **84j:14051**
 (with Vogel, Wolfgang) Some remarks on a paper by L. Kronecker. **84c:14063**
 Bruce, J. W. The duals of generic space curves and complete intersections. **84m:14057**
 Casazza, Enrica (with Valenti, Enrico) Cubic surfaces in P^3 with some set-theoretic complete intersection curves. (Italian. English summary) **84c:14042**
 Gordeev, N. L. Stanley's conjecture and classification of finite groups whose algebra of invariants is a complete intersection. (Russian) **84m:14058**
 Ishii, Shihoko A characterization of hyperplane cuts of smooth complete intersections. **84f:14033**
 Renschuch, Bodo See Bresinsky, Henrik; et al., **84j:14051**
 Robbiano, Lorenzo (with Valla, Giuseppe) Some curves in P^3 are set-theoretic complete intersections. **84m:14059**
 Spangher, Walter Existence and increasing sequences of monoids on complete intersection varieties. (Italian. English summary) **84c:14043**
 Stückrad, Jürgen (with Vogel, Wolfgang) On the number of equations defining an algebraic set of zeros in n -space. **84m:14060**
 See also Bresinsky, Henrik; et al., **84j:14051**
 Valenti, Enrico See Casazza, Enrica, **84c:14042**
 Valla, Giuseppe See Robbiano, Lorenzo, **84m:14059**
 Vogel, Wolfgang See Bresinsky, Henrik, **84c:14063** and Stückrad, Jürgen, **84m:14060**

secondary classifications:

- Boratyński, M. Generating ideals up to radical and systems of parameters of graded rings. **(84g:13017)**
 Brooks, Robert The \hat{A} -genus of complex hypersurfaces and complete intersections. **(84i:53062)**
 Ciliberto, Ciro Remarks on some classical unirationality theorems for hypersurfaces and projective algebraic complete intersections. (Italian. English summary) **(84c:14037)**
 Conte, Alberto Conics on complete intersections and the Hodge conjecture for some of them. **(84j:14014)**
 Fiorentini, Mario (with Lascu, Alexandru T.) A formula of enumerative geometry. (Italian. English summary) **(84f:14037)**
 Gimigliano, Alessandro Complete intersections in products of projective spaces. (Italian. English summary) **(84c:14013)**
 Gordeev, N. L. Subgroups of a finite group whose algebra of invariants is a complete intersection. (Russian) **(84h:20045)**
 Iarrobino, Anthony Deformations of zero-dimensional complete intersections after M. Granger, T. Gaffney. **(84j:14012)**
 Deforming complete intersection Artin algebras. Appendix: Hilbert function of $C[x,y]/I$. **(84j:14010)**
 Lascu, Alexandru T. See Fiorentini, Mario, **(84f:14037)**
 Libgober, Anatoly S. (with Wood, John W.) Differentiable structures on complete intersections. I. **(84a:57037)**
 Martens, Gerriet Über den Clifford-Index algebraischer Kurven. [On the Clifford index of algebraic curves] **(84c:14020a)**
 Renschuch, Bodo On radical-equivalent and zero-equivalent ideals. **(84c:13017)**
 Rotillon, Denis See Watanabe, Keiichi, **(84c:13008)**
 Valla, Giuseppe A property of almost complete intersections. **(84c:13013)**
 Watanabe, Keiichi (with Rotillon, Denis) Invariant subrings of $C[X,Y,Z]$ which are complete intersections. **(84c:13008)**
 Wood, John W. See Libgober, Anatoly S., **(84a:57037)**

14M12 Determinantal varieties

- Józefiak, Tadeusz (with Lascoux, Alain; Pragacz, Piotr) Classes of determinantal varieties associated with symmetric and antisymmetric matrices. **84j:14052**
 Lascoux, Alain See Józefiak, Tadeusz; et al., **84j:14052**
 Pragacz, Piotr See Józefiak, Tadeusz; et al., **84j:14052**
 Strickland, Elisabetta On the conormal bundle of the determinantal variety. **84j:14053**
 An application of combinatorics of Young tableaux to geometric problems. **84f:14034**

secondary classifications:

- Bruns, Winfried The canonical module of a determinantal ring. **(84i:13016)**
 Livsic, M. S. Cayley-Hamilton theorem, vector bundles and divisors of commuting operators. **(84j:47005)**
 Nielsen, H. Andreas Free resolutions of tensor forms. **(84h:14062)**

14M15 Grassmannians, Schubert varieties [See also 51M35.]

- (Bernstein, Joseph N.) See Segal, Graeme, **84c:14029**
 Di Fiore, Lora (with Freni Casale, Sveva) On the Grassmannians contained in a given Grassmannian. (Italian. English summary) **84c:14044**
 (with Freni Casale, Sveva) More on the Grassmannians contained in a given Grassmannian. (Italian. English summary) **84j:14053**
 Freni Casale, Sveva See Di Fiore, Lora, **84c:14044** and **84j:14053**
 Gel'fand, I. M. See Segal, Graeme, **84c:14029**
 (Gel'fand, S. I.) See Segal, Graeme, **84b:14029**
 Gerstenhaber, Murray (with May, Ralph) Geometry of subalgebras and inseparable extensions. **84a:14025**
 Griffith, Walter Lawrence, Jr. $H^*(G/B, L)$ for G of semisimple rank 2. **84i:14033**
 Gruson, Laurent (with Peskine, Christian) Courbes de l'espace projectif: variétés de sécantes. [Curves in projective space: secant varieties] **84m:14061**
 Hiller, Howard Combinatorics and intersections of Schubert varieties. **84b:14028**
 Huneke, Craig (with Lakshmibai, V.) On the normality of the rings of Schubert varieties. **84c:14037**
 Kazhdan, David (with Lusztig, George) Schubert varieties and Poincaré duality. **84d:14054**
 Lakshmibai, V. See Huneke, Craig, **84c:14037**
 Lusztig, George See Kazhdan, David, **84d:14054**
 May, Ralph See Gerstenhaber, Murray, **84a:14025**
 Peskine, Christian See Gruson, Laurent, **84m:14061**
 Segal, Graeme An introduction to the paper: "Schubert cells, and the cohomology of the spaces G/P " [Uspekhi Mat. Nauk 28 (1973), no. 3(171), 3-26; MR 55 #2941] by I. N. Bernstein (Joseph N. Bernstein), I. M. Gel'fand and S. I. Gel'fand. **84b:14029**
 Zhong, Jia Qing A note on Schubert calculus. **84m:14062**

secondary classifications:

- Brylinski, Jean-Luc Differential operators on the flag varieties. **(84c:14035)**
 Formanek, Edward The polynomial identities of matrices. **(84b:16019)**
 Gel'fand, S. I. (with MacPherson, Robert D.) Verma modules and Schubert cells: a dictionary. **(84b:17004)**
 Goldstein, Norman Connell hypersurfaces in Minkowski space. **(84c:32043)**
 Kapranov, M. M. The derived category of coherent sheaves on Grassmann varieties. (Russian) **(84c:14014)**
 Keller, Ott-Heinrich Supplements to my work: "The homology groups of the manifold which consists of the linear k -spaces on a nondegenerate $2k$ -quadric" [Beiträge Algebra Geom. No. 9 (1980), 161-169; MR 83c:14038]. (German) **(84b:14064)**
 Kodama, Akio On the zeros of vector fields on $P^n(C)$. **(84c:32039)**
 MacPherson, Robert D. See Gel'fand, S. I., **(84b:17004)**
 Newstead, P. E. On the plane sections of a quadric hypersurface. **(84f:14032)**
 Papantonopoulou, A. Embeddings in $G(1,3)$. **(84c:14030)**
 Rader, Cary The Betti numbers of Grassmannians. **(84i:57033)**
 Shayman, Mark A. On the variety of invariant subspaces of a finite-dimensional linear operator. **(84g:15004)**
 Geometry of the algebraic Riccati equation. I, II. **(84m:93027)**
 Tanisaki, Toshiyuki Defining ideals of the closures of the conjugacy classes and representations of the Weyl groups. **(84g:14049)**
 Wang, Jian Pan Sheaf cohomology on G/B and tensor products of Weyl modules. **(84b:20032)**
 Representation theory ★ Representation theory. **(84a:22003)**

14M17 Homogeneous spaces [See also 32M10, 53C30, 57T15.]

- Akyildiz, Ersan On the G_2 -decomposition of G/P . (Turkish summary) **84c:14039**
 Vector fields and cohomology of G/P . **84j:14054**
 Ballico, Edoardo (with Dikranjan, Dikran) Invariant ideals and the variety of complexes. (Italian summary) **84j:14055**
 Bertin, José Pinceaux de droites et automorphismes des surfaces affines. [Pencils of lines and automorphisms of affine surfaces] **84f:14035**
 Dikranjan, Dikran See Ballico, Edoardo, **84j:14055**
 Griffith, Walter Lawrence, Jr. The indecomposability of $H^*(G/B, L)$. **84c:14038**
 Ilori, Samuel A. Subvarieties of flag bundles. (Italian summary) **84c:14040**
 Keller, Ott-Heinrich Supplements to my work: "The homology groups of the manifold which consists of the linear k -spaces on a nondegenerate $2k$ -quadric" [Beiträge Algebra Geom. No. 9 (1980), 161-169; MR 83c:14038]. (German) **84b:14064**
 Lascoux, Alain (with Schützenberger, Marcel-Paul) Structure de Hopf de l'anneau de cohomologie et de l'anneau de Grothendieck d'une variété de drapeaux. (English summary) [Hopf algebra structures of the cohomology ring and Grothendieck ring of a flag manifold] **84b:14030**
 Magasumov, G. S. See Rozenfel'd, B. A., **84j:14055**
 Rozenfel'd, B. A. (with Magasumov, G. S.) Cell decompositions of manifolds of forms of simplicity. (Russian) **84g:14055**
 Schützenberger, Marcel-Paul See Lascoux, Alain, **84b:14030**
 Shpiz, G. B. Some geometric structures on algebraic varieties. (Russian) **84j:14056**

secondary classifications:

- Akyildiz, Ersan On the G_2 -decomposition of G/P . **(84b:14058)**
 Carrell, James B. Vector fields and cohomology of G/B . **(84c:32038)**
 Ferrer Santos, Walter Ricardo A note on reductive groups. **(84g:20080)**
 Glover, Henry H. (with Homer, William D.) Fixed points on flag manifolds. **(84c:55002)**
 Goldstein, Norman Ampleteness and connectedness in complex G/P . **(84b:32043)**
 Ampleteness in complex homogeneous spaces and a second Lefschetz theorem. **(84c:32044)**
 Homer, William D. See Glover, Henry H., **(84c:55002)**
 Huckleberry, Alan T. (with Oeljeklaus, E.) Homogeneous spaces from a complex analytic viewpoint. **(84c:32045)**

- Huneke, Craig (with Lakshmbai, V.) On the normality of the rings of Schubert varieties. (84e:14037)
- Kac, Victor G. See Peterson, Dale H., (84g:17017)
- Lakshmbai, V. See Huneke, Craig, (84e:14037)
- Oeljeklaus, E. See Huckleberry, Alan T., (84i:32045)
- Peterson, Dale H. (with Kac, Victor G.) Infinite flag varieties and conjugacy theorems. (84g:17017)
- Sullivan, John Brendan Quasi-affine homogeneous spaces. (84g:20088)
- Umemura, Hiroshi On the maximal connected algebraic subgroups of the Cremona group. I. (84g:14013)

14M20 Rational varieties

secondary classifications:

- Bertin, José Pinceaux de droites et automorphismes des surfaces affines. [Pencils of lines and automorphisms of affine surfaces] (84f:14035)
- Coray, Daniel F. The Hasse principle for pairs of quadratic forms. (See 84c:10003)
- Crade, R. F. (with Hall, G. S.) Second order symmetric tensors and quadric surfaces in general relativity. (84d:83029)
- Hall, G. S. See Crade, R. F., (84d:83029)
- Herzer, Armin Die Schmieghyperebenen an die Veronese-Mannigfaltigkeit bei beliebiger Charakteristik. (English summary) [The osculating hyperplanes to the Veronese manifold in the case of arbitrary characteristic] (84g:51036)
- Hirschowitz, André (with Narasimhan, M. S.) Fibrés de 't Hooft spéciaux et applications. [Special 't Hooft bundles and applications] (84g:14016)
- Narasimhan, M. S. See Hirschowitz, André, (84g:14016)
- Newstead, P. E. Pencils on conic bundles. (84i:14013)
- Seiple, J. G. Complete conics of S_2 and their model variety $\Omega_2^{[2]}$ [27]. (84i:14037)
- Shioda, Tetsuji Geometry of Fermat varieties. (See 84c:10004)
- Suslin, A. A. Quaternion homomorphism for the field of functions on a conic. (Russian) (84a:12030)
- Umemura, Hiroshi Maximal algebraic subgroups of the Cremona group of three variables. Imprimitve algebraic subgroups of exceptional type. (84b:14005)
- On the maximal connected algebraic subgroups of the Cremona group. I. (84g:14013)
- Waterhouse, William C. Real classification of complex quadrics. (84h:10028)
- Zhuk, I. K. The rationality of some homogeneous spaces of the group $SO(q)$. (Russian. English summary) (84g:10050)

14M99 None of the above, but in this section

- Demushkin, A. S. Combinatorial invariance of toric singularities. (Russian. English summary) (84f:14036)
- Tyurin, A. N. The structure of the variety of pairs of commuting pencils of symmetric matrices. (Russian) (84a:14026)

secondary classifications:

- Daniilov, V. I. Birational geometry of three-dimensional toric varieties. (Russian) (84e:14008)
- Lanteri, Antonio (with Pallešchi, Marino) On k -dimensional elliptic scrolls. (Italian summary) (84d:14025)
- Pallešchi, Marino See Lanteri, Antonio, (84d:14025)
- Spangher, Walter Existence and increasing sequences of monoids on complete intersection varieties. (Italian. English summary) (84c:14043)
- Vetter, Udo The depth of the module of differentials of a generic determinantal singularity. (84g:13025)

14Nxx Classical methods and problems [See also 51-XX.]

14N05 Projective techniques

- Burau, Werner Some considerations and examples of algebraic curves and surfaces treated synthetically using the Veronesean. (Italian) (84i:14034)
- Contiglozzi Penna, Anna Maria Some properties of Veronese surfaces. (Italian) (84i:14035)
- Di Fiore, Lora (with Freni, Sveva) On varieties cut out by hyperplanes into Grassmann varieties of arbitrary indexes. (Italian. English summary) (84i:14036)
- Drechsler, Konrad (with Sterz, Ulrich) Berührungsbedingungen für p - l -s-Kegelschnitte. [Conditions of contact for p - l -s conic sections] (84g:14056a)
- (with Sterz, Ulrich) Eine Anzahlbestimmung für mittelbar superskulierende Kegelschnitte. [A determination of number for directly superskulating conic sections] (84g:14056b)
- (with Sterz, Ulrich) Die Kohomologieringe der Varietäten der p - l -Kegelschnitte und der p - l -s Kegelschnitte. [The cohomology rings of the varieties of p - l -conic sections and p - l -s conic sections] (84k:14042)
- (with Sterz, Ulrich) Ausgeartete Berührungsbedingungen auf Kegelschnittmannigfaltigkeiten. [Degenerate contact conditions on conic section varieties] (84i:14041)
- (with Sterz, Ulrich) Die p - l -s-Kegelschnitte auf der Grundlage des mittelbaren Superskulierens. [p-l-s conics based on direct superskulation] (84k:14043)
- Dye, R. H. Osculating hyperplanes and a quartic combinatorial of the nonsingular model of the Kummer and Weddle surfaces. (84j:14057)
- Freni, Sveva See Di Fiore, Lora, (84i:14036)
- Gruson, Laurent (with Peskine, Christian) Section plane d'une courbe gauche: postulation. [Plane section of a space curve: postulation] (84c:14045)
- Peskine, Christian See Gruson, Laurent, (84c:14045)
- Piccoletta, Lia Fioravanti New differential characterizations of Veronese varieties. (Italian. English summary) (84k:14044)

- Sterz, Ulrich See Drechsler, Konrad, (84g:14056a; 84g:14056b; 84k:14041; 84k:14042 and 84k:14043)

- Xambó, S. On projective varieties of minimal degree. (84e:14039)

secondary classifications:

- Bottema, O. On conics which pass through two given points and touch three given lines. (Dutch) (84k:51020)
- Dymitrow, Georgi A projective construction of ruled quadrics. (Polish. English summary) (84i:51038)
- Fellmann, Jerzy A transformation with respect to a space curve of order three. (Polish. English summary) (84m:51030)
- Georgiev, G. Kh. (with Skopets, Z. A.) Cremona transformation of a plane on a plane by the norm-surface $V_2^2(2; 2)$ in P_3 . (Bulgarian. English and Russian summaries) (84g:51041)
- Goñi, J. On the multiple points of plane algebraic curves. (Spanish. English summary) (84i:14038)
- Gudkov, D. A. (with Usachev, A. E.) Nonsingular curves of lower orders on a hyperboloid. (Russian) (84m:51031)
- (with Shustin, E. I.) Classification of nonsingular eighth-order curves on an ellipsoid. (Russian) (84m:51032)
- Hartshorne, Robin Genre de courbes algébriques dans l'espace projectif (d'après L. Gruson et C. Peskine). [Genus of algebraic curves in projective space (after L. Gruson and C. Peskine)] (84f:14023)
- Herzer, Armin Die Schmieghyperebenen an die Veronese-Mannigfaltigkeit bei beliebiger Charakteristik. (English summary) [The osculating hyperplanes to the Veronese manifold in the case of arbitrary characteristic] (84g:51036)
- Holme, Audun Computation of some projective invariants. (84j:14027)
- Knitter, Konrad Suites périodiques des involutions et des anti-involutions de la droite projective complexe. [Periodic sequences of involutions and anti-involutions of the projective line] (84m:51033)
- (with Mańkowski, Czesław) Suites périodiques de polarités dans l'espace projectif complexe à n dimensions. [Periodic sequences of polarities in n -dimensional complex projective space] (84m:51034)
- Kozłowski, Edwin Über eine Eigenschaft des Büschels von ebenen Kurven n -ter Ordnung mit dem $(n-1)$ -fachen Punkt. [On a property of the pencil of plane curves of n th order with the $(n-1)$ -fold point] (84j:51048)
- Lanteri, Antonio (with Pallešchi, Marino) On polarized algebraic manifolds with relative sectional genus one. (Italian summary) (84h:14046)
- Mańkowski, Czesław Periodic sequences of polar hyperquadrics in an n -dimensional projective space. (Polish. English summary) (84m:51035)
- See also Knitter, Konrad, (84m:51034)
- Menichetti, Giampaolo Commutative division algebras. (84f:51051)
- Menkova, D. I. Some properties and projections of a general norm surface V_2^4 of the space P_3 . (Bulgarian. English and Russian summaries) (84g:51040)
- Pallešchi, Marino See Lanteri, Antonio, (84h:14046)
- Panella Martinelli, Luigia Circular Veronese manifolds. (Italian. English summary) (84c:51033)
- Rotondaro, Giovanni See de Vito, Paola, (84g:14007)
- Seidenberg, Abraham Existence of a nonsingular curve of order 7 and genus 4 in 3-space. (Italian summary) (84j:14035)
- Serpico, Maria Ezia Fano varieties that are hyperplane sections of $P_2 \times P_2$. (Italian. English summary) (84j:14043)
- Shustin, E. I. See Gudkov, D. A., (84m:51032)
- Skopets, Z. A. See Georgiev, G. Kh., (84g:51041)
- Stanilova, L. R. Transformation of the rulings of a three-dimensional surface with a double plane. (Bulgarian. English and Russian summaries) (84h:51054)
- Syarova, A. B. An involutive space transformation $I_{3,4,3}$, associated with a hypernet $\Sigma(2,4)$ of lines in P_3 . (Bulgarian. English and Russian summaries) (84h:51055)
- A group of quadratic Cremona transformations of a special type in the space P_3 . (Bulgarian. English and Russian summaries) (84h:51056)
- Usachev, A. E. See Gudkov, D. A., (84m:51031)
- Vaccaro, Giuseppe Differential characteristics of algebraic entities. (Italian) (84j:53013)
- de Vito, Paola (with Rotondaro, Giovanni) Certain covariant curves of a linear system of curves. (Italian. English summary) (84g:14007)
- Xambó, S. Scrolls and quartics. (84c:14041)

14N10 Enumerative problems

- Chiarli, Nadia A short algebraic proof of the generalized Plücker's formula. (Italian summary) (84j:14058)
- Coray, Daniel F. Enumerative geometry of rational space curves. (84g:14057)
- Fiorentini, Mario (with Lascu, Alexandru T.) A formula of enumerative geometry. (Italian. English summary) (84f:14037)
- Kleiman, Steven L. Plane forms and multiple-point formulas. (84d:14035)
- Multiple point formulas for maps. (84j:14059)
- Lascu, Alexandru T. See Fiorentini, Mario, (84f:14037)
- Le Barz, Patrick Formules multisécantes pour les courbes gauches quelconques. [Multisecant formulas for arbitrary space curves] (84m:14063)
- Ran, Ziv A united-set formula. (84f:14038)
- Seiple, J. G. Complete conics of S_2 and their model variety $\Omega_2^{[2]}$ [27]. (84i:14037)
- Speiser, Robert Triple contact of plane curves: Schubert's enumerative theory. (84k:14045)
- Stagnaro, Ezio On Basset's limitations for the maximum number of isolated singularities on an algebraic surface. (84j:14058)
- Vainsencher, Israel Schubert calculus for complete quadrics. (84m:14064)

secondary classifications:

- Beauville, Arnaud Diviseurs spéciaux et intersection de cycles dans la jacobienne d'une courbe algébrique. [Special divisors and intersection of cycles in the Jacobian of an algebraic curve] (84m:14036)

- Józeffiak, Tadeusz (with Lascoux, Alain; Pragacz, Piotr) Classes of determinantal varieties associated with symmetric and antisymmetric matrices. (84j:14052)
- Lascoux, Alain See Józeffiak, Tadeusz; et al., (84j:14052)
- Maebashi, Toshiyuki Geodesic perpendiculars and Euler characteristics of projective varieties. (84e:53065)
- Magasumov, G. S. See Rozenfel'd, B. A., (84g:14055)
- Marchionna, Ermano On regular Cohen-Macaulay varieties. (Italian) (84g:14050)
- Marin, Alexis Quelques remarques sur les courbes algébriques planes réelles. [Some remarks on real plane algebraic curves] (84c:14022)
- Piene, Ragni Degenerations of complete twisted cubics. (84h:14010)
- Pragacz, Piotr See Józeffiak, Tadeusz; et al., (84j:14052)
- Rozenfel'd, B. A. (with Magasumov, G. S.) Cell decompositions of manifolds of forms of simplicity. (Russian) (84g:14055)

14N99 None of the above, but in this section

secondary classifications:

- Bresinsky, Henrik (with Vogel, Wolfgang) Some remarks on a paper by L. Kronecker. (84h:14063)
- Fiedler, Thomas Eine Beschränkung für die Lage von reellen ebenen algebraischen Kurven. [A restriction on the position of real plane algebraic curves] (84h:14031)
- Gudkov, D. A. A fifth-order curve with five cusps. (Russian) (84g:14031)
- Vogel, Wolfgang See Bresinsky, Henrik. (84h:14063)
- Wall, C. T. C. Pencils of real binary cubics. (84m:14011)

15-XX LINEAR AND MULTILINEAR ALGEBRA; MATRIX THEORY (finite and infinite)

15-01 Elementary exposition, textbooks

- Arkhangel'skii, A. V. ★Конечномерные векторные пространства. (Russian) [Finite-dimensional vector spaces] 84j:15001
- Banchoff, Thomas (with Wermer, John) ★Linear algebra through geometry. 84f:15001
- Bhattacharya, Phani Bhushan (with Jain, Surender Kumar; Nagpaul, S. R.) ★First course in linear algebra. 84m:15001
- Cremarencu, Sfetoslav Apropos the cardinalities of square matrices of order 3. (Romanian) 84g:15001
- Deif, Assem S. ★Advanced matrix theory for scientists and engineers. 84c:15001
- Heuvers, Konrad J. Symmetric matrices with prescribed eigenvalues and eigenvectors. 84h:15001
- Jain, Surender Kumar See Bhattacharya, Phani Bhushan; et al., 84m:15001
- Lorenz, Falko ★Lineare Algebra. I. (German) [Linear algebra. I] 84b:15001
- Mutafian, Claude ★Les applications linéaires. (French) [Linear mappings] 84c:15002
- Nagpaul, S. R. See Bhattacharya, Phani Bhushan; et al., 84m:15001
- Perry, E. L. See Thrall, Robert M., (See 84i:00045)
- (Shokurov, Vladimir) See Voevodin, V. V., 84c:15001
- Thrall, Robert M. (with Perry, E. L.) An everyday approach to matrix operations. (See 84i:00045)
- Voevodin, V. V. ★Linear algebra. 84c:15001
- Walter, Rolf ★Einführung in die lineare Algebra. (German) [Introduction to linear algebra] 84b:15002
- Warmus, Mieczysław ★Wektory i macierze. Tom I. (Polish) [Vectors and matrices. Vol. I] 84b:15003
- Wermer, John See Banchoff, Thomas, 84f:15001
- Whitelaw, Thomas A. ★An introduction to linear algebra. 84f:15002

secondary classifications:

- Bachmann, Walter (with Haacke, Rudolf) ★Matrizenrechnung für Ingenieure. (German) [Matrix calculus for engineers] (84c:65001)
- Evseev, A. E. See Lyapun, E. S., (84a:00001)
- González de Posada, F. ★Problemas de estructuras algebraicas tensoriales. (Spanish) [Problems of tensorial algebraic structures] (84g:15033)
- Haacke, Rudolf See Bachmann, Walter, (84c:65001)
- Kozhamkulov, T. A. (with Murzagaliev, G. D.) ★Элементы тензорного исчисления в евклидовом пространстве. (Russian) [Elements of tensor calculus in Euclidean space] (84e:53003)
- Lyapun, E. S. (with Evseev, A. E.) ★Алгебра и теория чисел. Часть II. (Russian) [Algebra and number theory. Part II] (84a:00001)
- Murzagaliev, G. D. See Kozhamkulov, T. A., (84e:53003)
- Pickert, Günter Analytische Geometrie oder nur lineare Algebra? [Analytic geometry or only linear algebra?] (84f:01045)
- Rau, Nicholas ★Matrices and mathematical programming. (84b:90001)
- Renaud, J.-C. Matrices with integer entries and integer eigenvalues. (84c:15024)
- Robinson, Enders Anthony ★Least squares regression analysis in terms of linear algebra. (84b:62098)
- Weiß, Peter ★Lineare Algebra und analytische Geometrie. (German) [Linear algebra and analytic geometry] (84a:00005)

15-02 Advanced exposition (research surveys, monographs, etc.)

- (Demushkin, S. P.) See Lancaster, Peter, 84b:15004
- Kim, Ki Hang ★Boolean matrix theory and applications. 84a:15001
- Lancaster, Peter ★Теория матриц. (Russian) [Theory of matrices] 84b:15004
- (Rota, Gian-Carlo) See Kim, Ki Hang, 84a:15001
- Shaw, Ronald ★Linear algebra and group representations. Vol. I. 84m:15002
- ★Linear algebra and group representations. Vol. II. 84m:15003

secondary classifications:

- Gohberg, Israel (with Lancaster, Peter; Rodman, Leiba) ★Matrix polynomials. (84c:15012)
- Lancaster, Peter A review of some recent results concerning factorization of matrix and operator valued functions. (84c:15015)
- See also Gohberg, Israel; et al., (84c:15012)
- Minc, Henryk ★Перманенты. (Russian) [Permanents] (84c:15010)
- Theory of permanents, 1978-1981. (84g:15008)
- Rodman, Leiba See Gohberg, Israel; et al., (84c:15012)
- (Tarakanov, V. E.) See Minc, Henryk, (84c:15010)
- (Zakharov, V. K.) See Minc, Henryk, (84c:15010)

15-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Fearnley-Sander, Desmond Grassmann's theory of dimension. (84f:01024)
- (Grassmann, Hermann) See Fearnley-Sander, Desmond, (84f:01024)

15-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Aasland, Liv (with Björstad, Petter) The generalized eigenvalue problem in shipdesign and offshore industry—a comparison of traditional methods with the Lanczos process. (See 84c:65009)
- Björstad, Petter See Aasland, Liv, (See 84c:65009)
- Carnoy, E. G. (with Geradin, M.) On the practical use of the Lanczos algorithm in finite element applications to vibration and bifurcation problems. (See 84c:65009)
- Eriksen, Thomas Implementation and applications of the spectral transformation Lanczos algorithm. (See 84c:65009)
- Evans, David J. Preconditioned iterative methods for the generalized eigenvalue problem. (See 84c:65009)
- Geradin, M. See Carnoy, E. G., (See 84c:65009)
- Jennings, Alan On bounds for symmetric eigenvalue problems. (See 84c:65009)
- Kågström, Bo On computing the Kronecker canonical form of regular $(A - \lambda B)$ -pencils. (See 84c:65009)
- Kublaevskaya, V. N. An approach to solving the spectral problem of $A - \lambda B$. (See 84c:65009)
- Ruhe, Axel The two-sided Arnoldi algorithm for nonsymmetric eigenvalue problems. (See 84c:65009)
- Saad, Youcef Projection methods for solving large sparse eigenvalue problems. (See 84c:65009)
- Stewart, G. W. A method for computing the generalized singular value decomposition. (See 84c:65009)
- Sun, Ji Guang Perturbation analysis for the generalized eigenvalue and the generalized singular value problem. (See 84c:65009)
- Van Dooren, Paul Reducing subspaces: definitions, properties and algorithms. (See 84c:65009)
- Wilkinson, J. H. Note on the practical significance of the Drazin inverse. (84c:65071)

15-06 Proceedings, conferences, etc.

secondary classifications:

- (Kågström, Bo) See Matrix pencils, (84c:65009)
- (Ruhe, Axel) See Matrix pencils, (84c:65009)
- Conference: Matrix Pencils ★Matrix pencils. (84c:65009)
- Matrix pencils ★Matrix pencils. (84c:65009)
- Pite Havshad ★Matrix pencils. (84c:65009)

15A03 Vector spaces, linear dependence, rank

- Beasley, Leroy B. Linear transformations on matrices: the invariance of sets of ranks. 84c:15001
- Rank- k -preservers and preservers of sets of ranks. 84c:15002
- Linear transformations preserving sets of ranks. 84m:15004
- Boja, N. (with Brăiloiu, G.) On the conjugation of K -spaces by means of sesquilinear forms. (Romanian. English summary) 84g:15002
- Brăiloiu, G. See Boja, N., 84g:15002
- Chen, Gong Ning Note on lower bounds for the rank of a matrix. 84c:15003
- Guralnick, Robert M. (with Lanski, Charles) The rank of a commutator. 84m:15005
- Huppert, Bertram Isometrien von Vektorräumen. I. [Isometries of vector spaces. I] 84d:15001
- Isometrien von Vektorräumen. II. [Isometries of vector spaces. II] 84d:15002
- Lanski, Charles See Guralnick, Robert M., 84m:15005
- Meenakshi, Ar. On sums of EP matrices. 84c:15004
- Pan, Shi Zhong See Xie, Bang Jie, 84f:15003
- Xie, Bang Jie (with Pan, Shi Zhong) On the proof of the theorem of the dimensionality of the conjugate space of a vector space. (Chinese. English summary) 84f:15003

secondary classifications:

- Antoulas, A. C. New results on the algebraic theory of linear systems: the solution of the cover problems. (84g:93026)
- Bárány, Imre (with Grinberg, V. S.) On some combinatorial questions in finite-dimensional spaces. (84f:05001)

- Chobanov, Ivan. See *Kristova, Ivanka*, (84j:51024)
- Deza, Michel (with Frankl, Peter) On the vector space of 0-configurations. (84i:05003)
- Farzan, Masoud Vector spaces associated with a graph. (See 84m:00013)
- Frankl, Peter. See *Deza, Michel*, (84i:05003)
- Grinberg, V. S. See *Bárány, Imre*, (84i:05001)
- Hill, Paul (with White, Errin) The projective dimension of valuated vector spaces. (84d:18014)
- Kaplenko, E. F. On the question of triples and quadruples of subspaces of a finite-dimensional vector space. (Russian) (84j:51041)
- Kristova, Ivanka (with Chobanov, Ivan) On the definition of vector multiplication. (Bulgarian summary) (84j:51024)
- Labeyrie, Jacques Factorisation de Ritt pour les polynômes exponentiels formels. (English summary) [Ritt factorization for formal exponential polynomials] (84m:12021)
- Marcu, Dănuț Free sets associated to a finite oriented graph. (84g:05090)
- Nesetril, Jaroslav (with Prömel, H. J.; Rödl, Vojtěch; Voigt, Bernd) Canonical ordering theorems, a first attempt. (84f:05014)
- Prömel, H. J. See *Nesetril, Jaroslav*; et al., (84f:05014)
- Rödl, Vojtěch See *Nesetril, Jaroslav*; et al., (84f:05014)
- Searl, Herbert E. Production sets with indivisibilities. I. Generalities. (84a:90015a)
- Production sets with indivisibilities. II. The case of two activities. (84a:90015b)
- Spircu, Tiberiu Extensions of a theorem of P. Gabriel. (84c:18001)
- Voigt, Bernd See *Nesetril, Jaroslav*; et al., (84f:05014)
- White, Errin See *Hill, Paul*, (84d:18014)
- Winter, David J. The Jacobson descent theorem. (84h:16021)
- Xu, Cheng Yi A discussion of the rank of a matrix using generalized inverses. (Chinese. English summary) (84j:15003)

15A04 Linear transformations, semilinear transformations

- Brown, Lawrence G. Classification of operators on finite-dimensional Hilbert spaces, generalized finite Toeplitz matrices, and Szegő polynomials. 84c:15003
- McAsey, Michael J. (with Muhly, Paul S.) On projective equivalence of invariant subspace lattices. 84f:15004
- Muhly, Paul S. See *McAsey, Michael J.*, 84f:15004
- Ong, Sing Cheong Remarks on invariant subspaces for finite-dimensional operators. 84f:15005
- Pan, Shi Zhong A theorem on algebras of linear transformations. (Chinese. English summary) 84c:15002
- Schreiber, Morris On the spectra of certain matrices. 84g:15003
- Shayman, Mark A. On the variety of invariant subspaces of a finite-dimensional linear operator. 84g:15004
- Sinkhorn, Richard Linear adjugate preservers on the complex matrices. 84a:15002
- Szabó, László (with Szendrei, Ágnes) Słupski-type criteria for quasilinear functions over a finite-dimensional vector space. (German and Russian summaries) 84f:15006
- Szendrei, Ágnes See *Szabó, László*, 84f:15006

secondary classifications:

- Bakan, G. M. (with Nizhnicenko, E. A.) Algorithm for the solution of a countable system of linear algebraic equations by using the operation of stretching space. (84h:65029)
- Barker, George Phillip (with Tam, Bit Shun) Graphs for cone preserving maps. (84c:05053)
- Bhagwandas (with Bridges, W. G.) Applications of algebraic duality to group divisible structures. (84j:05017)
- Bridges, W. G. See *Bhagwandas*, (84j:05017)
- Dawlings, R. J. H. On idempotent affine mappings. (84d:20071)
- Fan, Ky Normalizable operators. (84f:47037)
- Luk, Franklin T. Orthogonal rotation to a partially specified target. (84m:65054)
- Nizhnicenko, E. A. See *Bakan, G. M.*, (84h:65029)
- Novotný, Miroslav Commutativity of endomorphisms of linear spaces. (Czech. English summary) (84g:15017)
- Proctor, Robert A. Solution of two difficult combinatorial problems with linear algebra. (84f:05002)
- Schaal, Hermann Zur Bestimmung der Quadratwurzeln affiner Abbildungen im $A^2(\mathbb{R})$. [On determining the square roots of affine mappings in $A^2(\mathbb{R})$] (84f:51005)
- Shtern, A. I. Factorization and irreducible representations of a direct product of groups. (Russian. English summary) (84c:22008)
- Tam, Bit Shun See *Barker, George Phillip*, (84c:05053)
- Waterhouse, William C. Invertibility of linear maps preserving matrix invariants. (84i:15020)

15A06 Linear equations

- Bevis, Jean H. (with Hall, Frank J.) Some classes of integral matrices. 84a:15003
- Dong, Nai Chang Structure of solutions of linear equations over rings and theorems about matrices over rings. (Chinese. English summary) 84f:15007
- Hall, Frank J. See *Bevis, Jean H.*, 84a:15003
- Kulik, V. L. Linear algebraic systems of equations with smooth coefficients given on an n -dimensional torus. (Russian) 84h:15002
- Scheiber, Ernest A method for solving a system of linear equations of the form $a_{i,j}u_{i,j} + b_{i,j}u_{i,j+1} + c_{i,j}u_{i+1,j} + d_{i,j}u_{i,j-1} + e_{i,j}u_{i,j+1} = f_{i,j}$. (Romanian. English summary) 84h:15005
- Verghese, George C. A "Cramer rule" for the least-norm, least-squared-error solution of inconsistent linear equations. 84a:15004
- Yang, Shu Guang On the geometric interpretation of the T-solution of an overdetermined system of linear equations. (Chinese. French summary) 84c:15004
- Zhang, Han Fang Further discussion of the formula for solving a system of linear equations. (Chinese) 84a:15005

secondary classifications:

- Audish, S. E. See *Evans, David J.*, (84d:65026)
- Bunch, James R. Stable algorithms for solving symmetric and skew-symmetric systems. (84a:65022)
- Buoni, John J. (with Subramanian, B.) A Stein-Rosenberg theorem for rectangular matrices. (84a:65025)
- Caplan, S. Roy (with Zeilberger, Doron) T. L. Hill's graphical method for solving linear equations. (84f:05035)
- Deif, Assem S. The generalized inverse of a perturbed singular matrix. (German summary) (84k:15006)
- Delves, L. M. (with Freeman, T. L.) ★Analysis of global expansion methods: weakly asymptotically diagonal systems. (84a:65002)
- Evans, David J. (with Audish, S. E.) The direct solution of banded linear systems by a new matrix factorization procedure. (84d:65026)
- Freeman, T. L. See *Delves, L. M.*, (84a:65002)
- Goulden, I. P. (with Jackson, D. M.) Sequence enumeration. (84f:05009)
- Jackson, D. M. See *Goulden, I. P.*, (84f:05009)
- Johnson, Charles R. (with Uhlig, Frank; Warner, Dan) Sign patterns, nonsingularity, and the solvability of $Ax=b$. (84h:15005)
- Kuznetsov, Yu. A. (with Matsokin, A. M.) Partial solution of systems of linear algebraic equations. (Russian) (84c:65029)
- Lau, Ming Gao A note on the prime solutions of systems of linear equations—study of the conditions for solvability of a congruence. (Chinese) (84i:10001)
- Matsokin, A. M. See *Kuznetsov, Yu. A.*, (84c:65029)
- Shapkin, A. F. Solution of systems of linear algebraic equations with a triangular matrix. (Russian) (84c:65030)
- Subramanian, B. See *Buoni, John J.*, (84a:65025)
- Uhlig, Frank See *Johnson, Charles R.*; et al., (84h:15005)
- Warner, Dan See *Johnson, Charles R.*; et al., (84h:15005)
- Zeilberger, Doron See *Caplan, S. Roy*, (84f:05035)

15A09 Matrix inversion, generalized inverses

- Barnett, Stephen (with Lancaster, Peter) Matrices having striped inverse. 84j:15002
- Brawley, J. V. Counting matrices by Drazin index. 84i:15001
- (Chen, Xi Ru) See *Rao, C. Radhakrishna*, 84c:15005
- Cheng, Zhi Bin On the problem of singularity of the bordered matrix of an $m \times n$ matrix A . (Chinese. English summary) 84g:15005
- Deif, Assem S. The proof of a new matrix theorem. (Arabic summary) 84h:15003
- The generalized inverse of a perturbed singular matrix. (German summary) 84k:15006
- De Mazancourt, T. (with Gerlic, D.) The inverse of a block-circulant matrix. 84m:15006
- Denman, E. D. (with Leyva-Ramos, J.; Jeon, G. J.) The algebraic theory of latent projectors in lambda matrices. 84c:15005
- Flores de Chela, Delia Approximations in the l_∞ norm and the generalized inverse. 84f:15008
- Gabriel, Richard Das allgemeine Element des verallgemeinerten Inversen von Moore-Penrose. [The general element of the generalized Moore-Penrose inverse] 84m:15007
- Galba, E. F. See *Molchanov, I. N.*, 84c:15004
- Gerlic, D. See *De Mazancourt, T.*, 84m:15006
- Hall, Frank J. See *Hartwig, Robert E.*, 84a:15006
- Hartwig, Robert E. (with Hall, Frank J.) Applications of the Drazin inverse to Cesàro-Neumann iterations. 84c:15006
- Harward, P. M. (with Mills, T. M.) How to invert a matrix and probably get the right answer. 84i:15002
- Jain, Surender Kumar Nonnegative matrices having nonnegative generalized inverses. 84i:15003
- Nonnegative rectangular matrices having certain nonnegative W -weighted group inverses. 84h:15004
- Jeon, G. J. See *Denman, E. D.*; et al., 84c:15005
- Johnson, Charles R. (with Uhlig, Frank; Warner, Dan) Sign patterns, nonsingularity, and the solvability of $Ax=b$. 84h:15005
- Lancaster, Peter See *Barnett, Stephen*, 84j:15002
- Leyva-Ramos, J. See *Denman, E. D.*; et al., 84c:15005
- Lin, Chun Tu The problem of singularity of a bordered matrix. (Chinese. English summary) 84k:15007
- Meek, D. S. The inverses of Toeplitz band matrices. 84c:15003
- Mills, T. M. See *Harward, P. M.*, 84i:15002
- Mitra, Sujit Kumar (with Puri, Madan L.) The fundamental bordered matrix of linear estimation and the Duffin-Morley general linear electromechanical systems. 84f:15009
- Molchanov, I. N. (with Galba, E. F.) A weighted pseudoinverse for complex matrices. (Russian) 84c:15004
- Neumann, Michael (with Poole, George D.; Werner, Hans-Joachim) More on generalizations of matrix monotonicity. 84g:15006
- Poole, George D. See *Neumann, Michael*; et al., 84g:15006
- Puri, Madan L. See *Mitra, Sujit Kumar*, 84f:15009
- Puystjens, Roland (with Robinson, Donald W.) The Moore-Penrose inverse of a morphism with factorization. 84h:15006
- Rao, C. Radhakrishna Matrix approximations and reduction of dimensionality in multivariate statistical analysis. (Chinese) 84c:15005
- Rao, K. P. S. Bhaskara On generalized inverses of matrices over integral domains. 84f:15010
- Robinson, Donald W. See *Puystjens, Roland*, 84h:15006
- Schwerdtfeger, Hans On the covariance of the Moore-Penrose inverse of a matrix. 84i:15003
- On the covariance of the Moore-Penrose inverse. 84h:15007
- Sim, Son Suk The inverse matrix of a block Toeplitz tridiagonal matrix. (Korean. English summary) 84h:15005

- Tam, Bit Shun Generalized inverses of cone preserving maps. **84b:15006**
 Tuniev, A. D. A generalized partially inverse matrix, its properties and application. (Russian. Armenian summary) **84m:15008**
 Uhlig, Frank See Johnson, Charles R.; et al., **84b:15005**
 Warner, Dan See Johnson, Charles R.; et al., **84b:15005**
 Werner, Hans-Joachim See Neumann, Michael; et al., **84g:15006**
 Wong, Edward T. Involution functions and Moore-Penrose inverses of matrices in an arbitrary field. **84c:15006**
 Xu, Cheng Yi A discussion of the rank of a matrix using generalized inverses. (Chinese. English summary) **84j:15003**

secondary classifications:

- de Boor, C. (with Friedland, Shmuel; Pinkus, A.) Inverses of infinite sign regular matrices. **(84f:47035b)**
 The inverse of a totally positive bi-infinite band matrix. **(84f:47035a)**
 Campbell, Stephen L. Index two linear time-varying singular systems of differential equations. **(84m:34005)**
 Carlson, David H. (with Haynsworth, Emilie V.) Complementable and almost definite matrices. **(84i:15015)**
 Drygalla, F. Refinement of pseudosolutions of a system of linear equations. (Russian) **(84a:65026)**
 Eldén, Lars A weighted pseudoinverse, generalized singular values, and constrained least squares problems. **(84g:65048)**
 Friedland, Shmuel See de Boor, C.; et al., **(84f:47035b)**
 Gao, Yi Ming Criteria for generalized diagonal dominance and nonsingularity of matrices. (Chinese. English summary) **(84g:15007)**
 Hartwig, Robert E. (with Spindelböck, Klaus) Some closed form formulae for the intersection of two special matrices under the star order. **(84j:15025a)**
 (with Spindelböck, Klaus) Partial isometries, contractions and EP matrices. **(84j:15025b)**
 Haynsworth, Emilie V. See Carlson, David H., **(84i:15015)**
 Hilgers, John W. A theory for optimal regularization in the finite-dimensional case. **(84c:65037)**
 Kikuchi, David A. The inverse of a partitioned positive-definite symmetric matrix. **(84m:62065)**
 Kuang, Jiao Xun The representation and approximation of Drazin inverses of linear operators. (Chinese. English summary) **(84b:47001)**
 Luo, Cheng Zhong Generalized inverses of fuzzy matrix. **(84m:15021)**
 Lutsenko, B. N. Biased estimation in linear models by means of generalized inverse matrices. (Russian) **(84i:62089)**
 Meenakshi, Ar. On sums of EP matrices. **(84k:15004)**
 Meyer, C. D., Jr. Analysis of finite Markov chains by group inversion techniques. **(84b:60090)**
 Mitra, Sujit Kumar Shorted operators and the identification problem. **(84g:15027)**
 Papathodorou, T. S. Inverses for a class of banded matrices and applications to piecewise cubic approximation. **(84c:65055)**
 Pinkus, A. See de Boor, C.; et al., **(84f:47035b)**
 Rothblum, Uriel G. Resolvent expansions of matrices and applications. **(84d:15024)**
 Sinha, Bikas Kumar On complete classes of experiments for certain invariant problems of linear inference. **(84c:62123)**
 Spindelböck, Klaus See Hartwig, Robert E., **(84j:15025a)** and **(84j:15025b)**
 Tam, Bit Shun A geometric treatment of generalized inverses and semigroups of nonnegative matrices. **(84j:15019)**
 Verghese, George C. A "Cramer rule" for the least-norm, least-squared-error solution of inconsistent linear equations. **(84a:15004)**
 Wilkinson, J. H. Note on the practical significance of the Drazin inverse. **(84c:65071)**

15A12 Conditioning of matrices [See also 65F35.]

- Demmel, James The condition number of equivalence transformations that block diagonalize matrix pencils. (See **84c:65009**)
 Landis, T. L. See Parlett, B. N., **84b:15007**
 Parlett, B. N. (with Landis, T. L.) Methods for scaling to doubly stochastic form. **84b:15007**
 secondary classifications:
 Gautschi, Walter The condition of Vandermonde-like matrices involving orthogonal polynomials. **(84i:65043)**
 Kammler, David W. A perturbation analysis of the intrinsic conditioning of an approximate null vector computed with a SVD. **(84k:65039)**
 Mangasarian, O. L. A condition number for linear inequalities and linear programs. **(84f:65034)**

15A15 Determinants, permanents, other special matrix functions

- Bang, Thøger The van der Waerden conjecture and its proofs. (Danish. English summary) **84j:15004**
 Beasley, Leroy B. (with Cummings, Larry J.) Multiplicative properties of generalized matrix functions. **84b:15008**
 (with Cummings, Larry J.) On the uniqueness of generalized matrix functions. **84d:15004**
 Berman, Stephen (with Joffe, Anatole) Matrices topologiquement nilpotentes. (English summary) [Topologically nilpotent matrices] **84d:15005**
 Cummings, Larry J. See Beasley, Leroy B., **84d:15004** and **84b:15008**
 Dias da Silva, J. A. On a conjecture of Russell Merris. (Portuguese) **84a:15007**
 See also de Oliveira, Graciano N., **84d:15007**
 Di Cave, Annalisa (with Ricci, Paolo Emilio) On functions of a 2×2 nonsingular complex matrix. **84d:15006**

- Eades, Peter (with Praeger, Cheryl E.; Seberry, Jennifer R.) Some remarks on the permanents of circulant $(0, 1)$ matrices. **84m:15009**
 Gao, Yi Ming Criteria for generalized diagonal dominance and nonsingularity of matrices. (Chinese. English summary) **84g:15007**
 Good, Irving John (with Tideman, T. N.) Generalized determinants and generalized generalized variance. **84c:15007**
 Howland, James Lucien The sign matrix and the separation of matrix eigenvalues. **84c:15008**
 Joffe, Anatole See Berman, Stephen, **84d:15005**
 Khatri, C. G. (with Rao, C. Radhakrishna) Some extensions of the Kantorovich inequality and statistical applications. **84c:15006**
 Kräuter, Arnold R. (with Seifter, Norbert) On convertible $(0, 1)$ -matrices. **84k:15008**
 de Leeuw, Jan A note on partitioned determinants. **84b:15009**
 van Lint, J. H. The van der Waerden conjecture. **84b:15010**
 Loewy, Raphael Determinants of nonprincipal submatrices of normal matrices. **84b:15011**
 Merris, Russell Extensions of the Minkowski determinant theorem. **84c:15009**
 Minc, Henryk ★Перманенты. (Russian) [Permanents] **84c:15010**
 Theory of permanents, 1978–1981. **84g:15008**
 de Oliveira, Graciano N. (with Dias da Silva, J. A.) Equality of decomposable symmetrized tensors and \ast -matrix groups. **84d:15007**
 Pach, János Mixed volume and the van der Waerden conjecture. (Hungarian) **84k:15009**
 Praeger, Cheryl E. See Eades, Peter; et al., **84m:15009**
 Rao, C. Radhakrishna See Khatri, C. G., **84c:15006**
 Ricci, Paolo Emilio See Di Cave, Annalisa, **84d:15006**
 Seberry, Jennifer R. See Eades, Peter; et al., **84m:15009**
 Seifter, Norbert See Kräuter, Arnold R., **84k:15008**
 Sviran, D. Proof of Scott's conjecture. **84b:15008**
 Szulc, Tomasz On a determinant and spectrum of some matrix. I. (Russian and Polish summaries) **84c:15007**
 Tarakanov, V. E. See Minc, Henryk, **84c:15010**
 Tideman, T. N. See Good, Irving John, **84c:15007**
 Visick, G. T. J. The Kronecker product and vec transformation with some applications. **84c:15011**
 (Zakharov, V. K.) See Minc, Henryk, **84c:15010**
 Zheng, Da Zhong A new method on computation of the characteristic polynomial for a class of square matrices. **84m:15010**

secondary classifications:

- Ando, Tsuyoshi ★Majorization, doubly stochastic matrices and comparison of eigenvalues. **(84a:15019)**
 See also Potapov, V. P., **(84a:01061)**
 Bapat, Ravindra Doubly stochastic matrices with equal superpermanents. **(84g:15024)**
 Bellman, Richard Ernest On the calculation of matrix exponential. **(84i:15016)**
 Berman, Abraham See Herschkowitz, Daniel, **(84g:15020)**
 Chen, Chi Tsong See Wang, Ji Wen, **(84b:65042)**
 Chi, Zhong Xian (with Shen, Shi Hu; Yang, Yuan Sheng) A topological evaluation of determinants. (Chinese. English summary) **(84k:65041)**
 Gelbaum, Bernard R. An algorithm for the minimal polynomial of a matrix. **(84j:15014)**
 Guralnick, Robert M. On an identity of Schur. **(84c:15017)**
 Herschkowitz, Daniel (with Berman, Abraham) Necessary conditions and a sufficient condition for the Fischer-Hadamard inequalities. **(84g:15020)**
 Jungnickel, Dieter ★Transversaltheorie. (German) [Transversal theory] **(84j:05005)**
 Kageyama, Sampo Approximate determinants for the covariance matrix of a moving average process of higher order. **(84g:62145)**
 Kelmans, A. K. (with Kimelfeld, B. N.) Multiplicative submodularity of a matrix's principal minor as a function of the set of its rows, and some combinatorial applications. **(84c:15028)**
 Kimelfeld, B. N. See Kelmans, A. K., **(84c:15028)**
 Lin, Hai Ming L -matrices and their applications. (Chinese) **(84a:15015)**
 London, David On the van der Waerden conjecture and zeros of polynomials. **(84i:12017)**
 Marshall, Albert W. (with Olkin, Ingram) A convexity proof of Hadamard's inequality. **(84f:15023)**
 Merris, Russell The Laplacian permanent polynomial for trees. **(84a:05047)**
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15A18 Eigenvalues, singular values, and eigenvectors

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- Datta, Karabi An algorithm to determine if two matrices have common eigenvalues. **84f:15011**
- Deif, Assem S. Nondiagonal systems under small perturbations. (German summary) **84d:15008**
- Denman, E. D. (with Leyva-Ramos, J.) Spectral decomposition of a matrix using the generalized sign matrix. (See **84g:93005d**)
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- Elsner, Ludwig (with Sun, Ji Guang) Perturbation theorems for the generalized eigenvalue problem. **84f:15012**
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- Kuwahara, Michiyoshi See Mori, Takehiro; et al., **84m:15011**
- Lancaster, Peter (with Patahbiraman, M. V.) The local determination of Jordan bases for H -selfadjoint operators. **84d:15009**
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- Mazko, A. G. Theory of distribution of the spectrum of a matrix with respect to algebraic and transcendental curves. (Russian) **84j:15008**
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- Sussman-Fort, Stephen E. The reconstruction of bordered-diagonal and Jacobi matrices from spectral data. **84c:15013**
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- Au-Yeung, Yik Hoi (with Ng, Kam Chuen) A remark on a conjecture of Marcus on the generalized numerical range. (See **84m:15018**)
- Bellman, Richard Ernest The largest and the smallest characteristic roots of a positive definite matrix. (See **84d:15021**)
- Belov, N. V. See Soldatov, E. A.; et al., (See **84j:82088**)
- Bjørstad, Petter See Aasland, Liv, (See **84c:65009**)
- Bolla, Marianna The QRPS transformation: the generalization of the QR algorithm for singular values decomposition of rectangular real matrices. (Hungarian. English summary) (See **84c:65062**)
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- Carnoy, E. G. (with Geradin, M.) On the practical use of the Lanczos algorithm in finite element applications to vibration and bifurcation problems. (See **84c:65009**)
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- de Leeuw, Jan A note on partitioned determinants. (See **84h:15009**)
- Lerer, L. (with Tismenetsky, M.) The Bezoutian and the eigenvalue-separation problem for matrix polynomials. (See **84c:15015**)
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- Ng, Kam Chuen See Au-Yeung, Yik Hoi, (See **84m:15018**)
- Powers, David L. (with Sulaiman, Mohammad M.) The walk partition and colorations of a graph. (See **84a:05049**)
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- Stewart, G. W. A method for computing the generalized singular value decomposition. (See **84c:65009**)
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- Thompson, Robert C. Counterexamples concerning the diagonal elements of normal matrices. (See **84c:15019**)
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- 15A21 Canonical forms, reductions, classification
- Fletcher, Roger (with Sorensen, D. C.) An algorithmic derivation of the Jordan canonical form. **84d:15011**
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- Khranov, Yu. E. Reduction of matrices to block-diagonal form. **84c:15011**
- Kleiner, Mark (with Martin, Clyde Franklin) Representations of quivers and canonical forms for linear systems. (See **84g:93005d**)
- Kublanovskaya, V. N. A certain approach to the solution of spectral problems for pencils of matrices. (Russian) **84d:15012**
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- Pizarro, Antonio Similarity classes of 3×3 matrices over a discrete valuation ring. **84j:15012**
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Botta, Peter (with Pierce, Stephen; Watkins, William) Linear transformations that preserve the nilpotent matrices. **84c:15014**

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15A24 Matrix equations and identities

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 Fukuma, Norio See Mori, Takehiro; et al., (84c:93032) and (84d:15023)
 van Geel, Jan See Puystjens, Roland, (84a:15011)
 Gohberg, Israel (with Lancaster, Peter; Rodman, Leiba) ★Matrix polynomials. (84c:15012)
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 Lancaster, Peter See Gohberg, Israel; et al., (84c:15012)
 Lindquist, Anders See Gragg, William B., (84c:93020)
 Lychak, M. M. See Kuntsevich, V. M., (84b:65044)
 Mori, Takehiro (with Fukuma, Norio; Kuwahara, Michiyoshi) On the discrete Lyapunov matrix equation. (84d:15023)
 (with Fukuma, Norio; Kuwahara, Michiyoshi) Upper and lower bounds for the solution to the discrete Lyapunov matrix equation. (84c:93032)
 Newman, Morris Lyapunov revisited. (84m:15012)
 Nierstrasz, O. M. See Collins, C. B.; et al., (84g:05009)
 Paige, Chris (with Van Loan, Charles) A Schur decomposition for Hamiltonian matrices. (84d:65019)
 Parker, G. Edgar (with Walters, Terry J.) Constructing solutions to $\int_0^t f(j)A(j, x)/f(x)dx = \int_0^t f(x)A(x, j)/f(j)dx$. (84c:45005)
 Pearson, K. R. Degree 7 monic polynomials satisfied by a 3×3 matrix over a noncommutative ring. (84c:16021a)
 The Robson cubics generate all polynomials satisfied by the general 2×2 matrix. (84c:16021b)
 Pittelkow, Uwe See Runckel, Hans-J., (84d:47018)
 Puystjens, Roland (with van Geel, Jan) Diagonalization of matrices over graded principal ideal domains. (84a:15011)
 Regev, Amitai See Cohen, Paula, (84c:05016)
 Rodman, Leiba See Gohberg, Israel; et al., (84c:15012)
 Runckel, Hans-J. (with Pittelkow, Uwe) Matrix functions and two-sided linear operator equations. (84d:47018)
 Sasagawa, Tetsushi Analytical construction of a negative semidefinite solution of algebraic Riccati equations and its application. (84j:34010)
 Van Loan, Charles See Paige, Chris, (84d:65019)
 Walters, Terry J. See Parker, G. Edgar, (84c:45005)
 Wang, Kai A generalization of group difference sets and the matrix equation $A^n = dI + \lambda J$. (84c:05023)
 Williams, David A "potential-theoretic" note on the quadratic Wiener-Hopf equation for Q -matrices. (84f:60107)
 Yabe, Hiroshi See Yamaki, Naokazu, (84h:49062)
 Yamaki, Naokazu (with Yabe, Hiroshi) On factorized variable-metric methods. (84h:49062)
 Yuan, Bing Cheng (with Zou, Li Guo) Representation of a matrix with determinant ± 1 as a product of reflections. (Chinese. English summary) (84g:15013)
 Zou, Li Guo See Yuan, Bing Cheng, (84g:15013)

15A27 Commutativity

- Epstein, Irving J. See Kotin, Leon, (84c:15020)
 Kotin, Leon (with Epstein, Irving J.) On matrices which commute with their derivatives. (84c:15020)
 Novotný, Miroslav Commutativity of endomorphisms of linear spaces. (Czech. English summary) (84g:15017)

15A30 Algebraic systems of matrices [See also 16A42, 20Gxx, 20Hxx.]

- Akemann, Charles A. Subalgebras and right ideals in matrix algebras. (84c:15021)
 Atkinson, M. D. Primitive spaces of matrices of bounded rank. II. (84h:15017)
 Calogero, Francesco Isospectral matrices and classical polynomials. (84h:15018)
 Gaines, Fergus J. (with Laffey, Thomas J.; Shapiro, Helene M.) Pairs of matrices with quadratic minimal polynomials. (84c:15011)
 Kalman, Dan Polynomial translation groups. (84c:15016)
 Laffey, Thomas J. See Gaines, Fergus J.; et al., (84c:15011)
 Shapiro, Helene M. See Gaines, Fergus J.; et al., (84c:15011)
 Skryago, A. M. A property of matrices. (Russian. English summary) (84d:15019)

secondary classifications:

- Bandy, C. Factorization of the general second degree polynomial. (84d:12020)
 Beard, Jacob T. B., Jr. (with McConnell, Robert M.) Matrix field extensions. (84d:10057)
 Beasley, Leroy B. Rank- k -preservers and preservers of sets of ranks. (84c:15002)
 Benkart, Georgia M. (with Osborn, J. Marshall) Power-associative products on matrices. (84c:17002)
 Guralnick, Robert M. (with Lanski, Charles) Pseudosimilarity and cancellation of modules. (84a:16036)
 Huo, Yuan Ji See Zou, Li Guo, (84c:20024)
 Lanski, Charles See Guralnick, Robert M., (84a:16036)
 McConnell, Robert M. See Beard, Jacob T. B., Jr., (84d:10057)
 Mullen, Gary L. Matrix equivalence over finite fields. (84f:15019)
 Novotný, Miroslav Commutativity of endomorphisms of linear spaces. (Czech. English summary) (84g:15017)
 Osborn, J. Marshall See Benkart, Georgia M., (84c:17002)
 Prätzel-Wolters, Dieter Canonical forms for linear systems. (84j:93025)
 Taddai, Giovanni Invariance du sous-groupe symplectique élémentaire dans le groupe symplectique sur un anneau. (English summary) [Invariance of the elementary symplectic subgroup in the symplectic group over a ring] (84c:20058)
 Zelmanowitz, J. M. On the Jacobson density theorem. (84c:16022)
 Zou, Li Guo (with Huo, Yuan Ji) Generators of the groups defined by symmetric matrices over a field of characteristic 2. (Chinese. English summary) (84c:20024)

15A33 Matrices over special rings (quaternions, finite fields, etc.)

- Lempel, Abraham See Seroussi, Gadil, (84f:15020)
 Mullen, Gary L. Matrix equivalence over finite fields. (84f:15019)
 Seroussi, Gadil (with Lempel, Abraham) On symmetric representations of finite fields. (84f:15020)
 Xie, Bang Jie Several theorems concerning self-conjugate matrices and determinants of quaternions. (Chinese. English summary) (84c:15022)

secondary classifications:

- Banković, Dragić Some remarks on Boolean equations. (84c:06017)
 Beard, Jacob T. B., Jr. (with McConnell, Robert M.) Matrix field extensions. (84d:10057)
 Brawley, J. V. Counting matrices by Drazin index. (84d:15001)
 Cerlienco, Luigi (with Mureddu, Marina) A note on polynomial equations in quaternions. (Italian. English summary) (84f:12013)
 Denman, E. D. (with Leyva-Ramos, J.; Jeon, G. J.) The algebraic theory of latent projectors in lambda matrices. (84c:15005)
 Jeon, G. J. See Denman, E. D.; et al., (84c:15005)
 Leyva-Ramos, J. See Denman, E. D.; et al., (84c:15005)
 Liang, Joseph J. (with Mead, George F., Jr.) On matrix equations over the ring of p -adic integers. (84c:10069)
 Matthews, Rex Some generalisations of Chebyshev polynomials and their induced group structure over a finite field. (84f:12010)
 McConnell, Robert M. See Beard, Jacob T. B., Jr., (84d:10057)
 Mead, George F., Jr. See Liang, Joseph J., (84c:10069)
 Mureddu, Marina See Cerlienco, Luigi, (84f:12013)
 Odoni, R. W. K. Some remarks on the values taken by abelian group determinants. (84c:20005)
 Pizarro, Antonio Similarity classes of 3×3 matrices over a discrete valuation ring. (84j:15012)
 Rudeanu, Sergiu Linear Boolean equations and generalized minterms. (84c:06019)

15A36 Matrices of integers [See also 10M20.]

- Lam, Clement W. H. Nonskew symmetric orthogonal matrices with constant diagonals. (84f:15021)
 Nanda, V. C. See Narang, Asha, (84c:15013b)
 Narang, Asha Hermite normal form for matrices over Dedekind domains. (84c:15013a)
 (with Nanda, V. C.) Factorization of matrices over Dedekind domains. (84c:15013b)
 Newman, Morris On a problem of H. J. Ryser. (84d:15020)
 Piehler, Joachim Einige Betrachtungen über 0-1-Determinanten. [Some observations on 0-1 determinants] (84c:15023)
 Renaud, J.-C. Matrices with integer entries and integer eigenvalues. (84c:15024)
 Tolstikov, A. V. Rotations of integer matrices (a remark on a theorem of Yu. V. Linnik). (Russian) (84c:15014)

secondary classifications:

- Anstee, R. P. The network flows approach for matrices with given row and column sums. (84d:05050)
 Bevis, Jean H. (with Hall, Frank J.) Some classes of integral matrices. (84a:15003)
 Brualdi, Richard A. (with Li, Qiao) Small diameter interchange graphs of matrices of zeros and ones. (84h:05085)
 Chou, Tsu Wu J. (with Collins, George E.) Algorithms for the solution of systems of linear Diophantine equations. (84c:10020)
 Collins, George E. See Chou, Tsu Wu J., (84c:10020)
 Fortes, M. A. Crystallographic applications of the elementary divisor theorem. (84c:15024)
 Hall, Frank J. See Bevis, Jean H., (84a:15003)
 Istamov, A. M. Asymptotic distribution of integral matrices of n th order that belong to a given residue class. (Russian) (84c:10055)
 Karpinski, Marek Decidability of "Skolem matrix emptiness problem" entails constructibility of exact regular expression. (84c:03039)
 Li, Qiao See Brualdi, Richard A., (84h:05085)

- Lu, Ming Gao A note on the prime solutions of systems of linear equations—study of the conditions for solvability of a congruence. (Chinese) (84i:10001)
- Tonchev, V. D. Hadamard matrices of order 28 with automorphisms of order 13. (84i:05032)
- Wang, Kai On the g -circulant solutions to the matrix equation $A^m = \lambda J$. (84f:15017)
- Zelinsky, Daniel Similarity of nilpotent, integer matrices, or, four elementary categories. (84f:13007)

15A39 Linear inequalities

- Bakhtin, V. I. Regularity conditions for a system of vectors in a finite-dimensional space. (Russian) (84g:15018)
- Censor, Yair (with Elfving, Tommy) New methods for linear inequalities. (84f:15022)
- Elfving, Tommy See Censor, Yair, 84f:15022

secondary classifications:

- Bakan, G. M. (with Nizhichenko, E. A.) A finitely converging algorithm for solving a countable system of inequalities. (Russian) (84j:90096)
- Gainanov, D. N. (with Novokshenov, V. Yu.; Tyagunov, L. I.) Graphs generated by incompatible systems of linear inequalities. (Russian) (84f:05067)
- Mangasarian, O. L. A condition number for linear inequalities and linear programs. (84f:65034)
- Nizhichenko, E. A. See Bakan, G. M., (84j:90096)
- Novokshenov, V. Yu. See Gainanov, D. N.; et al., (84f:05067)
- Provan, J. Scott Determinacy in linear systems and networks. (84g:90061)
- Tyagunov, L. I. See Gainanov, D. N.; et al., (84f:05067)

15A42 Inequalities involving eigenvalues and eigenvectors

- Bellman, Richard Ernest The largest and the smallest characteristic roots of a positive definite matrix. (84d:15021)
- Chan, N. N. (with Li, Kim Hung) Diagonal elements and eigenvalues of a real symmetric matrix. (84g:15019)
- Elsner, Ludwig On the variation of the spectra of matrices. (84h:15019)
- Fernandes Miranda, Maria Emilia Inequalities involving the eigenvalues and the three kinds of singular values of a complex matrix. (Portuguese) (84a:15016)
- Fiedler, Miroslav A note on the Hadamard product of matrices. (84c:15025)
- Fukuma, Norio See Mori, Takehiro; et al., 84d:15023
- Karanam, V. R. Eigenvalue bounds for algebraic Riccati and Lyapunov equations. (84d:15022)
- Kuwahara, Michiyoshi See Mori, Takehiro; et al., 84d:15023
- Li, Kim Hung See Chan, N. N., 84g:15019
- Liao, Xiao Xin On degrees of stability and nonsingularity and eigenvalues distribution of some classes of matrices. (84c:15017)
- Machihara, Fumiaki On the property of eigenvalues of some infinitesimal generator. (84j:15015)
- Mazko, A. G. A criterion for containment of the spectrum of a matrix in an arbitrary region of some class. (84e:15018)
- Mori, Takehiro (with Fukuma, Norio; Kuwahara, Michiyoshi) On the discrete Lyapunov matrix equation. (84d:15023)
- Thompson, Robert C. Counterexamples concerning the diagonal elements of normal matrices. (84e:15019)

secondary classifications:

- Ando, Tsuyoshi ★ Majorization, doubly stochastic matrices and comparison of eigenvalues. (84a:15019)
- Jennings, Alan Bounds for the singular values of a matrix. (84e:65036)
- Karanam, V. R. On lower bounds for singular values of matrix sums. (84c:15008)
- Lin, Xiu Ding Inequalities for Hermitian matrices. (Chinese summary) (84j:15022a)
- See also Shi, Zhong Ci, (84j:15022b)
- Miranda, M. E. Fernandes Some results on matrices with prescribed diagonal elements, eigenvalues and singular values. (84d:15009)
- Newman, Morris Lyapunov revisited. (84m:15012)
- Shi, Zhong Ci Comment on: "Inequalities for Hermitian matrices" [J. China Univ. Sci. Tech. 11 (1981), no. 1, 17–31] by X. D. Lin. (Chinese) (84j:15022b)
- Sussman-Fort, Stephen E. The reconstruction of bordered-diagonal and Jacobi matrices from spectral data. (84c:15013)
- Wimmer, Harald K. On Ostrowski's generalization of Sylvester's law of inertia. (84j:15011)
- Wu, Chuan Yi A series of inequalities for Mills's ratio. (Chinese) (84g:62025)

15A45 Miscellaneous inequalities involving matrices

- Ando, Tsuyoshi On the arithmetic-geometric-harmonic-mean inequalities for positive definite matrices. (84j:15016)
- Berman, Abraham See Hershkovitz, Daniel, 84g:15020
- Butcher, J. C. A short proof concerning B -stability. (84c:15026)
- Cohen, Joel E. (with Friedland, Shmuel; Kato, Tosio; Kelly, Frank P.) Eigenvalue inequalities for products of matrix exponentials. (84h:15020)
- Friedland, Shmuel See Cohen, Joel E.; et al., 84h:15020
- Hershkovitz, Daniel (with Berman, Abraham) Necessary conditions and a sufficient condition for the Fischer-Hadamard inequalities. (84g:15020)
- Kato, Tosio See Cohen, Joel E.; et al., 84h:15020
- Kelly, Frank P. See Cohen, Joel E.; et al., 84h:15020
- Komiyama, Hidetoshi Necessary and sufficient conditions for multivariate majorization. (84k:15015)
- Lin, Xiu Ding Inequalities for compound and induced matrices and their applications to combinatorial analysis. (Chinese) (84k:15016)

- Luk, Franklin T. The commutability problem for Stieltjes matrices. (84a:15017)
- Marshall, Albert W. (with Olkin, Ingram) A convexity proof of Hadamard's inequality. (84f:15023)
- Olkin, Ingram See Marshall, Albert W., 84f:15023
- Sviridov, V. V. Generalization of the Birkhoff theorem on extreme points. (Russian) (84m:15015)
- Yang, Lu (with Zhang, Jing Zhong) A geometrical proof of an algebraic theorem. (84g:15021)
- Zhang, Jing Zhong See Yang, Lu, 84g:15021

secondary classifications:

- Bang, Thøger The van der Waerden conjecture and its proofs. (Danish. English summary) (84j:15004)
- Elsner, Ludwig On the variation of the spectra of matrices. (84h:15019)
- Khatri, C. G. (with Rao, C. Radhakrishna) Some extensions of the Kantorovich inequality and statistical applications. (84e:15006)
- Kölbig, K. S. (with Schwarz, Fritz Franz) On positive function series. (German summary) (84b:33012)
- Pach, János Mixed volume and the van der Waerden conjecture. (Hungarian) (84c:15009)
- Rao, C. Radhakrishna See Khatri, C. G., (84e:15006)
- Saitoh, Saburo Positive definite Hermitian matrices and reproducing kernels. (84h:15009)
- Schwarz, Fritz Franz See Kölbig, K. S., (84b:33012)

15A48 Positive matrices and their generalizations

- Adin, Ron Extreme positive operators on minimal and almost minimal cones. (84h:15021)
- de Boor, C. (with Jia, Rong Qing; Pinkus, A.) Structure of invertible (bi)infinite totally positive matrices. (84h:15022)
- Brualdi, Richard A. (with Li, Qiao) Linear transformations on nonnegative matrices preserving properties of irreducibility and full indecomposability. (84e:15020)
- Cohen, Joel E. Contractive inhomogeneous products of nonnegative matrices. (84g:15022)
- (with Sellers, Peter H.) Sets of nonnegative matrices with positive inhomogeneous products. (84a:15018)
- Deif, Assem S. Normal positive definite matrices. (84c:15027)
- Delsarte, Philippe (with Genin, Yves; Kamp, Yves) On the class of positive definite matrices equivalent to Toeplitz matrices. (See 84g:93005d)
- Fiedler, Miroslav (with Markham, Thomas L.; Neumann, Michael) Classes of products of M -matrices and inverse M -matrices. (84c:15017)
- Garloff, Jürgen Criteria for sign regularity of sets of matrices. (84f:15024)
- Genin, Yves See Delsarte, Philippe; et al., (See 84g:93005d)
- Hadeleir, K. P. On copositive matrices. (84e:15021)
- Han, S. P. (with Mangasarian, O. L.) A conjugate decomposition of the Euclidean space. (84c:15018)
- Imam, I. N. Tridiagonal and upper triangular inverse M -matrices. (84j:15017)
- Jacobson, D. H. See Martin, D. H., 84g:15023
- Jia, Rong Qing See de Boor, C.; et al., 84h:15022
- Kamp, Yves See Delsarte, Philippe; et al., (See 84g:93005d)
- Kel'mans, A. K. (with Kimel'fel'd, B. N.) Multiplicative submodularity of a matrix's principal minor as a function of the set of its rows, and some combinatorial applications. (84c:15028)
- Kemperman, J. H. B. A Hurwitz matrix is totally positive. (84f:15012)
- Kimel'fel'd, B. N. See Kel'mans, A. K., 84c:15028
- Kohlberg, Elon The Perron-Frobenius theorem without additivity. (84h:15023)
- Li, Qiao See Brualdi, Richard A., 84e:15020
- Logofet, D. O. (with Uflyanov, N. B.) Necessary and sufficient conditions for the sign stability of matrices. (Russian) (84j:15018)
- Mangasarian, O. L. See Han, S. P., 84c:15018
- Markham, Thomas L. See Fiedler, Miroslav; et al., 84c:15017
- Martin, D. H. (with Jacobson, D. H.) On conditionally definite quadratic forms. (84g:15023)
- Neumann, Michael See Fiedler, Miroslav; et al., 84c:15017
- Pinkus, A. See de Boor, C.; et al., 84h:15022
- Ross, Jeffrey A. On the exponent of a primitive, nearly reducible matrix. II. (84f:15025)
- Saitoh, Saburo Positive definite Hermitian matrices and reproducing kernels. (84h:15009)
- Sellers, Peter H. See Cohen, Joel E., 84a:15018
- Soules, George W. Constructing symmetric nonnegative matrices. (84m:15016)
- Stern, Ronald J. On strictly positively invariant cones. (84h:15010)
- Tam, Bit Shun A geometric treatment of generalized inverses and semigroups of nonnegative matrices. (84j:15019)
- Tian, Guo Qiang Matrices satisfying Šiljak's conjecture. (Chinese summary) (84h:15011)
- Uflyanov, N. B. See Logofet, D. O., 84j:15018
- Ycart, Bernard Extrémaux du cône des matrices de type non négatif, à coefficients positifs ou nuls. (English summary) [Extremals of the cone of nonnegative matrices with positive or zero coefficients] (84h:15013)

secondary classifications:

- Ahn, S. M. Stability of a matrix polynomial in continuous systems. (84j:93060)
- Ando, Tsuyoshi On the arithmetic-geometric-harmonic-mean inequalities for positive definite matrices. (84j:15016)
- Berman, Abraham (with Hershkovitz, Daniel) Matrix diagonal stability and its implications. (84i:15004)
- Handelman, David E. Positive matrices and dimension groups affiliated to C^* -algebras and topological Markov chains. (84i:46058)
- Hershkovitz, Daniel See Berman, Abraham, (84i:15004)
- Jain, Surender Kumar Nonnegative matrices having nonnegative generalized inverses. (84d:15003)
- Nonnegative rectangular matrices having certain nonnegative W -weighted group inverses. (84h:15004)

- Johnson, Gregory A. A generalization of N -matrices. (84e:15025)
 Mickie, M. H. See Monticone, L. C.; et al., (84a:90021)
 Monticone, L. C. (with Vogt, W. G.; Mickie, M. H.) The RAS method and a game theoretic approach to the extended RAS (ERAS) method. (84a:90021)
 Neumann, Michael (with Poole, George D.; Werner, Hans-Joachim) More on generalizations of matrix monotonicity. (84g:15006)
 Olinick, Michael See Peterson, Bruce, (84b:65033)
 Peterson, Bruce (with Olinick, Michael) Leontief models, Markov chains, substochastic matrices, and positive solutions of matrix equations. (84b:65033)
 Poole, George D. See Neumann, Michael; et al., (84g:15006)
 Tam, Bit Shun Generalized inverses of cone preserving maps. (84b:15006)
 Vogt, W. G. See Monticone, L. C.; et al., (84a:90021)
 Werner, Hans-Joachim See Neumann, Michael; et al., (84g:15006)
 Wolkowicz, Henry Some applications of optimization in matrix theory. (84a:90067)
 Yang, Lu (with Zhang, Jing Zhong) A geometrical proof of an algebraic theorem. (84g:15021)
 Zhang, Jing Zhong See Yang, Lu, (84g:15021)

15A51 Stochastic matrices

- Ando, Tsuyoshi ★Majorization, doubly stochastic matrices and comparison of eigenvalues. (84a:15019)
 Bapat, Ravindra Doubly stochastic matrices with equal subpermanents. (84g:15024)
 Benson, R. V. (with Shiflett, R. C.) Doubly stochastic matrices over arbitrary vector spaces and the Birkhoff theorem. (84e:15022)
 Chen, Xiao Kang Ergodic matrices and ergodic indices. (Chinese) (84f:15026)
 Hartfiel, D. J. Stochastic eigenvectors for qualitative stochastic matrices. (84f:15027)
 Mine, Henryk Inverse elementary divisor problem for doubly stochastic matrices. (84h:15024)
 Shiflett, R. C. See Benson, R. V., (84e:15022)
 Spreen, Dieter On some properties of the Cesàro limit of a stochastic matrix. (84e:15023)
 Tan, Choon Peng A functional form for a particular coefficient of ergodicity. (84f:15029)
 Webster, R. J. The harmonic means of diagonals of doubly-stochastic matrices. (84h:15025)

secondary classifications:

- Barnett, Fred C. (with Weaver, James R.; Frame, J. S.) Eigenvalues and eigenvectors of a certain stochastic matrix. (84h:15010a)
 Frame, J. S. See Barnett, Fred C.; et al., (84h:15010a)
 Landis, T. L. See Parlett, B. N., (84b:15007)
 Liv'yant, R. Z. Neighborhood of vertices in the polyhedron of bistochastic matrices. (Russian) (84g:52010)
 Nawrotzki, Kurt Weak ergodicity of stationary random sequences of stochastic matrices. II. (Russian) (84a:60049)
 Parlett, B. N. (with Landis, T. L.) Methods for scaling to doubly stochastic form. (84b:15007)
 Shur, M. G. On the asymptotic behavior of the powers of a positive operator. (Russian) (84j:47053)
 Spezzaferri, Fulvio Reconstructing marginals from conditional distributions for discrete random variables. (Italian summary) (84k:60028)
 Tam, Bit Shun A geometric treatment of generalized inverses and semigroups of nonnegative matrices. (84j:15019)
 Tan, Choon Peng Coefficients of ergodicity with respect to vector norms. (84h:60125)
 Weaver, James R. Eigenvalues and eigenvectors of a certain stochastic matrix. II. (84k:15010b)
 See also Barnett, Fred C.; et al., (84k:15010a)
 Wellstein, H. Iterierte arithmetische Mittelung und eine Verallgemeinerung der Jenssenschen Ungleichung. [Iterated arithmetical mean and a generalization of Jensen's inequality] (84c:26022)

15A52 Random matrices

secondary classifications:

- Boneva, Liliana I. Random $(0,1)$ matrices in seriation. (Bulgarian summary) (84k:05023)
 Gluskin, E. D. Norms of random matrices and diameters of finite-dimensional sets. (Russian) (84g:41021)
 Hastings, Harold M. The May-Wigner stability theorem for connected matrices. (84b:92049)
 Masol, V. I. Expansion of the domain of invariance for random Boolean matrices. (84m:94040)
 Mehta, Madan Lal See Pandey, A., (84e:81085)
 Nawrotzki, Kurt Weak ergodicity of stationary random sequences of stochastic matrices. II. (Russian) (84a:60049)
 Olkin, Ingram (with Pukelsheim, F.) The distance between two random vectors with given dispersion matrices. (84f:62062)
 Pandey, A. (with Mehta, Madan Lal) Gaussian ensembles of random Hermitian matrices intermediate between orthogonal and unitary ones. (84e:81085)
 Pukelsheim, F. See Olkin, Ingram, (84f:62062)
 Purkert, Walter (with vom Scheidt, Jürgen) Eigenwerte zufälliger normalverteilter Matrizen. [Eigenvalues of normally distributed random matrices] (84a:60073)
 vom Scheidt, Jürgen See Purkert, Walter, (84a:60073)

15A54 Matrices over function rings in one or more variables

- Ahn, S. M. Stability of a matrix polynomial in discrete systems. (84f:15028)
 Georgiou, Tryphon T. See Khargonekar, Pramod P.; et al., (See 84g:93005d)
 Gohberg, Israel (with Kaashoek, M. A.; Lerer, L.; Rodman, Leiba) Common multiples and common divisors of matrix polynomials. II. Vandermonde and resultant matrices. (84e:15024)

Hirasawa, Yoshikazu On solutions of a homogeneous linear matrix equation with variable components. (84f:15029)

Jones, John, Jr. Solutions of Lyapunov and Riccati type matrix equations arising in optimal control theory and systems theory. (See 84e:00005)

Kaashoek, M. A. See Gohberg, Israel; et al., (84e:15024)

Kazimirskii, P. S. (with Shavarovskii, B. Z.) Conditions for semiscalar equivalence of polynomial matrices with pairwise relatively prime elementary divisors. (Russian. English summary) (84g:15025)

Khargonekar, Pramod P. (with Georgiou, Tryphon T.; Özgüler, Bülent) Skew-prime polynomial matrices and invariant subspaces. (See 84g:93005d)

Lee, E. Bruce (with Žak, Stanisław H.) Smith forms over $R[z_1, z_2]$. (84e:15014)

Lerer, L. See Gohberg, Israel; et al., (84e:15024)

Neudecker, H. On two germane matrix derivatives. (84g:15026)

Özgüler, Bülent See Khargonekar, Pramod P.; et al., (See 84g:93005d)

Rodman, Leiba See Gohberg, Israel; et al., (84e:15024)

Shavarovskii, B. Z. See Kazimirskii, P. S., (84g:15025)

Wimmer, Harald K. Polynomial matrices and dualities. (84a:15020)

Xu, Ke Kang A resultant theorem for relative primality of polynomial matrices. (Chinese. English summary) (84c:15030)

Žak, Stanisław H. See Lee, E. Bruce, (84e:15014)

secondary classifications:

- Bachmuth, Seymour (with Mochizuki, Horace Y.) $E_2 \neq SL_2$ for most Laurent polynomial rings. (84a:20056)
 Chen, Chi Tsong See Krishnarao, I. Satesh, (84m:93025)
 Coleman, Thomas F. (with Moré, Jorge J.) Estimation of sparse Jacobian matrices and graph coloring problems. (84f:05043)
 Dewilde, Patrick See Van Dooren, Paul, (84j:15009)
 Epstein, Irving J. See Kotin, Leon, (84c:15020)
 Kaczorek, Tadeusz Polynomial matrix equations in two indeterminates. (Russian summary) (84j:93037)
 Algebraic operations on two-dimensional polynomials. (Russian summary) (84j:93045a)
 Algebraic operations on two-dimensional polynomial matrices. (Russian summary) (84j:93045b)
 Kotin, Leon (with Epstein, Irving J.) On matrices which commute with their derivatives. (84c:15020)
 Krishnarao, I. Satesh (with Chen, Chi Tsong) Properness of feedback transfer matrices. (84m:93025)
 Mochizuki, Horace Y. See Bachmuth, Seymour, (84a:20056)
 Moré, Jorge J. See Coleman, Thomas F., (84f:05043)
 Shavarovskii, B. Z. Reduction of unital polynomial matrices with pairwise relatively prime elementary divisors to block-diagonal form. (Russian. English summary) (84i:15007)
 See also Zelisko, V. R., (84i:15009)
 Ungar, Abraham Generalized hyperbolic functions. (84c:33008)
 Van Dooren, Paul (with Dewilde, Patrick) The eigenstructure of an arbitrary polynomial matrix: computational aspects. (84j:15009)
 Wimmer, Harald K. Hermitian polynomial matrices, isometries and inertial signs. (84m:15017)
 Zelisko, V. R. (with Shavarovskii, B. Z.) Decomposition of a matrix polynomial into the product of factors of simple structure. (Russian) (84i:15009)

15A57 Other types of matrices (Hermitian, skew-Hermitian, etc.)

- Barel, M. (with Tamir, Arie) Nested matrices and the existence of least majorized elements. (84a:15021)
 Boseck, Helmut Variations on a theorem of J. D. Dixon. (84j:15020)
 Cain, Bryan E. (with Marques de Sá, E.) The inertia of a Hermitian matrix having prescribed complementary principal submatrices. (84h:15026a)
 The inertia of a Hermitian matrix having prescribed diagonal blocks. (84h:15026b)
 Carlson, David H. (with Haynsworth, Emilie V.) Complementable and almost defaite matrices. (84e:15015)
 Delsarte, Philippe (with Genin, Yves; Kamp, Yves) Equivalence classes of Hermitian matrices and their Schur parametrization. (84j:15021)
 Fiala, Tibor Normal equivalent to an arbitrary diagonalizable matrix. (84g:15028)
 Genin, Yves See Delsarte, Philippe; et al., (84f:15021)
 Haynsworth, Emilie V. See Carlson, David H., (84i:15015)
 Johnson, Gregory A. A generalization of N -matrices. (84e:15025)
 Kamp, Yves See Delsarte, Philippe; et al., (84j:15021)
 Koluha, Michal Some properties of a universal matrix. (Polish. English and Russian summaries) (84f:15030)
 Kuo, Chi-Chin Tung See Thompson, Robert C., (84c:15031)
 Lin, Xiu Ding Inequalities for Hermitian matrices. (Chinese summary) (84j:15022a)
 See also Shi, Zhong Ci, (84j:15022b)
 Marques de Sá, E. On the inertia of sums of Hermitian matrices. (84h:15026c)
 See also Cain, Bryan E., (84h:15026a)
 Mitra, Sujit Kumar Shorted operators and the identification problem. (84g:15027)
 Shi, Zhong Ci Comment on: "Inequalities for Hermitian matrices" [J. China Univ. Sci. Tech. 11 (1981), no. 1, 17-31] by X. D. Lin. (Chinese) (84j:15022b)
 Tamir, Arie See Barel, M., (84a:15021)
 Thompson, Robert C. (with Kuo, Chi-Chin Tung) Doubly stochastic, unitary, unimodular, and complex orthogonal power embeddings. (84c:15031)
 Waldenström, S. Unitarity bounds on the S -matrix elements for the general lossless nonreciprocal three-port. (84j:15023)
 Wimmer, Harald K. Hermitian polynomial matrices, isometries and inertial signs. (84m:15017)

secondary classifications:

- Bellman, Richard Ernest** The largest and the smallest characteristic roots of a positive definite matrix. (84d:15021)
- Bhattacharyya, B. B.** See **Chakrabarti, Satyabrata**; et al., (See 84g:93005a)
- Bshouty, Daoud** (with Hengartner, Walter) On analytic injective matrix functions. (84m:30027)
- Chakrabarti, Satyabrata** (with Bhattacharyya, B. B.; Swamy, M. N. S.) On simultaneous diagonalization of a collection of Hermitian matrices. (See 84g:93005a)
- Chan, N. N.** (with Li, Kim Hung) Diagonal elements and eigenvalues of a real symmetric matrix. (84g:15019)
- Crawford, C. R.** (with Moon, Yiu Sang) Finding a positive definite linear combination of two Hermitian matrices. (84f:65032)
- De Mazancourt, T.** (with Gerlic, D.) The inverse of a block-circulant matrix. (84m:15006)
- Doverspike, R. D.** (with Lemke, C. E.) A partial characterization of a class of matrices defined by solutions to the linear complementarity problem. (84d:90109)
- Fredricks, Gregory A.** Sylvester's theorem for matrices with smooth entries. (84e:58008)
- Gerlic, D.** See **De Mazancourt, T.** (84m:15006)
- Graovac, Ante** See **Gutman, Ivan**; et al., (84m:05053)
- Gregor, J.** See **Zehab, Ezra** (84m:94039)
- Gutman, Ivan** (with Graovac, Ante; Mohar, Bojan) On the existence of a Hermitian matrix whose characteristic polynomial is the matching polynomial of a molecular graph. (84m:05053)
- Hengartner, Walter** See **Bshouty, Daoud**, (84m:30027)
- Hoffman, Alan J.** The role of unimodularity in applying linear inequalities to combinatorial theorems. (See 84h:90034a)
- Imam, I. N.** Tridiagonal and upper triangular inverse M -matrices. (84j:15017)
- Jeter, Melvyn W.** (with Pye, Wallace C.) Structure properties of certain Q -matrices. (84j:90089)
- Kislyakov, S. V.** Projectors onto the set of Hankel matrices. (Russian. English summary) (84g:47026)
- Lemke, C. E.** See **Doverspike, R. D.** (84d:90109)
- Li, Kim Hung** See **Chan, N. N.** (84g:15019)
- Lin, Xiu Ding** Inequalities for compound and induced matrices and their applications to combinatorial analysis. (Chinese) (84k:15016)
- Malley, James D.** Statistical and algebraic independence. (84h:62089)
- Mazko, A. G.** A criterion for containment of the spectrum of a matrix in an arbitrary region of some class. (84e:15018)
- Meek, D. S.** The inverses of Toeplitz band matrices. (84e:15003)
- Mohar, Bojan** See **Gutman, Ivan**; et al., (84m:05053)
- Moon, Yiu Sang** See **Crawford, C. R.**, (84f:65032)
- Newman, Morris** Lyapunov revisited. (84m:15012)
- Paige, Chris** (with Van Loan, Charles) A Schur decomposition for Hamiltonian matrices. (84d:65019)
- Pye, Wallace C.** See **Jeter, Melvyn W.** (84j:90089)
- Shapiro, Helene M.** Hermitian pencils with a cubic minimal polynomial. (84h:15014)
- Soules, George W.** Constructing symmetric nonnegative matrices. (84m:15016)
- Sussman-Fort, Stephen E.** The reconstruction of bordered-diagonal and Jacobi matrices from spectral data. (84c:15013)
- Swamy, M. N. S.** See **Chakrabarti, Satyabrata**; et al., (See 84g:93005a)
- Van Loan, Charles** See **Paige, Chris**, (84d:65019)
- Wimmer, Harald K.** On Ostrowski's generalization of Sylvester's law of inertia. (84j:15011)
- Zehab, Ezra** On n -dimensional impedances: "Biquadratic n -dimensional impedances" [Internat. J. Circuit Theory Appl. 9 (1981), no. 4, 369-377; MR 83f:94046] by J. Gregor. (84m:94039)

15A60 Norms of matrices, numerical range, applications of functional analysis to matrix theory [See also 65F35, 65J05.]

- Au-Yeung, Yik Hoi** (with Ng, Kam Chuen) A remark on a conjecture of Marcus on the generalized numerical range. 84m:15018
- Feng, Yu Yu** A property of the p -norm of the inverse of a totally positive matrix. (Chinese) 84j:15024
- Hartwig, Robert E.** (with Spindelböck, Klaus) Some closed form formulae for the intersection of two special matrices under the star order. 84j:15025a
(with Spindelböck, Klaus) Partial isometries, contractions and EP matrices. 84j:15025b
- Holbrook, John A. R.** Polynomials in a matrix and its commutant. 84i:15016
- Krein, M. G.** (with Spitkovskii, I. M.) Some generalizations of Szegő's first limit theorem. (Russian. English summary) 84i:15017
- Ng, Kam Chuen** See **Au-Yeung, Yik Hoi**, 84m:15018
- Okamoto, Sigeru** See **Oshima, Kunio**, 84k:15019
- Oshima, Kunio** (with Okamoto, Sigeru) On the submultiplicative classes. 84k:15019
- Prék, Vlastimil** Uniqueness in the first maximum problem. 84g:15029
- Rothblum, Uriel G.** Resolvent expansions of matrices and applications. 84d:15024
- Spindelböck, Klaus** See **Hartwig, Robert E.**, 84j:15025a and 84j:15025b
- Spitkovskii, I. M.** See **Krein, M. G.**, 84i:15017
- Tadmor, Eitan** The equivalence of L_2 -stability, the resolvent condition, and strict H -stability. 84g:15030
- Uhlig, Frank** Relations between the fields of values of a matrix and of its polar factors: the 2×2 real and complex case. 84i:15018
- Ziętak, Krystyna** The L_p -solution of the nonlinear matrix equation $XY=A$. 84f:15031

secondary classifications:

- Déchamps-Gondim, Myriam** (with Lust-Piquard, Françoise; Queffelec, Hervé) La propriété du minorant dans $\mathcal{C}_*(H)$. (English summary) [The minorant property in $\mathcal{C}_*(H)$] (84e:47059)

- Flores de Chela, Della** Approximations in the l_∞ norm and the generalized inverse. (84f:15008)
- Gil', M. I.** Estimates of the norms of solutions and of the boundaries of domains of stability of quasilinear systems. (Russian) (84d:34044)
- Goldberg, Moshe** (with Straus, E. G.) Operator norms, multiplicativity factors, and C -numerical radii. (84b:47011)
- Groh, Ulrich** Some observations on the spectra of positive operators on finite-dimensional C^* -algebras. (84f:46079)
- Guala, Elda** On the equivalence of classes of operators of $\mathcal{K}^*(\Omega)$ into itself with the matrix of derivations. (Italian. English summary) (84m:47050)
- Kublanovskaya, V. N.** A certain approach to the solution of spectral problems for pencils of matrices. (Russian) (84d:15012)
- Lust-Piquard, Françoise** See **Déchamps-Gondim, Myriam**; et al., (84e:47059)
- Marek, Ivo** (with Žitný, Karel) Two-sided spectral bounds of two irreducible linear maps. (84e:47058)
- Queffelec, Hervé** See **Déchamps-Gondim, Myriam**; et al., (84e:47059)
- Straus, E. G.** See **Goldberg, Moshe**, (84b:47011)
- Žitný, Karel** See **Marek, Ivo**, (84e:47058)

15A63 Quadratic and bilinear forms, inner products [See mainly 10Cxx.]

- Artstein, Zvi** (with Schechtman, Gideon) Positive definite forms generated by integrals and weak limits. 84m:15019
- Bertraneu, A.** (with Ficht, B.) Étude de la frontière de l'ensemble des formes quadratiques positives, sur un espace vectoriel de dimension finie. [Study of the boundary of the set of positive quadratic forms on a finite-dimensional vector space] 84f:15032
- Bertuccioni, Inta** An anisotropic locally hyperbolic quadratic space. 84b:15012
- Deheuvels, René** ★Formes quadratiques et groupes classiques. (French) [Quadratic forms and classical groups] 84j:15026
- Fernández Bermejo, Emiliano** ★Espacios simplecticos sobre β -anillos y anillos de Hermite, trasvecciones simplecticas. (Spanish) [Symplectic spaces over β -rings and Hermitian rings, symplectic transvections] 84i:15019
- Ficht, B.** See **Bertraneu, A.**, 84f:15032
- Fischer, Pal** (with Mokanski, J. P.) A class of symmetric biadditive functionals. 84d:15025
- Mokanski, J. P.** See **Fischer, Pal**, 84d:15025
- Pate, Thomas H.** Permutation-operator inequalities on certain symmetry classes of tensors. 84g:15031
- Potapov, V. P.** A theorem on the modulus. I. Fundamental concepts. The modulus. (Russian) 84d:15026
- Saariakki, Mikko** ★Dense subspaces in Hermitean spaces of uncountable dimensions. 84i:15020
- Schechtman, Gideon** See **Artstein, Zvi**, 84m:15019
- Valiaho, H.** On the definiteness of quadratic forms subject to linear constraints. 84b:15013

secondary classifications:

- Arason, J. K.** (with Pfister, Albrecht) Supplement to the work: "Quadratic forms over affine algebras and an algebraic proof of the Borsuk-Ulam theorem" [J. Reine Angew. Math. 331 (1982), 181-184; MR 83d:10023]. (German) (84h:10027)
- Benkart, Georgia M.** (with Osborn, J. Marshall) Power-associative products on matrices. (84e:17002)
- Boja, N.** (with Brăiloiu, G.) On the conjugation of K -spaces by means of sesquilinear forms. (Romanian. English summary) (84g:15002)
- Boshko, O.** See **Krein, M. G.**; et al., (84i:12016)
- Brăiloiu, G.** See **Boja, N.**, (84g:15002)
- Deif, Assem S.** Normal positive definite matrices. (84c:15027)
- Feig, Ephraim** Certain systems of bilinear forms whose minimal algorithms are all quadratic. (84g:10042)
- Gondard, Danielle** Théorie des modèles et fonctions définies positives sur les variétés algébriques réelles. (English summary) [Model theory and positive definite functions in real algebraic varieties] (84a:12026)
- Gross, Herbert** (with Keller, Hans A.) On the problem of classifying infinite chains in projective and orthogonal geometry. (84c:51010)
- Haapasalo, Lemmi** (with Niemistö, Pekka) Lattice generation program for computing a vector space lattice. (84g:06012)
- (Howland, James Lucien)** See **Krein, M. G.**; et al., (84i:12016)
- Jacobson, D. H.** See **Martin, D. H.**, (84g:15023)
- Keller, Hans A.** See **Gross, Herbert**, (84c:51010)
- Kneser, Martin** Composition of binary quadratic forms. (84b:10031)
- Krein, M. G.** (with Naimark, M. A.) The method of symmetric and Hermitian forms in the theory of the separation of the roots of algebraic equations. (84i:12016)
- Lancaster, Peter** (with Pattabhiraman, M. V.) The local determination of Jordan bases for H -selfadjoint operators. (84a:15009)
- Martin, D. H.** (with Jacobson, D. H.) On conditionally definite quadratic forms. (84g:15023)
- Matveev, G. V.** The trace form on a central simple algebra. (Russian) (84c:16033)
- Meißner, Wilfried** Quadratische Räume unendlicher Dimension und partielle Isomorphismen. [Quadratic spaces of infinite dimension and partial isomorphisms] (84i:10020)
- A Löwenheim-Skolem theorem for inner product spaces. (84j:03078)
- Menichetti, Giampaolo** Commutative division algebras. (84f:51051)
- Mimura, Yoshio** On 2-lattices in a Hermitian space. (84c:10026)
- Naimark, M. A.** See **Krein, M. G.**, (84i:12016)
- Niemistö, Pekka** See **Haapasalo, Lemmi**, (84g:06012)
- Osborn, J. Marshall** See **Benkart, Georgia M.**, (84e:17002)
- Parimala, Raman** Failure of a quadratic analogue of Serre's conjecture. (84d:13016)
- Quadratic spaces over polynomial extensions of regular rings of dimension 2. (84d:10026)
- Quadratic forms over polynomial rings over global fields. (84k:10015)

- Pattabhiraman, M. V. See Lancaster, Peter, (84a:15009)
 Pfister, Albrecht See Arason, J. K., (84h:10027)
 Power, S. C. Finite rank multivariable Hankel forms. (84f:47032)
 Serre, Denis Formes quadratiques et calcul des variations. (English summary) [Quadratic forms and the calculus of variations] (84m:49031)
 Waterhouse, William C. Real classification of complex quadrics. (84h:10028)

15A66 Clifford algebras

- Dresden, Max See Salingaros, Nikos, 84e:15026a
 Greub, W. H. The signature of a real Clifford algebra. 84d:15027
 Holland, P. R. Tensor conditions for algebraic spinors. 84c:15021
 Salingaros, Nikos On the classification of Clifford algebras and their relation to spinors in n dimensions. 84c:15022a
 Erratum: "On the classification of Clifford algebras and their relation to spinors in n dimensions". 84c:15022b
 (with Dresden, Max) Physical algebras in four dimensions. I. The Clifford algebra in Minkowski spacetime. 84e:15026a
 Physical algebras in four dimensions. II. The Majorana algebra. 84e:15026b

secondary classifications:

- (Bulinskiĭ, A. V.) See Casanova, Gaston, (84a:53013)
 Caianiello, E. R. (with Giovannini, A.) Pure spinors as Pfaffians connecting Clifford and Grassmann algebras. (84h:81053)
 Casanova, Gaston ★ Векторы аффина. (Russian) [Vector algebra] (84a:53013)
 Crumeyrolle, Albert Bilinearité et géométrie affine attachées aux espaces de spineurs complexes, minkowskiens ou autres. [Bilinearity and affine geometry related to complex, Minkowski or other spaces of spinors] (84a:81012)
 Frescura, F. A. M. (with Hiley, B. J.) The algebraization of quantum mechanics and the implicate order. (84m:81020)
 Giovannini, A. See Caianiello, E. R., (84h:81053)
 Goldschmidt, Bernd Regularity properties of generalized analytic vectors in \mathbb{R}^n . (84a:35071)
 Hellsten, Hans On the visual geometry of spinors and twistors. (84j:81041)
 Helmstetter, Jacques Systèmes de puissances partiellement divisées. [Systems of partially divided powers] (84c:13014)
 Hiley, B. J. See Frescura, F. A. M., (84m:81020)
 Jagannathan, R. (with Santhanam, T. S.) On a number of theoretical problems involved in the study of the physics of spin-systems. (84j:82097)
 Khovanova, T. G. Models of representations and generalized Clifford algebras. (Russian) (84d:22024)
 Santhanam, T. S. See Jagannathan, R., (84j:82097)
 Seligman, George B. Variations on even Clifford algebras. (See 84a:00007)

15A69 Multilinear algebra, tensor products

- Chollet, John See Marcus, Marvin, 84h:15027
 Friedland, Shmuel (with Robbin, J. W.) Symmetries of tensor products. 84f:15033
 Marcus, Marvin (with Chollet, John) The index of a symmetry class of tensors. 84h:15027
 Merris, Russell Induced bases of symmetry classes of tensors. 84e:15027
 (with Watkins, William) Tensors and graphs. 84c:15023
 de Oliveira, Graciano N. Equality conditions for decomposable symmetric tensors. (Portuguese. English summary) 84e:15028
 Pate, Thomas H. On those symmetric multilinear functions that are expressible as a linear combination of a small number of linearly independent powers. 84f:15034
 de Pillis, John Stand-alone results and applications in multilinear algebra. 84h:15028
 Robbin, J. W. See Friedland, Shmuel, 84f:15033
 Watkins, William See Merris, Russell, 84c:15023

secondary classifications:

- Beasley, Leroy B. Linear transformations preserving sets of ranks. (84m:15004)
 Hanouzet, B. (with Joly, Jean-Luc) Formes multilinéaires sur des sous-espaces de distributions. [Multilinear forms on distribution subspaces] (84f:46050)
 Joly, Jean-Luc See Hanouzet, B., (84f:46050)
 Merris, Russell Pólya's counting theorem via tensors. (84h:05006)
 Okoh, Frank Some properties of purely simple Kronecker modules. I. (84c:16024)
 Pate, Thomas H. Permutation-operator inequalities on certain symmetry classes of tensors. (84g:15031)
 Prediger, H. Das äußere Tensorprodukt in der Mechanik. [The exterior tensor product in mechanics] (84h:73008)
 Suzuki, Hiroshi Automorphism groups of multilinear maps. (84k:10016)

15A72 Vector and tensor algebra, theory of invariants

- Applequist, Jon Cartesian polytensors. 84j:15027
 Betten, Josef Zur Aufstellung einer Integritätsbasis für Tensoren zweiter und vierter Stufe. [On establishing an integrity basis for tensors of second and fourth ranks] 84g:15032
 Dicks, Warren (with Formanek, Edward) Poincaré series and a problem of S. Montgomery. 84c:15032
 Dixmier, Jacques Série de Poincaré et systèmes de paramètres pour les invariants des formes binaires de degré 7. (English summary) [Poincaré series and systems of parameters for invariants of binary forms of degree 7] 84f:15035
 Djoković, Dragomir Z. Classification of trivectors of an eight-dimensional real vector space. 84f:15036
 Formanek, Edward See Dicks, Warren, 84c:15032
 González de Posada, F. ★ Problemas de estructuras algebraicas tensoriales. (Spanish) [Problems of tensorial algebraic structures] 84g:15033

- Lim, M. H. Linear mappings on symmetry classes of tensors. 84a:15022
 Procesi, Claudio Symmetry on tensor spaces; some consequences. (Italian summary) 84h:15029
 Stein, Paul R. On an identity from classical invariant theory. 84h:15030
 Waterhouse, William C. Invertibility of linear maps preserving matrix invariants. 84i:15020

secondary classifications:

- Akin, Kaan (with Buchsbaum, David A.; Weyman, Jerzy) Schur functors and Schur complexes. (84c:20021)
 Alves, A. S. ★ L'orientation temporelle d'une variété. (French) [Temporal orientation of a manifold] (84m:53074)
 Buchsbaum, David A. See Akin, Kaan; et al., (84c:20021)
 De Concini, Corrado Characteristic free "decomposition" of the coordinate ring of the symplectic group. (Italian summary) (84j:20041)
 Djoković, Dragomir Z. Closures of equivalence classes of trivectors of an eight-dimensional complex vector space. (84h:14059)
 Gordeev, N. L. Stanley's conjecture and classification of finite groups whose algebra of invariants is a complete intersection. (Russian) (84m:14058)
 Helmstetter, Jacques Systèmes de puissances partiellement divisées. [Systems of partially divided powers] (84c:13014)
 Hess, Siegfried ★ Vektor- und Tensor-Rechnung. (German) [Vector and tensor calculus] (84a:53011)
 Jakubowicz, A. On a certain construction of algebraic vector, covector and scalar concomitants of a given tensor field. (See 84g:53003)
 Kimura, Tatsuo On the construction of some relative invariants for $GL(n)$ ($n=6,7,8$) by the decomposition of the Young diagrams. (84j:14047)
 Remark on some combinatorial construction of relative invariants. (84g:20078)
 Kopský, Vojtěch The concept of extended integrity bases. (84a:14023)
 Merris, Russell Generalized matrix functions and pattern inventory. (84i:05011)
 Mikolajová, Věra On the functional independence of scalar invariants of curvature for dimensions $n=2,3,4$. (Russian summary) (84m:53029)
 Nakajima, Haruhisa Relative invariants of finite groups. (84c:13006)
 Popov, V. L. Homological dimension of algebras of invariants. (84i:14010)
 Sands, Donald E. ★ Vectors and tensors in crystallography. (84k:82085)
 Shtern, A. I. Factorization and irreducible representations of a direct product of groups. (Russian. English summary) (84c:22008)
 Simmonds, James G. ★ A brief on tensor analysis. (84h:53002)
 Weyman, Jerzy See Akin, Kaan; et al., (84c:20021)

15A75 Exterior algebra, Grassmann algebras

- Carlson, David H. (with Loewy, Raphael) On equality of maps induced by alternate products. 84g:15034
 Loewy, Raphael See Carlson, David H., 84g:15034
 Vanstone, J. R. The Poincaré map in mixed exterior algebra. 84g:15035
 Wu, Guang Lei Generalization of Cartan's lemma. 84j:15028

secondary classifications:

- Akin, Kaan (with Buchsbaum, David A.; Weyman, Jerzy) Schur functors and Schur complexes. (84c:20021)
 Buchsbaum, David A. See Akin, Kaan; et al., (84c:20021)
 Ionescu-Pallas, Nicholas Jean (with Sofonea, Liviu) Géométries non-classiques et pré-relativistes capables de décrire la phénoménologie relativiste. II. Le formalisme complexe vectoriel. [Nonclassical prerelativistic geometries that can describe relativistic phenomenology. II. Complex vector formalism] (84m:83002)
 Ogawa, Yūsuke Orthogonal decomposition of curvature type tensors. (84k:53023)
 Sofonea, Liviu See Ionescu-Pallas, Nicholas Jean, (84m:83002)
 Weyman, Jerzy See Akin, Kaan; et al., (84c:20021)
 Yastrebov, A. V. Bianchi sums in a ring of Hermite double skew-symmetric forms. (Russian) (84i:53070)

15A78 Other algebras built from modules

secondary classifications:

- Akin, Kaan (with Buchsbaum, David A.; Weyman, Jerzy) Schur functors and Schur complexes. (84c:20021)
 Buchsbaum, David A. See Akin, Kaan; et al., (84c:20021)
 Weyman, Jerzy See Akin, Kaan; et al., (84c:20021)
 Wyss, Walter Cumulants and moments. (84m:46067)

15A90 Applications to physics

- Diță, Petre Parametrisation of unitary matrices. 84e:15029
 Fortes, M. A. Crystallographic applications of the elementary divisor theorem. 84k:15024
 Stöckel, Helmut Rechenregeln für Skalare. (English and Russian summaries) [Rules of computation for scalars] 84a:15023

secondary classifications:

- Audit, Ph. Utilisation des matrices cycliques pour l'étude des cristaux parfaits: discussion générale. (English summary) [The use of cyclic matrices for the study of perfect crystals: general discussion] (84c:82029)
 Belov, N. V. See Soldatov, E. A.; et al., (84j:82088)
 Blandin, André Les renversements d'espace et de temps: quelques propriétés de "matrices": cinématique. (English summary) [Space and time reversals: some properties of "matrices": kinematics] (84j:83005)

- Curir, Anna (with Pastrone, Franco; Tulczyjew, Włodzimierz M.) Symplectic geometry and reciprocal networks. (84h:94018)
- Derrick, G. H. On the square root of Minkowski space. (84b:81043)
- Dresden, Max See Salingaros, Nikos. (84c:15026a)
- Faizullaev, B. A. See Slavov, A. A., (84b:81088)
- Gürsey, Feza (with Tze, Hsiung Chia) Complex and quaternionic analyticity in chiral and gauge theories. I. (84d:81031)
- Holland, P. R. Tensor conditions for algebraic spinors. (84c:15021)
- Kuz'min, A. E. See Soldator, E. A.; et al., (84j:82088)
- Moore, E. See Sharp, J. J., (84k:00040)
- Newman, Douglas John Operator orthogonality and parameter uncertainty. (84j:81139)
- Pastrone, Franco See Curir, Anna; et al., (84h:94018)
- Salingaros, Nikos (with Dresden, Max) Physical algebras in four dimensions. I. The Clifford algebra in Minkowski spacetime. (84c:15026a)
- Physical algebras in four dimensions. II. The Majorana algebra. (84c:15026b)
- Sands, Donald E. ★ Vectors and tensors in crystallography. (84c:82085)
- Schulze, Reinhard About a possibility of the topologic and electrical description of multiterminal networks. (German and Russian summaries) (84j:94056)
- Sharp, J. J. (with Moore, E.) Partial analysis and matrix methods. (84k:00040)
- Simpson, H. C. (with Spector, Scott J.) On copositive matrices and strong ellipticity for isotropic elastic materials. (84m:73018)
- Slavov, A. A. (with Faizullaev, B. A.) Invariant infrared regularization for supersymmetrical Yang-Mills fields. (Russian. English summary) (84b:81088)
- Soldator, E. A. (with Kuz'min, A. E.; Belov, N. V.) On the characteristic equations of crystallographic matrices. (Russian) (84j:82088)
- Spector, Scott J. See Simpson, H. C., (84m:73018)
- Stepanovskii, Yu. P. Maxwell poles and the theory of spinors. (Russian. English summary) (84b:78008)
- Titova, T. N. Determination of the normal forms of the Hamiltonian matrices. (84c:70013)
- Tulczyjew, Włodzimierz M. See Curir, Anna; et al., (84h:94018)
- Tze, Hsiung Chia See Gürsey, Feza, (84d:81031)
- Wetterich, C. Massless spinors in more than four dimensions. (84f:81051)

15A99 Miscellaneous topics

- Babikov, G. V. Factorization of matrices over some universal algebras. (Russian) 84d:15028
- Cao, Zhi Qiang The eigen fuzzy sets of a fuzzy matrix. 84i:15021
- Chobanov, Ivan See Stoyanova, Rumyana, 84m:15022
- Gohberg, Israel (with Kaashoek, M. A.; van Schagen, F.) Rational matrix and operator functions with prescribed singularities. 84i:15037
- Hashimoto, Hiroshi Reduction of a nilpotent fuzzy matrix. 84c:15033
- Convergence of powers of a fuzzy transitive matrix. 84c:15034
- Kaashoek, M. A. See Gohberg, Israel; et al., 84f:15037
- Lou, Shi Bo (with Tong, Zeng Xiang) LSG powers of an L-fuzzy matrix. 84m:15020
- Luo, Cheng Zhong Generalized inverses of fuzzy matrix. 84m:15021
- Roman, Steven Operational formulas. 84b:15014
- van Schagen, F. See Gohberg, Israel; et al., 84f:15037
- Stoyanova, Rumyana (with Chobanov, Ivan) An application of reciprocal repères. (Bulgarian summary) 84m:15022
- Tong, Zeng Xiang See Lou, Shi Bo, 84m:15020
- Wedin, Per Åke On angles between subspaces of a finite-dimensional inner product space. (See 84c:65009)
- Wiener, Gerry Some structural results concerning certain classes of qualitative matrices and their inverses. 84g:15036

secondary classifications:

- Ahrens, J. H. Paving the chessboard. (84d:05009)
- Bartholdi, John J., III A good submatrix is hard to find. (84c:68026)
- Basu, Sankar (with Bose, N. K.) Matrix Stieltjes series and network models. (84i:94048)
- Borzacchini, Luigi (with Pulito, Carmelo) Some results on conversion matrices. (84c:05073)
- Bose, N. K. See Basu, Sankar, (84i:94048)
- Chen, Yong Yi The solution of generalized fuzzy matrix equations. (Chinese. English summary) (84d:03065)
- Cortina, Elsa j -expansive matrix-valued functions and Darlington realization of transfer-scattering matrices. (84m:94031)
- Drake, David A. (with Sane, Sharad S.) Auxiliary sets of matrices with new step parameter sequences. (84b:51016)
- Dym, Harry (with Gohberg, Israel) Extension of matrix valued functions and block matrices. (84g:47035)
- Gohberg, Israel See Dym, Harry, (84g:47035)
- Golub, Gene H. See Kaustsky, J., (84g:65050)
- Gu, Wen Xiang (with Li, Su Yun) Fuzzy linear groups. (Chinese. English summary) (84c:20054)
- Iakin, A. L. Anomalies in higher-order conjugate quaternions: a clarification. (84h:10013)
- Kaustsky, J. (with Golub, Gene H.) On the calculation of Jacobi matrices. (84g:65050)
- Li, Su Yun See Gu, Wen Xiang, (84c:20054)
- Mitra, Sujit Kumar (with Puri, Madan L.) The fundamental bordered matrix of linear estimation and the Duffin-Morley general linear electromechanical systems. (84f:15009)
- Muciek, Andrzej (with Szata, Mieczysław) A class of dimensionless functions in the π theorem. (Russian summary) (84b:00023)
- Nowak, Werner-Georg (with Tichy, Robert Franz) Über die Verteilung mod 1 der Potenzen reeller (2×2) -Matrizen. [On the distribution mod 1 of the powers of real (2×2) -matrices] (84g:10083)
- Pták, Vlastimil Biorthogonal systems and the infinite companion matrix. (84g:15016)
- Pulito, Carmelo See Borzacchini, Luigi, (84c:05073)

- Puri, Madan L. See Mitra, Sujit Kumar, (84f:15009)
- Regev, Amitai Combinatorial sums, identities and trace identities of the 2×2 matrices. (84h:20006)
- Sane, Sharad S. See Drake, David A., (84b:51016)
- Shieh, Leang S. (with Tajvari, A.) Some properties and applications of a new matrix Sturm series and a new block canonical form of a matrix transfer function. (See 84f:93006d)
- Szata, Mieczysław See Muciek, Andrzej, (84b:00023)
- Tajvari, A. See Shieh, Leang S., (See 84f:93006d)
- Tichy, Robert Franz See Nowak, Werner-Georg, (84g:10083)
- Votava, Milan The set of solutions of a linear differential equation from the standpoint of the theory of linear spaces. (Czech. Russian summary) (84c:34014)
- Yang, Cai Liang Fuzzy eigenequations, convergence of powers of a fuzzy matrix, and stability of fuzzy systems. (Chinese. English summary) (84j:93122)
- Yu, Lian Sheng Research into the theory of fuzzy clustering: principle of the maximum element of a matrix. (Chinese. English summary) (84m:03085)

16-XX ASSOCIATIVE RINGS AND ALGEBRAS (For the commutative case, see 13-XX.)

16-01 Elementary exposition, textbooks

- Pierce, Richard S. ★ Associative algebras. 84c:16001

secondary classifications:

- Golan, Jonathan S. ★ 'Iyunim balgebrāh modernit. Kerek I. (Hebrew) [Studies in modern algebra. Vol. I] (84b:00002a)
- ★ 'Iyunim balgebrāh modernit. Kerek II. (Hebrew) [Studies in modern algebra. Vol. II] (84b:00002b)

16-02 Advanced exposition (research surveys, monographs, etc.)

- Bokut', L. A. ★ Ассоциативные кольца. Часть II. (Russian) [Associative rings. Part II] 84d:16001

secondary classifications:

- (Andrunakievich, V. A.) See Dniester notebook, (84a:13001)
- Bokut', L. A. Algorithmic problems and imbedding theorems: some open problems for rings, groups and semigroups. (Russian) (84j:20001)
- Dniester notebook ★ Днестровская тетрадь. (Russian) [The Dniester notebook] (84a:13001)
- Problems: Theory of rings and modules ★ Днестровская тетрадь. (Russian) [The Dniester notebook] (84a:13001)

16-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Gustafson, William H. The history of algebras and their representations. (84b:01047)
- Schöte, K.-H. Zur Geschichte der Algebraentheorie—Peirces "Linear associative algebra". [On the history of algebraic theory—Peirce's "Linear associative algebra"] (84m:01030)

16-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Angerer, Josef (with Pilz, Günter) The structure of near-rings of small order. (84b:16041)
- Pilz, Günter See Angerer, Josef, (84b:16041)

16-06 Proceedings, conferences, etc.

- (Fleury, Patrick J.) See Advances in noncommutative ring theory, 84i:16001
- (Hudson, George H.) See Advances in noncommutative ring theory, 84i:16001
- (Kato, Toyonori) See Proceedings: Symposium on ring theory, 84c:16002
- (Ryabukhin, Yu. M.) See All-union symposium: Theory of rings, algebras, and modules, 84c:16001
- Advances in noncommutative ring theory ★ Advances in noncommutative ring theory, 84i:16001
- All-union symposium: Theory of rings, algebras, and modules ★ Четвертый всесоюзный симпозиум по теории колец, алгебр и модулей. (Russian) [Fourth all-union symposium on the theory of rings, algebras, and modules] 84c:16001
- Kishinev ★ Четвертый всесоюзный симпозиум по теории колец, алгебр и модулей. (Russian) [Fourth all-union symposium on the theory of rings, algebras, and modules] 84c:16001
- Plattsburgh, N.Y. ★ Advances in noncommutative ring theory. 84i:16001
- Proceedings: Symposium on ring theory ★ Proceedings of the 16th symposium on ring theory, 84c:16002
- Symposium: Advances in Noncommutative Ring Theory ★ Advances in noncommutative ring theory, 84i:16001
- Hudson, George H. ★ Advances in noncommutative ring theory. 84i:16001

Symposium (continued)

- Ring theory ★Proceedings of the 16th symposium on ring theory. 84k:16002
 Topics in Algebra ★Topics in algebra. (Japanese) 84d:16002
 Tokyo ★Proceedings of the 16th symposium on ring theory. 84k:16002

secondary classifications:

- (Amitsur, S. A.) See *Algebraists' homage: papers in ring theory and related topics*. (84a:00007)
 Bokut', L. A. New results of the theory of associative and Lie rings. (Russian) (84e:17001)
 (Cotti Ferrero, Celestina) See *Proceedings: Conference on Near-Rings and Near-Fields*. (84e:16024)
 (Dennis, R. Keith) See *Algebraic K-theory*. (84a:18001a) and (84a:18001b)
 (Ferrero, Giovanni) See *Proceedings: Conference on Near-Rings and Near-Fields*. (84e:16024)
 (Göbel, Rüdiger) See *Abelian group theory*. (84j:20004)
 (Jacobson, Nathan) See *Algebraists' homage: papers in ring theory and related topics*. (84a:00007)
 (Lady, E. L.) See *Abelian group theory*. (84j:20004)
 (Mader, Adolf) See *Abelian group theory*. (84j:20004)
 (Osolkov, A. P.) See *All-Union Conference: Algebra*. (84i:00013a) and (84i:00013b)
 (Saltman, David J.) See *Algebraists' homage: papers in ring theory and related topics*. (84a:00007)
 (Seligman, George B.) See *Algebraists' homage: papers in ring theory and related topics*. (84a:00007)
 Abelian group theory ★Abelian group theory. (84j:20004)
 Algebraic K-theory ★Algebraic K-theory. Part I. (84a:18001a)
 ★Algebraic K-theory. Part II. (84a:18001b)
 Algebraists' homage: papers in ring theory and related topics ★Algebraists' homage: papers in ring theory and related topics. (84a:00007)
 All-Union Conference:
 Algebra ★XVI Всесоюзная Алгебраическая Конференция. Часть 1. (Russian) [XVI All-Union Algebra Conference. Part I] (84i:00013a)
 ★XVI Всесоюзная Алгебраическая Конференция. Часть 2. (Russian) [XVI All-Union Algebra Conference. Part 2] (84i:00013b)
 Conference:
 Abelian group theory ★Abelian group theory. (84j:20004)
 Algebra ★Algebraists' homage: papers in ring theory and related topics. (84a:00007)
 Algebra and Geometry ★Proceedings of the Conference on Algebra and Geometry. (84e:00006)
 Algebraic K-Theory ★Algebraic K-theory. Part I. (84a:18001a)
 ★Algebraic K-theory. Part II. (84a:18001b)
 Near-Rings and Near-Fields ★Proceedings of Conference on Near-Rings and Near-Fields. (84e:16024)
 Honolulu, Hawaii ★Abelian group theory. (84j:20004)
 Kuwait ★Proceedings of the Conference on Algebra and Geometry. (84e:00006)
 Leningrad ★XVI Всесоюзная Алгебраическая Конференция. Часть 1. (Russian) [XVI All-Union Algebra Conference. Part I] (84i:00013a)
 ★XVI Всесоюзная Алгебраическая Конференция. Часть 2. (Russian) [XVI All-Union Algebra Conference. Part 2] (84i:00013b)
 New Haven, Conn. ★Algebraists' homage: papers in ring theory and related topics. (84a:00007)
 Oberwolfach ★Algebraic K-theory. Part I. (84a:18001a)
 ★Algebraic K-theory. Part II. (84a:18001b)
 Proceedings:
 Conference on Algebra and Geometry ★Proceedings of the Conference on Algebra and Geometry. (84e:00006)
 Conference on Near-Rings and Near-Fields ★Proceedings of Conference on Near-Rings and Near-Fields. (84e:16024)
 San Benedetto del Tronto ★Proceedings of Conference on Near-Rings and Near-Fields. (84e:16024)

16A02 Integral domains, unique factorization domains (noncommutative)

- Martindale, Wallace S., III (with Montgomery, Susan) The normal closure of coproducts of domains. 84k:16003
 Montgomery, Susan See Martindale, Wallace S., III, 84k:16003

secondary classifications:

- Dicks, Warren Free algebras over Bézout domains are Sylvester domains. (84a:16003)
 van Geel, Jan See Puystjens, Roland, (84a:15011)
 Puystjens, Roland (with van Geel, Jan) Diagonalization of matrices over graded principal ideal domains. (84a:15011)
 Tachikawa, Hiroyuki Diagrammatic theory of extensions of rings. (Japanese) (84f:16036)
 Xie, Bang Jie Some recent generalizations of the classical theory of commutative rings. (Chinese) (84g:16027)
 16A03 Graded algebras, rings and modules
 Anick, David J. Noncommutative graded algebras and their Hilbert series. 84g:16001
 The smallest singularity of a Hilbert series. 84g:16002
 Artamonov, V. A. Quillen's theorem for graded algebras. (Russian. English summary) 84h:16001
 Bărcănescu, Șerban Algebraic aspects of a combinatorial decomposition theorem. 84c:16002
 Jespers, Eric (with Krempa, Jan; Puczyłowski, Edmund R.) On radicals of graded rings. 84h:16003b
 Krempa, Jan See Jespers, Eric; et al., 84c:16003b

- Năstăsescu, Constantin (with Van Oystaeyen, F.) ★Graded ring theory. 84i:16002
 (with Van Oystaeyen, F.) Jacobson radicals and maximal ideals of normalizing extensions applied to \mathbb{Z} -graded rings. 84c:16003a
 (with Van Oystaeyen, F.) On strongly graded rings and crossed products. 84c:16004
 Strongly graded rings of finite groups. 84k:16004
 Puczyłowski, Edmund R. See Jespers, Eric; et al., 84c:16003b
 Van Oystaeyen, F. A note on graded P.I. rings. 84d:16003
 See also Năstăsescu, Constantin, 84c:16003a; 84c:16004 and 84i:16002

secondary classifications:

- Anderson, D. D. (with Anderson, David F.) Grading integral domains. (84f:13001)
 Anderson, David F. See Anderson, D. D., (84f:13001)
 Baclawski, Kenneth (with Garsia, Adriano M.) Combinatorial decompositions of a class of rings. (84a:06003a)
 Dade, Everett C. The equivalence of various generalizations of group rings and modules. (84a:16018)
 De Wilde, Marc (with Lecomte, Pierre B. A.) Star-produits et déformations formelles associées aux variétés symplectiques exactes. (English summary) [Star-products and formal deformations associated with exact symplectic manifolds] (84g:17014)
 Garsia, Adriano M. See Baclawski, Kenneth, (84a:06003a)
 Krasner, Marc Le vieux qui est neuf. [What's old is new] (84d:01045)
 Lecomte, Pierre B. A. See De Wilde, Marc, (84g:17014)
 Mezzetti, Emilia (with Viola, Paolo) An operation on ideals in graded rings. (Italian. English summary) (84f:13011)
 Sweedler, Moss E. Tor gives the inverse to the Hilbert function of a graded algebra. (84e:16015)
 Van Oystaeyen, F. Generalized Rees rings and arithmetical graded rings. (84g:13032)
 Viola, Paolo See Mezzetti, Emilia, (84f:13011)

16A04 Noncommutative principal ideal rings, rings with a division algorithm

- McLean, K. R. Principal ideal rings and separability. 84a:16001
 Rivero, Francisco ★Anillos con algoritmo débil. (Spanish) [Rings with a weak algorithm] 84g:16003

16A05 Skew polynomial rings, power series rings

- Ilamed, Yehiel On central polynomials and algebraic algebras. (See 84i:16001)
 Malcolmson, Peter (with Shapiro, Jay) The Hilbert basis theorem for skew polynomial rings. 84a:16002
 Mathis, Darrell Differential polynomial rings and Morita equivalence. 84c:16005
 Montgomery, Susan X -inner automorphisms of filtered algebras. II. 84g:16004
 Pearson, K. R. (with Stephenson, W.; Watters, J. F.) Skew polynomials and Brown-McCoy rings. 84c:16006
 Puczyłowski, Edmund R. Nil ideals of power series rings. 84d:16004
 Reutenauer, Christophe Sur les éléments inversibles de l'algèbre de Hadamard des séries rationnelles. (English summary) [The invertible elements of the Hadamard algebra of rational power series] 84f:16001
 Shapiro, Jay See Malcolmson, Peter, 84a:16002
 Smits, T. H. M. On the coproduct of quadratic algebras. 84f:16002
 Stephenson, W. See Pearson, K. R.; et al., 84c:16006
 Watters, J. F. See Pearson, K. R.; et al., 84c:16006
 Wechler, Wolfgang Characterization of rational and algebraic power series. (French summary) 84m:16001

secondary classifications:

- Allaway, William R. Isomorphisms from the Eulerian umbral algebra onto formal Newton series. (84k:05003)
 Arnautov, V. I. (with Mikhalev, A. V.) The topologies of the ring of polynomials and a topological analogue of Hilbert's basis theorem. (Russian) (84b:16045)
 Dams, John ★A concrete approach to division rings. (84g:16014)
 Dicks, Warren (with Formanek, Edward) Poincaré series and a problem of S. Montgomery. (84c:15032)
 Free algebras over Bézout domains are Sylvester domains. (84a:16003)
 Ferrero, Miguel (with Kishimoto, Kazuo; Motose, Kaoru) On radicals of skew polynomial rings of derivation type. (84g:16007)
 Formanek, Edward See Dicks, Warren, (84c:15032)
 Gerstenhaber, Murray (with May, Ralph) Geometry of subalgebras and inseparable extensions. (84a:14025)
 Kishimoto, Kazuo See Ferrero, Miguel; et al., (84g:16007)
 May, Ralph See Gerstenhaber, Murray, (84a:14025)
 Mikhalev, A. V. See Arnautov, V. I., (84b:16045)
 Motose, Kaoru See Ferrero, Miguel; et al., (84g:16007)

16A06 Free algebras, free ideal rings (firs) and their generalizations [See also tensor algebra in 15A72.]

- Cohn, P. M. Determinants on free fields. 84g:16005
 The universal field of fractions of a semifir. I. Numerators and denominators. 84h:16002
 Dicks, Warren A free algebra can be free as a module over a nonfree subalgebra. 84j:16001
 Free algebras over Bézout domains are Sylvester domains. 84a:16003
 Drenski, Veselin S. Lattices of varieties of associative algebras. (Russian) 84h:16003
 Lichtman, A. I. On residual properties of free products of algebras. 84c:16005
 Sidorov, Plamen N. The Specht property of a variety of associative algebras defined by the product of three commutators of arbitrary length. (Russian) 84h:16004

secondary classifications:

- Bokut', L. A. ★ Ассоциативные кольца. Часть II. (Russian) [Associative rings. Part II] (84d:16001)
- Cohn, P. M. Torsion modules and the factorization of matrices. (See 84b:16001)
- Gerasimov, V. N. Localization in associative rings. (Russian) (84a:16004)
- Kozhukhov, I. B. Semigroup rings of free left ideals. (Russian) (84a:20069)
- Latshev, V. N. Stable ideals of identities. (Russian) (84a:16057)
- Schweigert, Dietmar (with Szymańska, Magdalena) A completeness theorem for correlation lattices. (84m:06021)
- Stoyanova-Venkova, A. N. Some lattices of varieties of associative algebras defined by identities of the fifth degree. (Russian) (84b:08007)
- Szymańska, Magdalena See Schweigert, Dietmar. (84m:06021)
- Zakharova, E. N. Almost commutative nilpotent varieties of algebras. (Russian) (84b:08009)
- Zlatoš, Pavol On the ring of the variety of algebras over a ring. (84i:08005)

16A08 Rings of quotients, noncommutative localization

- Beachy, John A. Stable torsion radicals over FBN rings. (84b:16001)
- van Geel, Jan See Nauwelaerts, Erna. (See 84i:16001)
- Gerasimov, V. N. Localization in associative rings. (Russian) (84a:16004)
- Karamzadeh, O. A. S. On duo rings. (84b:16002)
- Kitamura, Yoshimi On quotient rings of trivial extensions. (84d:16005)
- Le Bruyn, Lieven Homogenization of sheaves and kernel functors. (84b:16003)
- Lo, Ch'ing Chün Quotient rings which commute with direct products. (84b:16006)
- Malcolmson, Peter Construction of universal matrix localizations. (See 84i:16001)
- Nauwelaerts, Erna (with van Geel, Jan) Arithmetical Zariski central rings. (See 84i:16001)
- Popescu, Nicolae N. Sur la sous-catégorie localisante associée à un idéal bilatéral premier dans un anneau noethérien (à droite). [On the localizing subcategory associated with a prime bilateral ideal in a (right) Noetherian ring] (84b:16001)
- Rauf Qureshi, M. A. On the maximal quotient ring of an integral domain. (84b:16003)
- Révész, Gábor On the abelianized multiplicative group of a universal field of fractions. (84b:16004)
- Verschoren, A. Localization of (pre-) sheaves of modules and structure sheaves. (84b:16002)
- Wisbauer, Robert Localization of modules on the central closure of rings. (84b:16004)

secondary classifications:

- Bokut', L. A. ★ Ассоциативные кольца. Часть II. (Russian) [Associative rings. Part II] (84d:16001)
- Chatters, A. W. Divisible ideals of Noetherian rings. (84b:16026)
- Dubrovin, N. I. An example of a chain primitive ring with nilpotent elements. (Russian) (84b:16012)
- Fakhruddin, Syed M. Flat modules and noncommutative localizations. (84b:16018)
- Fujita, Hisaaki (with Nishida, Kenji) Ideals of hereditary Noetherian prime rings. (84d:16006)
- García Hernández, José Luis ★ Condiciones de finitud relativas a topologías aditivas. (Spanish) [Finiteness conditions for additive topologies] (84m:16039)
- Golan, Jonathan S. Two dimensions defined on the spectrum of a noncommutative ring. (84b:16029)
- Kado, Jiro Note on the maximal right N_0 -quotient ring of a regular ring. (84m:16008)
- Nazarov, A. O. Open imbeddings of topological rings. (Russian. English summary) (84b:16046)
- Nishida, Kenji See Fujita, Hisaaki. (84d:16006)
- Ooms, Alfons I. The center of the quotient division ring of the universal envelope of a Lie algebra. (84b:17013)
- Page, S. S. Semiprime and nonsingular FPF rings. (84b:16005)
- Passman, D. S. Universal fields of fractions for polycyclic group algebras. (84a:16021)
- Raynaud, Jacques Foncteurs de cohomologie locale associés à la localisation canonique d'un anneau de Krull régulier non nécessairement commutatif. [Local cohomology functors associated with the canonical localization of a not necessarily commutative regular Krull ring] (84b:16016)
- Rosset, Shmuel Remarks on a principle of localization. (84b:12034)
- Small, Lance W. (with Stafford, J. T.) Regularity of zero divisors. (84b:16014)
- Smith, P. F. The Artin-Rees property. (84a:16058)
- Stafford, J. T. Noetherian full quotient rings. (84b:16015)
- See also Small, Lance W., (84b:16014)
- Vogel, Pierre Localisation non commutative de formes quadratiques. [Noncommutative localization of quadratic forms] (84b:18016)
- Xie, Bang Jie Some recent generalizations of the classical theory of commutative rings. (Chinese) (84g:16027)
- Zakharov, V. K. Topological and algebraic aspects of some sets of measurable functions. (84g:54017)
- Zelmanowitz, J. M. The structure of rings with faithful nonsingular modules. (84d:16030)

16A10 Noncommutative local rings

secondary classifications:

- Alev, J. Fonction de Hilbert-Samuel dans les anneaux locaux réguliers non-commutatifs. [Hilbert-Samuel function in noncommutative regular local rings] (84d:16018)
- van Geel, Jan See Nauwelaerts, Erna. (See 84i:16001)
- Gray, Andy J. A class of maximal orders integral over their centres. (84m:16010)
- Nauwelaerts, Erna (with van Geel, Jan) Arithmetical Zariski central rings. (See 84i:16001)

16A12 Prime and semiprime rings

- Felzenszwalb, B. (with Giambruno, A.) A commutativity theorem for rings with derivations. (84b:16005)
- Fujita, Hisaaki (with Nishida, Kenji) Ideals of hereditary Noetherian prime rings. (84d:16006)
- Giambruno, A. See Felzenszwalb, B., 84b:16005
- Jenkins, T. L. See le Roux, H. J., 84b:16005
- Nicholson, W. K. (with Watters, J. F.) On tensor products and extended centroids. (84b:16005)
- Nishida, Kenji See Fujita, Hisaaki. (84d:16006)
- Page, S. S. Semiprime and nonsingular FPF rings. (84b:16005)
- Pascand, J.-L. Actions de groupes et traces. [Group actions and traces] (84b:16007)
- le Roux, H. J. (with Jenkins, T. L.) Radical partitioning. (84b:16005)
- Valette, Jacques Automorphismes algébriques et algèbre du groupe. [Algebraic automorphisms and group algebra] (84b:16003)
- Watters, J. F. See Nicholson, W. K., 84b:16005

secondary classifications:

- Abu-Khuzam, Hazar A commutativity theorem for semiprime rings. (84b:16037)
- Hajarnavis, C. R. (with Robson, J. C.) Decomposition of maximal orders. (84b:16016)
- Herstein, I. N. Derivations of prime rings having power central values. (84b:16032)
- A theorem on derivations of prime rings with involution. (84b:16009)
- Hirano, Yasuyuki (with Hongan, Motoshi; Tominaga, Hisao) Some commutativity theorems for semiprime rings. II. (84b:16061b)
- Hongan, Motoshi (with Tominaga, Hisao) Some commutativity theorems for semiprime rings. (84b:16061a)
- See also Hirano, Yasuyuki; et al., (84a:16061b)
- Lanski, Charles Derivations with algebraic values. (84m:16033)
- Li, Ch'iu K'un See Li, Pai Fei. (84b:16040)
- Li, Pai Fei (with Li, Ch'iu K'un) On derivations of prime rings. (84b:16040)
- Martindale, Wallace S., III Lie and Jordan mappings. (See 84a:00007)
- (with Miers, C. Robert) On the iterates of derivations of prime rings. (84b:16033)
- Mayne, Joseph H. Erratum to: "Ideals and centralizing mappings in prime rings" [Proc. Amer. Math. Soc. 86 (1982), no. 2, 211-212; MR 83k:16025]. (84b:16039)
- Miers, C. Robert See Martindale, Wallace S., III. (84b:16033)
- Prest, Mike Existentially complete prime rings. (84m:03055)
- Robson, J. C. See Hajarnavis, C. R., (84b:16016)
- Smith, P. F. Rings with enough invertible ideals. (84b:16059)
- Tominaga, Hisao See Hongan, Motoshi, (84a:16061a) and Hirano, Yasuyuki; et al., (84a:16061b)
- van der Walt, A. P. J. Prime and semiprime bi-ideals. (84d:16016)

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- Le Bruyn, Lieven A note on maximal orders over Krull domains. (84b:16006)
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- Smith, P. F. Rings with enough invertible ideals. (84b:16059)
- Stenström, Bo Maximal orders in an Azumaya algebra over a von Neumann regular ring. (84b:16009)

16A15 Other generalizations of commutative rings (For commutativity theorems, see 16A70.)

- Fujita, Hisaaki Idealizers in generalized Krull orders. (84g:16006d)
- Golan, Jonathan S. Regular sequences of ideals in a noncommutative ring. (84b:16008)
- Jespers, Eric On geometrical Ω -Krull rings. (84g:16006b)
- (with Le Bruyn, Lieven; Wauters, P.) A characterization of central Ω -Krull rings. (84g:16006a)
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- Liu, Ruy Wen (with Sung, Chen Han) A coprimeness condition in a left-distributive ring. (See 84g:93005d)
- Marubayashi, H. A Krull type generalization of HNP rings with enough invertible ideals. (84g:16006c)
- Maury, Guy Théorème d'approximation pour un anneau de Krull non commutatif (au sens de M. Chamarié) et applications. [Approximation theorem for a noncommutative Krull ring (in the sense of M. Chamarié) and applications] (84b:16006)
- Sung, Chen Han See Liu, Ruy Wen. (See 84g:93005d)
- Wauters, P. See Jespers, Eric; et al., 84g:16006a

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- Brown, Kenneth A. (with Hajarnavis, C. R.; MacEacharn, A. B.) Rings of finite global dimension integral over their centres. (84b:16029)
- Hajarnavis, C. R. See Brown, Kenneth A.; et al., (84b:16029)
- Karamzadeh, O. A. S. On duo rings. (84b:16002)
- MacEacharn, A. B. See Brown, Kenneth A.; et al., (84b:16029)

16A16 Separable algebras, Azumaya algebras and their generalizations [See also 12Gxx, 13A20.]

- Deneen, Linda L. On the lattice of subalgebras of an algebra. **84b:16007**
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 Szeto, George On separable abelian extensions of rings. **84b:16008**
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16A18 Orders, arithmetic in algebras [See also 12A80, 12B35.]

- Addou, K. (with Maury, Guy) Sur une classe d'ordres maximaux. [A class of maximal equivalent orders] **84d:16008**
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 (with Le Bruyn, Lieven; Wauters, P.) A characterization of central Ω -Krull rings. **(84g:16006a)**
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- Sugano, Kozo On H -separable extensions of two-sided simple rings. **84d:16009**

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- Ành, Phạm Ngoc On Litoff's theorem. **(84c:16022)**
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- van Leeuwen, L. C. A. See Leavitt, W. G., **(84c:16010)**
 Point, Françoise Sur l'élimination linéaire. (English summary) [Linear elimination] **(84c:03034)**

16A20 Primitive and semiprimitive rings

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 Guo, Yuan Chun See Ding, Ming Chao, **84a:16008**
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 Karpilovsky, G. The Jacobson radical of commutative group rings. **84d:16011**
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 Leavitt, W. G. Hereditary upper radicals. **84b:16007**
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 Jespers, Eric (with Krempa, Jan; Puczyłowski, Edmund R.) On radicals of graded rings. **(84c:16003b)**
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16A28 Rings with involution [See also 46Kxx.]

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secondary classifications:

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Saltman, David J. Exterior powers of fields and subfields. (84f:16019)

Sharma, C. S. (with Egele, U.) An interesting group in the operator algebra generated by Hodge's star and the exterior derivative. (84c:58004)

16A30 von Neumann regular rings and their generalizations [See also 06Cxx, 06Exx.]

Ahsan, Javed (with Ibrahim, A. S.) Some homological characterizations of regular rings. 84f:16017

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(with Handelman, David E.) The N^* -metric completion of regular rings. 84c:16023

Goursaud, J.-M. See Burgess, Walter D., 84c:16022

Handelman, David E. See Burgess, Walter D., 84c:16023

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Izawa, Tatsuo Artinian endomorphism rings of projective modules. 84f:16018a

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Anh, Pham Ngoc (with Márki, L.) Rees matrix rings. (84c:16021)

Choudhary, S. C. See Jat, J. L., (84b:16042)

Jat, J. L. (with Choudhary, S. C.) On strict weakly regular near rings. (84b:16042)

Karamzadeh, O. A. S. On duo rings. (84b:16002)

Márki, L. See Anh, Pham Ngoc, (84c:16021)

Müller, Bruno J. Continuous geometries, continuous regular rings, and continuous modules. (84f:06014)

Page, S. S. Semiprime and nonsingular FPF rings. (84b:16005)

Popa, Sorin Orthogonal pairs of \ast -subalgebras in finite von Neumann algebras. (84b:46077)

Yue Chi Ming, Roger On quasi-injectivity and von Neumann regularity. (84d:16032)

Zakharov, V. K. A characterization of orthocompleteness and the divisibility of modules by means of intrinsic order. (Russian) (84b:06018)

16A32 Idempotents in rings [See also 06Exx.]

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secondary classifications:

Anh, Pham Ngoc On Litoff's theorem. (84c:16022)

Deneen, Linda L. On the lattice of subalgebras of an algebra. (84b:16007)

Fujita, Hisaaki (with Nishida, Kenji) Ideals of hereditary Noetherian prime rings. (84d:16006)

Klein, Abraham A. Rings with bounded index of nilpotence. (See 84a:00007)

MacHale, D. Idempotents in finite rings. (84a:16037)

Nishida, Kenji See Fujita, Hisaaki, (84d:16006)

Thévenaz, Jacques Lifting idempotents and Clifford theory. (84g:20011)

16A33 Noetherian rings

Alev, J. Fonction de Hilbert-Samuel dans les anneaux locaux réguliers non-commutatifs.

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Brown, Kenneth A. (with Hajarnavis, C. R.; MacEacharn, A. B.) Noetherian rings of finite global dimension. 84a:16025

Chatters, A. W. Divisible ideals of Noetherian rings. 84a:16026

A characterisation of right Noetherian rings. 84a:16027

Gray, Andy J. A class of maximal orders integral over their centres. 84m:16010

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Höinghaus, Dorothea (with Richter, Günther) Hilbert basis quivers. 84j:16011

Jategaonkar, Arun Vinayak Solvable Lie algebras, polycyclic-by-finite groups and bimodule Krull dimension. 84c:16014

MacEacharn, A. B. See Brown, Kenneth A.; et al., 84a:16025

Resco, Richard (with Small, Lance W.; Stafford, J. T.) Krull and global dimensions of semiprime Noetherian PI-rings. 84g:16010

Richter, Günther See Höinghaus, Dorothea, 84j:16011

Small, Lance W. (with Stafford, J. T.) Regularity of zero divisors. 84b:16014

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Arnautov, V. I. (with Mikhalev, A. V.) The topologies of the ring of polynomials and a topological analogue of Hilbert's basis theorem. (Russian) (84b:16045)

Beachy, John A. Stable torsion radicals over FBN rings. (84b:16001)

Borbo, Walter On the Joseph-Small additivity principle for Goldie ranks. (84a:17007)

Chatters, A. W. (with Jøndrup, S.) Hereditary finitely generated P.I. algebras.

(84m:16012)

Cohen, Miriam (with Montgomery, Susan) Trace-like functions on rings with no nilpotent elements. (84a:16063)

Hajarnavis, C. R. (with Robson, J. C.) Decomposition of maximal orders. (84b:16016)

Jategaonkar, Arun Vinayak An addendum: "Relative Krull dimension and prime ideals in right Noetherian rings" [Comm. Algebra 2 (1974), 429-468; MR 50 #9962]. (84c:16035)

Jøndrup, S. See Chatters, A. W., (84m:16012)

Kosher, Karl A. On hereditary rings and Noetherian V -rings. (84g:16019)

Malcolmson, Peter (with Shapiro, Jay) The Hilbert basis theorem for skew polynomial rings. (84a:16002)

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Montgomery, Susan See Cohen, Miriam, (84a:16063)

Robson, J. C. See Hajarnavis, C. R., (84b:16016)

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Smith, P. F. The Artin-Rees property. (84a:16058)

Ukegawa, Takasaburo Some remarks on M -rings. (84f:16006)

16A34 Rings with annihilator conditions, chain conditions (Goldie rings)

Beachy, John A. Maximal torsion radicals over rings with finite reduced rank. (See 84c:16001)

González-Jiménez, S. On the annihilator of an algebra. (Spanish. English summary) 84m:16011

Jabbour, Samira Chain conditions in intermediate normalizing extensions. 84c:16018

Reiter, E. A dual to the Goldie ascending chain condition on direct sums of submodules. 84a:16028

Varadarajan, K. A generalization of Hilbert's basis theorem. 84a:16029a

On a theorem of Shock. 84a:16029b

Dual Goldie dimension of certain extension rings. 84a:16029c

secondary classifications:

Karamzadeh, O. A. S. On the Krull intersection theorem. (84b:16007)

van Leeuwen, L. C. A. On the hereditariness of annihilator ideals. (84b:16008)

Xie, Bang Jie Rings with the ascending chain condition for left zero divisor ideals. (Chinese) (84c:16005)

Zhou, Shang Chao A new proof of a theorem on rings with the ascending chain condition for left annihilators. (Chinese) (84m:16003)

16A35 Artinian rings

- Brune, Hermann On a theorem of Kulikov for Artinian rings. **84b:16015**
 Franchetta, Anna An observation on Artin algebras the square of whose radical is zero. (Italian. English summary) **84d:16020**
 Guérindon, Jean Modules de Loewy et modules artiniens. [Loewy modules and Artinian modules] **84c:16015**
 Hajarnavis, C. R. (with Robson, J. C.) Decomposition of maximal orders. **84b:16016**
 Robson, J. C. See Hajarnavis, C. R., **84b:16016**
 Zacharia, Dan The preprojective partition for hereditary Artin algebras. **84a:16030**

secondary classifications:

- Gonchigdorzh, R. Orders of direct products of prime Artinian rings. (Russian) **(84a:16034)**
 Hoshino, Mitsuo Trivial extensions of tilted algebras. **(84b:16019)**
 Maury, Guy Théorème d'approximation pour un anneau de Krull non commutatif (au sens de M. Chamarié) et applications. [Approximation theorem for a noncommutative Krull ring (in the sense of M. Chamarié) and applications] **(84b:16006)**
 Rayar, Mary On small and cosmall modules. **(84b:16017)**
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 Simson, Daniel On the structure of locally finite pure semisimple Grothendieck categories. **(84c:18021)**

16A36 Frobenius algebras, quasi-Frobenius rings and their generalizations

- Harada, Manabu A characterization of QF-algebras. **84c:16016**
 Hirata, Kazuhiko On trivial extensions which are quasi-Frobenius ones. **84b:16007**
 Masaike, Kanzo Semiprimary QF-3 quotient rings. **84g:16011**
 Page, S. S. Semihomomorphisms and fully idempotent PPF rings. **84c:16017**
 Rayar, Mary On small and cosmall modules. **84b:16017**

secondary classifications:

- Faith, Carl Embedding modules in projectives: a report on a problem. (See **84i:16001**)
 Mano, Takashi On modules over a serial ring whose endomorphism rings are quasi-Frobenius. **(84b:16036)**
 Tachikawa, Hiroyuki Diagrammatic theory of extensions of rings. (Japanese) **(84f:16036)**
 Wang, Kai Fixed subalgebra of a Frobenius algebra. **(84b:16040)**

16A38 Rings with polynomial identity

- Amitsur, S. A. See Regev, Amitai, **84b:16020**
 Berele, Allan Homogeneous polynomial identities. **84b:16018**
 (with Regev, Amitai) Applications of hook Young diagrams to P.I. algebras. **84g:16012**
 Braun, Amiram P.I. G-rings and the contractibility of primes. **84c:16018**
 Chatters, A. W. (with Jøndrup, S.) Hereditary finitely generated P.I. algebras. **84m:16012**
 Formanek, Edward The polynomial identities of matrices. **84b:16019**
 Golubchik, I. Z. (with Markov, V. T.) Localization dimension of PI rings. (Russian. English summary) **84f:16022**
 Irving, Ronald S. Affine PI-algebras not embeddable in matrix rings. **84f:16023**
 Jøndrup, S. See Chatters, A. W., **84m:16012**
 Komatsu, Hiroaki On the equational definability of addition in rings. **84d:16021**
 Lawrence, John W. The theory of V3 elementary conditions on rings. **84c:16019**
 Lorenz, Martin (with Small, Lance W.) On the Gelfand-Kirillov dimension of Noetherian P.I.-algebras. **84d:16022**
 Maf'tsev, Yu. N. Almost Engel locally finite varieties of associative rings. (Russian) **84d:16023**
 Markov, V. T. See Golubchik, I. Z., **84f:16022**
 Montgomery, Susan von Neumann finiteness of tensor products of algebras. **84c:16019**
 Regev, Amitai A polynomial rate of growth for the multiplicities in cocharacters of matrices. **84g:16013**
 (with Amitsur, S. A.) PI-algebras and their cocharacters. **84b:16020**
 See also Berele, Allan, **84g:16012**
 Rowen, Louis Halle A simple proof of Kostant's theorem, and an analogue for the symplectic involution. **84d:16024**
 Sarraïlle, J. J. Module finiteness of low-dimensional PI rings. **84f:16024**
 Schelter, William F. Affine rings satisfying a polynomial identity. **84c:16020**
 Siderov, Plamen N. Two remarks on critical associative rings. (Russian. English summary) **84a:16031**
 Small, Lance W. See Lorenz, Martin, **84d:16022**
 Smirnov, M. B. See Zaleskii, A. E., **84a:16032**
 Yakabe, Iwao Generalized Boolean-like rings. **84m:16013**
 Zaleskii, A. E. (with Smirnov, M. B.) Associative rings satisfying the identity of Lie solvability. (Russian. English summary) **84a:16032**

secondary classifications:

- Abakarov, A. Sh. Identities in algebras of triangular matrices. (Russian) **(84g:16015)**
 Addou, K. (with Maury, Guy) Sur une classe d'ordres maximaux. [A class of maximal equivalent orders] **(84d:16008)**
 Baclawski, Kenneth Rings with lexicographic straightening law. **(84a:06003b)**
 Berele, Allan (with Regev, Amitai) Hook Young diagrams, combinatorics and representations of Lie superalgebras. **(84d:05011)**
 Bokut', L. A. Ассоциативные кольца. Часть II. (Russian) [Associative rings. Part II] **(84d:16001)**
 Cohen, Miriam (with Montgomery, Susan) Trace-like functions on rings with no nilpotent elements. **(84a:16063)**
 Klein, Abraham A. Rings with bounded index of nilpotence. (See **84a:00007**)

- Levchenko, D. V. Finite basis property of identities with involution of a second-order matrix algebra. (Russian) **(84c:16008)**
 Maury, Guy See Addou, K., **(84d:16008)**
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 Neechev, A. A. Description of finite critical principal ideal rings. (Russian) **(84b:16012)**
 Procesi, Claudio Computing with matrices. (See **84a:00012**)
 Regev, Amitai See Berele, Allan, **(84d:05011)**
 Resco, Richard (with Small, Lance W.; Stafford, J. T.) Krull and global dimensions of semiprime Noetherian PI-rings. **(84g:16010)**
 Small, Lance W. See Resco, Richard; et al., **(84g:16010)**
 Stafford, J. T. See Resco, Richard; et al., **(84g:16010)**
 Tonov, Ivan K. Chain varieties of associative algebras with a unit. (Russian) **(84c:08008)**
 Van Oystaeyen, F. A note on graded P.I. rings. **(84d:16003)**
 Verschoren, A. When is a noncommutative scheme affine? **(84g:14002)**

16A39 Skew fields [See also 12E15.], division rings

- Amitsur, S. A. Division algebras. A survey. **84b:16021**
 Cohn, P. M. On extending valuations in division algebras. **84f:16025**
 Dauns, John ★ A concrete approach to division rings. **84g:16014**
 Jacobson, Nathan Brauer factor sets, Noether factor sets, and crossed products. **84b:16020**
 Mahdavi-Hezavehi, M. Matrix valuations and their associated skew fields. **84b:16022**
 Makar-Limanov, L. G. The skew field of fractions of the Weyl algebra contains a free noncommutative subalgebra. **84f:16012**
 Matveev, G. V. The trace form on a central simple algebra. (Russian) **84a:16033**
 Riesinger, R. Geometrische Überlegungen zum rechten Eigenwert-Problem für Matrizen über Schiefkörpern. [Geometric considerations on the right-hand eigenvalue problem for matrices over skew fields] **84b:16023**
 Scharlau, Winfried (with Tschimmel, Angelika) On the level of skew-fields. **84b:16016**
 Tignol, Jean-Pierre Produits croisés abéliens. [Abelian crossed products] **84f:16026**
 Tschimmel, Angelika See Scharlau, Winfried, **84b:16016**

secondary classifications:

- Baumgartner, Karlheinz ★ Fragmente: meine Konstruktion und die sie begleitenden allgemeinen Strukturtheorien. (German) [Fragments: my construction and the general structure theories that accompany it] **(84b:08008)**
 Benkart, Georgia M. (with Britten, Daniel J.; Osborn, J. Marshall) Real flexible division algebras. **(84a:17002)**
 Bokut', L. A. Ассоциативные кольца. Часть II. (Russian) [Associative rings. Part II] **(84d:16001)**
 Britten, Daniel J. See Benkart, Georgia M.; et al., **(84a:17002)**
 Cohn, P. M. Determinants on free fields. **(84g:16005)**
 The universal field of fractions of a semifir. I. Numerators and denominators. **(84b:16002)**
 Corwin, Lawrence Representations of division algebras over local fields. II. **(84b:12023)**
 Haile, Darrell E. Balanced spaces of forms and skew cyclic transformations. **(84m:16032)**
 Huang, Chang Ling A structure theorem between rings of linear transformations and its application. (Chinese) **(84c:16024)**
 Koch, Helmut Eisensteinsche Polynomfolgen und Arithmetik in Divisionsalgebren über lokalen Körpern. [Eisenstein polynomial sequences and arithmetic in division algebras over local fields] **(84d:12015)**
 Lichtman, A. I. On normal subgroups of multiplicative group of skew fields generated by a polycyclic-by-finite group. **(84f:16016)**
 Osborn, J. Marshall See Benkart, Georgia M.; et al., **(84a:17002)**
 Parimala, Raman Automorphisms of nonfree projective ideals of polynomial extensions of division rings. **(84a:16043)**
 Prasolov, V. V. Degenerate elements of representations of Lie algebras. (Russian) **(84c:17005)**
 Prolla, João B. ★ Topics in functional analysis over valued division rings. **(84g:46107)**
 Rosenberg, Alex Homological dimension and transcendence degree. **(84c:16026)**
 Rowen, Louis Halle Cyclic division algebras. **(84d:12021a)**
 Correction to: "Cyclic division algebras". **(84d:12021b)**
 Saltman, David J. Generic structures and field theory. (See **84c:00007**)
 Silvester, J. R. On the GL_n of a semilocal ring. **(84c:20057)**
 Xu, Yong Hua On infinite Galois theory for division rings. (Chinese summary) **(84d:12022)**

16A40 Simple and semisimple Artinian rings

- Gonchigdorzh, R. Orders of direct products of prime Artinian rings. (Russian) **84a:16034**
 Jacobson, Nathan Some applications of Jordan norms to involutorial simple associative algebras. **84m:16014**
 Taha, Faïeh Algèbres simples centrales sur les corps ultra-produits de corps *p*-adiques. [Central simple algebras over fields which are ultraproducts of *p*-adic fields] **84a:16035**

secondary classifications:

- Addou, K. (with Maury, Guy) Sur une classe d'ordres maximaux. [A class of maximal equivalent orders] **(84d:16008)**
 Anh, Pham Ngoc On Litoff's theorem. **(84b:16022)**
 de Groote, Hans F. Characterization of division algebras of minimal rank and the structure of their algorithm varieties. **(84c:68036)**
 Mahrhold, Wolfgang (with Rosenbaum, Kurt) Involutionen in halbeinfachen Algebren. [Involutionen in semisimple algebras] **(84m:16006)**
 Maury, Guy See Addou, K., **(84d:16008)**
 Rosenbaum, Kurt See Mahrhold, Wolfgang, **(84m:16006)**
 Seligman, George B. Variations on even Clifford algebras. (See **84a:00007**)
 Silvester, J. R. On the GL_n of a semilocal ring. **(84c:20057)**

16A42 Rings of linear transformations, matrix rings, infinite matrix rings
[See also 15A30.]

- Abakarov, A. Sh. Identities in algebras of triangular matrices. (Russian) **84j:16015**
 Anh, Pham Ngoc On Litoff's theorem. **84i:16022**
 (with Márki, L.) Rees matrix rings. **84i:16021**
 Borevich, Z. I. (with Vavilov, N. A.) Definition of the net subgroup. (Russian) **84i:16023**
 Guralnick, Robert M. (with Lanski, Charles) Pseudosimilarity and cancellation of modules. **84i:16036**
 Helm, P. R. Generators and relations for certain linear groups over rings of linear operators. **84i:16011**
 Huang, Chang Ling A structure theorem between rings of linear transformations and its application. (Chinese) **84i:16024**
 Lanski, Charles See Guralnick, Robert M., **84i:16036**
 Levchenko, D. V. Finite basis property of identities with involution of a second-order matrix algebra. (Russian) **84i:16008**
 Márki, L. See Anh, Pham Ngoc, **84i:16021**
 Pearson, K. R. Degree 7 monic polynomials satisfied by a 3×3 matrix over a noncommutative ring. **84i:16021a**
 The Robson cubics generate all polynomials satisfied by the general 2×2 matrix. **84i:16021b**
 Schmitt, Thomas Some identities for Berezin's function. **84j:16016**
 Vavilov, N. A. See Borevich, Z. I., **84i:16023**
 Zelmanowitz, J. M. Large rings of matrices contain full rows. **84i:16027**
 On the Jacobson density theorem. **84i:16022**

secondary classifications:

- Akemann, Charles A. Subalgebras and right ideals in matrix algebras. (**84i:15021**)
 Beard, Jacob T. B., Jr. (with McConnell, Robert M.) Matrix field extensions. (**84d:10057**)
 Dong, Nai Chang Structure of solutions of linear equations over rings and theorems about matrices over rings. (Chinese. English summary) (**84i:15007**)
 Golubchik, I. Z. (with Mikhailov, A. V.) Isomorphisms of the general linear group over an associative ring. (Russian. English summary) (**84i:20045**)
 Guralnick, Robert M. (with Lanski, Charles) The rank of a commutator. (**84i:15005**)
 Lanski, Charles See Guralnick, Robert M., (**84i:15005**)
 Malcolmson, Peter Construction of universal matrix localizations. (See **84i:16001**)
 McConnell, Robert M. See Beard, Jacob T. B., Jr., (**84d:10057**)
 Mikhailov, A. V. See Golubchik, I. Z., (**84i:20045**)
 Pan, Shi Zhong A theorem on algebras of linear transformations. (Chinese. English summary) (**84i:15002**)
 Pizarro, Antonio Similarity classes of 3×3 matrices over a discrete valuation ring. (**84j:15012**)
 Regev, Amitai A polynomial rate of growth for the multiplicities in cocharacters of matrices. (**84j:16013**)
 On the height of the Kronecker product of S_n characters. (**84g:20019**)
 Siderov, Plamen N. Two remarks on critical associative rings. (Russian. English summary) (**84i:16031**)
 Silvester, J. R. On the GL_n of a semilocal ring. (**84c:20057**)
 Xu, Yong Hua Quasiprimitive rings. II. (Chinese. English summary) (**84i:16006b**)
 Quasiprimitive rings. I. (**84i:16006a**)
 Zelmanowitz, J. M. The structure of rings with faithful nonsingular modules. (**84d:16030**)

16A44 Finite rings [See also 12Cxx, 13Mxx.]

- Antipkin, V. G. (with Elizarov, V. P.) Rings of order p^3 . (Russian) **84d:16025**
 Elizarov, V. P. See Antipkin, V. G., **84d:16025**
 MacHale, D. Idempotents in finite rings. **84i:16037**
 Mal'tsev, Yu. N. On critical rings. (Russian) **84i:16009**
 Nechaev, A. A. Description of finite critical principal ideal rings. (Russian) **84i:16012**
 Schultz, Barbara Über die Vollständigkeit induktiver Gruppoide, die zu einer speziellen Klasse endlicher Ringe gehören. [On the completeness of inductive groupoids which belong to a special class of finite rings] **84j:16017**

secondary classifications:

- Berline, Chantal (with Cherlin, Gregory) QE rings in characteristic p^n . (**84f:03027**)
 Cherlin, Gregory See Berlin, Chantal, **84f:03027**
 Isbell, John R. Zero sets of polynomials in finite rings. (**84i:12028**)
 Mal'tsev, Yu. N. Almost Engel locally finite varieties of associative rings. (Russian) (**84i:16023**)

16A45 Other types of rings and algebras

- Al-Khamees, Yousif Near Galois rings. **84f:16028**
 Cheng, Charles Ching-an (with Wong, Roman W.) Hereditary monoid rings. **84j:16013**
 Faith, Carl Embedding modules in projectives: a report on a problem. (See **84i:16001**)
 Hacque, Michel Quelques remarques sur la notion de socle. [Some remarks on the notion of socle] **84d:16026a**
 Anneaux fidèlement représentés sur leur socle droit. [Rings faithfully represented on their right socle] **84d:16026b**
 Okuninski, Jan Spectrally finite algebras and tensor products. **84j:16014**
 Volkov, M. V. Varieties of associative rings with amalgamation property. (Russian) **84i:16024**
 Wong, Roman W. See Cheng, Charles Ching-an, **84j:16013**

secondary classifications:

- Andrunakievich, A. V. (with Andrunakievich, V. A.) Subdirect products of division rings. (Russian) (**84i:16013**)
 Andrunakievich, V. A. See Andrunakievich, A. V., (**84i:16013**)

- Cerlienco, Luigi (with Mureddu, Marina) A note on polynomial equations in quaternions. (Italian. English summary) (**84f:12013**)
 Harmanci, A. On a class of Schur AW*-algebras. (**84h:46076**)
 Kukin, G. P. The word problem and free products of Lie algebras and associative algebras. (Russian) (**84m:17012**)
 Mureddu, Marina See Cerlienco, Luigi, (**84f:12013**)
 Park, Young Lim Conditions for rings of type-A to be Boolean. (**84c:17016**)
 Ponizovskii, I. S. Algebras with a finite number of classes of nonequivalent indecomposable modules. (Russian) (**84i:16026**)
 Vivarelli, Maria Dina The KS-transformation in hypercomplex form. (**84c:70007**)

16A46 Finite-dimensional algebras

- Baer, Dagmar (with Lenzing, Helmut) A homological approach to representations of algebras. I. The wild case. **84i:16038a**
 (with Brune, Hermann; Lenzing, Helmut) A homological approach to representations of algebras. II. Tame hereditary algebras. **84i:16038b**
 Brune, Hermann See Baer, Dagmar; et al., **84i:16038b**
 Happel, Dieter (with Ringel, Claus Michael) Tilted algebras. **84d:16027**
 Lenzing, Helmut See Baer, Dagmar, **84i:16038a** and **84i:16038b**
 Meltzer, Hagen (with Skowroński, Andrzej) Group algebras of finite representation type. **84d:16028**
 Richman, Fred Finite-dimensional algebras over discrete fields. **84i:16025**
 Ringel, Claus Michael See Happel, Dieter, **84d:16027**
 Skowroński, Andrzej See Meltzer, Hagen, **84d:16028**
 Wilson, George V. Ultimately closed projective resolutions and rationality of Poincaré-Betti series. **84i:16017**
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- Auslander, M. Representation theory of finite-dimensional algebras. (**84i:16031**)
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- Herstein, I. N. See Bergen, Jeffrey, (84c:16031)
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- Serven, R. J. See Boyle, A. K., (84c:16027)
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16A54 Grothendieck groups of rings, K -theory of noncommutative rings
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- Bürgisser, Balz On the projective class group of arithmetic groups. 84j:16015
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16A55 Dimension theory (Krull, Gabriel)

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- Chatters, A. W. A characterisation of right Noetherian rings. (84a:16027)
 Golan, Jonathan S. (with Raynaud, Jacques) Derived functors of the torsion functor and local cohomology of noncommutative rings. (84g:16025)
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 Jøndrup, S. Projective modules with Krull dimension. (84i:16019)
 Levasseur, Thierry Sur la dimension de Krull de l'algèbre enveloppante d'une algèbre de Lie semi-simple. [On the Krull dimension of the enveloping algebra of a semisimple Lie algebra] (84j:17011)
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- Handelman, David E. Extensions for AF C^* algebras and dimension groups. (84c:46063)
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- Gerstenhaber, Murray (with Schack, S. D.) On the deformation of diagrams of algebras. (See 84a:00007)
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- Abesis, S. (with Del Fra, A.) Degenerations for the representations of an equioriented quiver of type A_m . (Italian summary) (84c:16019)
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16A60 Homological dimension

- Brown, Kenneth A. (with Hajarnavis, C. R.; MacEacharn, A. B.) Rings of finite global dimension integral over their centres. 84b:16029
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- Baer, Dagmar (with Brune, Hermann; Lenzing, Helmut) A homological approach to representations of algebras. II. Tame hereditary algebras. (84a:16038b)
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16A62 Homological methods

- Kashu, A. I. Duality between localizations and colocalizations in an adjoint situation. (Russian) 84b:16030

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- Ahsan, Javed (with Ibrahim, A. S.) Some homological characterizations of regular rings. (84f:16017)
 Alev, J. Fonction de Hilbert-Samuel dans les anneaux locaux réguliers non-commutatifs. [Hilbert-Samuel function in noncommutative regular local rings] (84d:16018)
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16A63 Torsion theories [See also 13D30, 18E40.]

- Bhattacharya, B. B. (with Choudhury, D. P.) Purities relative to a torsion theory. 84k:16032
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(with Smith, Kirby C.) Distributively generated centralizer near-rings. 84a:16068

Meldrum, J. D. P. Finding upper faithful d.g. near-rings. (See 84c:16024)

See also Fang, Yuan, 84a:16066; Mahmood, S. J., 84i:16042 and Maxson, C. J.; et al., 84m:16035

Misra, Prabudh See Magill, K. D., Jr.; et al., 84m:16022

Militz, Reiner Interpolation in universal algebra. (Italian) (See 84c:16024)

Oswald, A. See Maxson, C. J.; et al., 84m:16035 and (See 84c:16024)

Pellegrini Manara, Silvia On the S -near-fields. (See 84c:16024)

Pilz, Günter Near-rings in all areas. (Italian. English summary) (See 84c:16024)

Polynomial near-rings. (See 84c:16024)

See also Angerer, Josef, 84b:16041

Prabhakara Rao, K. B. Vector near-rings. 84j:16020

Rinaldi, Maria Gabriella On the near-rings whose proper ideals are prime. (See 84c:16024)

See also Cotti Ferrero, Celestina, 84a:16065

Ruiz de Velasco y Bellas, Carlos Wreath products of near-rings. 84k:16051

Satyanarayana, Bhavanari Primary decomposition in Noetherian near-rings. 84m:16036

Saxena, P. K. (with Bhandari, M. C.) General radical theory for near-rings. 84j:16021

See also Bhandari, M. C., 84f:16040

Scapellato, Raffaele On the existence of Steiner functions. (See 84c:16024)

On geometric near-rings. (Italian summary) 84m:16037

Smith, Kirby C. See Maxson, C. J., 84a:16068

Suppa Modena, Alberta Near-rings with involution and Jordan and Lie mappings. (See 84c:16024)

Tewari, U. B. See Magill, K. D., Jr.; et al., 84m:16022

Theobald, Edmund Near-rings and noncommutative geometry. (See 84c:16024)

Thomsen, Momme Johs Bilinearly generated near-algebras. 84f:16041

van der Walt, Andries P. J. Fully generating subsets of near-rings. (See 84c:16024)

Wefelscheid, Heinrich Immersion of nonplanar near-fields into planar near-fields.

(Italian) (See 84c:16024)

Wiegandt, Richard Near-rings and radical theory. (See 84c:16024)

Conference:

Near-Rings and Near-Fields ★Proceedings of Conference on Near-Rings and Near-Fields. 84c:16024

Proceedings:

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San Benedetto del Tronto ★Proceedings of Conference on Near-Rings and Near-Fields. 84c:16024

secondary classifications:

Weinert, Hanns Joachim Zur Theorie der Halbfastkörper. [On the theory of seminear-fields] (84b:16025)

16A78 Semirings and other generalizations of rings

Bandelt, Hans-J. (with Petrich, Mario) Subdirect products of rings and distributive lattices. 84g:16030

Dale, Louis Extending certain semiring homomorphisms to ring homomorphisms. 84i:16043

Gabiani, Jolanda Laura (with Veronesi, Maria Luisa) On Boolean semirings. (Italian. English summary) 84g:16031

Gardner, B. J. Radical properties defined by the absence of free subobjects. 84d:16047

Gilmer, Robert (with Spiegel, Eugene) The coefficient field of a semigroup algebra. **84m:16038**

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Krasner, Marc A class of hyperrings and hyperfields. **84f:16042**

Kyuno, Shoji Subdirect sums of Nobusawa gamma rings. **84h:16023**

Mitchell, Sidney S. (with Sinutoko, Portip) The theory of semifields. **84d:16048**

Müller, Winfried B. Formal integration in composition rings. (Russian summary) **84g:16032**

Pastijn, Francis (with Romanowska, Anna) Idempotent distributive semirings. I. **84f:16043a**

Idempotent distributive semirings. II. **84f:16043b**

Petrich, Mario See Bandelt, Hans-J., **84g:16030**

Profera, Luigi The socle of a Lister ternary ring. (Italian. English summary) **84g:16033**

Rodriguez, Gaetano Decomposition of a semiring in a semilattice of semirings. (Italian. English summary) **84e:16069**

Romanowska, Anna Idempotent distributive semirings with a semilattice reduct. **84f:16045a**

Free idempotent distributive semirings with a semilattice reduct. **84f:16045b**

See also Pastijn, Francis, **84f:16043a**

Rota, Rosaria Multiplicative hyperrings. (Italian. French summary) **84g:16034**

Congruences on multiplicative hyperrings. (Italian. English summary) **84h:16052**

Shaheen, Talat (with Yusuf, S. M.) Radicals of additively inverse hemirings. **84f:16044**

Singh, Prahlad (with Yadav, N. S.) A type of semiring. **84f:16044**

Sinutoko, Portip See Mitchell, Sidney S., **84d:16048**

Spiegel, Eugene See Gilmer, Robert, **84m:16038**

Takahashi, Michihiro Extensions of semimodules. I. **84h:16024**

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Weinert, Hanns Joachim Zur Theorie der Halbfastkörper. [On the theory of seminear-fields] **84h:16025**

On idempotent semifields and a paper: "Division semirings with $1+1=1$ "

[Semigroup Forum 22 (1981), no. 2, 181-188; MR 82e:16037] by H. Hutchins. **84g:16035**

Yadav, N. S. See Singh, Prahlad, **84f:16044**

Yusuf, S. M. See Shaheen, Talat, **84f:16044**

secondary classifications:

Chatterjea, S. K. Ideal-theoretic characterizations of regular duo semigroups and rings. **(84c:20036)**

Grygiel, Grazyna Algebraic Σ_A -assignment problems. (Russian and Polish summaries) **(84c:90054)**

Wechler, Wolfgang Formal power series and (R, P) -rational languages. **(84b:68105)**

16A80 Topological rings and modules [See also 13Jxx.]

Ánh, Pham Ngoc Duality over Noetherian rings with a Morita duality. **84f:16047**

Duality of modules over topological rings. **84f:16048**

Arnaudov, V. I. (with Mikhalev, A. V.) The topologies of the ring of polynomials and a topological analogue of Hilbert's basis theorem. (Russian) **84f:16045**

Dikranjan, Dikran N. Minimal topological rings. **84g:16036**

García Hernández, José Luis ★ Condiciones de finitud relativas a topologías aditivas. (Spanish) [Finiteness conditions for additive topologies] **84m:16039**

Luedeman, John K. On the embedding of topological rings into rings of quotients. **84g:16037**

Menini, Claudia Linearly compact rings and strongly quasi-injective modules. **84h:16026a**

Errata: "Linearly compact rings and strongly quasi-injective modules".

84h:16026b

Mikhalev, A. V. See Arnaudov, V. I., **84f:16045**

Nazarov, A. O. Open imbeddings of topological rings. (Russian. English summary) **84f:16046**

Numakura, Katsumi Notes on compact rings with open radical. **84f:16046**

Orsatti, Adalberto Linearly compact rings and the theorems of Leptin. (Italian. English summary) **84b:16044**

Shalenko, N. I. Topological rings of continuous real-valued functions. (Russian) **84d:16049**

Ursul, M. I. Nil-ideals in some topological rings. (Russian) **84b:16045**

secondary classifications:

Ánh, Pham Ngoc On a problem of B. J. Müller. **(84a:16070)**

Choban, M. M. See Dumitrashtu, S. S., **(84c:54066)**

Cohn, P. M. On extending valuations in division algebras. **(84f:16025)**

Dikranjan, Dikran Extension of minimal ring topologies. **(84f:13025)**

Dumitrashtu, S. S. (with Choban, M. M.) Free topological algebras with a continuous signature. (Russian) **(84c:54066)**

Wiseman, Andrew N. Integral extensions of linearly compact domains. **(84k:13026)**

Zettl, Heinrich H. Ideals in Hilbert modules and invariants under strong Morita equivalence of C^* -algebras. **(84d:46060)**

16A86 Ordered rings [See also 06F25.]

Dhombres, J. Sur les fonctions simultanément suradditives et surmultiplicatives.

[Simultaneously superadditive and supermultiplicative functions] **84k:16053**

Steinberg, Stuart A. Unital f -prime lattice-ordered rings with polynomial constraints are domains. **84d:16050**

secondary classifications:

Prabhakara Rao, K. B. Vector near-rings. **(84j:16020)**

Révész, Gábor Ordering epic R -fields. **(84i:12022)**

Ribenboim, Paulo Orders in algebras. **(84k:17004)**

Steinberg, Stuart A. Archimedean, semiperfect and π -regular lattice-ordered algebras with polynomial constraints are f -algebras. **(84k:06022)**

16A89 Equivalence of module categories

Ánh, Pham Ngoc On a problem of B. J. Müller. **84a:16070**

Lambek, J. Remarks on colocalization and equivalence. **84j:16022**

secondary classifications:

Beer, Walter On Morita equivalence of nuclear C^* -algebras. **(84d:46096)**

Brodskii, G. M. On Morita equivalence and duality. (Russian) **(84e:16012)**

Lemaire, Claude Équivalences liées à une théorie de torsion. [Equivalences related to a torsion theory] **(84k:16048)**

16A90 Categorical methods and categorical ring theory

Verschoren, A. Les extensions et les schémas non-commutatifs. [Extensions and noncommutative schemes] **84c:16036**

secondary classifications:

Frei, Armin Kan extensions and systems of imprimitivity. **(84c:18006)**

Höinghaus, Dorothea (with Richter, Günther) Hilbert basis quivers. **(84j:16011)**

Ohtake, Koichiro Equivalence between colocalization and localization in abelian categories with applications to the theory of modules. **(84c:18022)**

Richter, Günther See Höinghaus, Dorothea, **(84j:16011)**

Yu, Yong Xi The category of left R - n modules and the Hom functor. (Chinese. English summary) **(84c:18006)**

16A99 Miscellaneous topics

Fuchs, László (with Loonstra, F.) Note on irredundant subdirect products. **84j:16023**

Haghany, A. On rings with intersection property. (See **84m:00014**)

Loonstra, F. See Fuchs, László, **84j:16023**

Ma, Ji Liang (with Yu, Chun Hai) Fuzzy rings. I. (Chinese. English summary) **84h:16046**

Xu, Zhong Ming The density theorem for Γ -rings. (Chinese. English summary) **84m:16040**

Yu, Chun Hai See Ma, Ji Liang, **84h:16046**

secondary classifications:

Benéteau, Lucien Quasigroupes distributifs provenant de certaines algèbres. (English summary) [Distributive quasigroups arising from certain algebras] **(84f:20082)**

Chen, Wei Xin The greatest (Neumann) regular ideal of a weak Γ_N -ring. (Chinese. English summary) **(84j:17003)**

Crédli, Gábor On properties of rings that can be characterized by infinite lattice identities. **(84c:06006)**

Feigelshtock, Shalom Noncommutative rank two torsion free rings. **(84i:20056)**

Goralčik, P. (with Goralčiková, A.; Koubek, V.; Rödl, Vojtěch) Fast recognition of rings and lattices. **(84g:68025)**

Goralčiková, A. See Goralčik, P.; et al., **(84g:68025)**

Koubek, V. See Goralčik, P.; et al., **(84g:68025)**

Krause, Ulrich Eindeutige Faktorisierung ohne ideale Elemente. [Unique factorization without ideal elements] **(84f:20078)**

Liu, Shao Xue (with Tsai, Chester E.) Wedderburn theorem on varieties of algebras. **(84a:17003)**

Myung, Hyo Chul The exponentiation and deformations of Lie-admissible algebras. **(84h:17001)**

Rödl, Vojtěch See Goralčik, P.; et al., **(84g:68025)**

Rose, Bruce I. Preservation of elementary equivalence under scalar extension. **(84c:03065)**

Sapir, M. V. Implicative characteristic of prevarieties of semigroups and rings. (Russian) **(84i:20063)**

Swaminathan, Thanjavur Venkatasubramanian Submaximal ideals in a Boolean-like ring. **(84h:06016)**

Szendrei, Agnes On the idempotent reducts of modules. I, II. **(84j:08010)**

Tomber, Marvin L. The history and methods of Lie-admissible algebras. **(84h:17002)**

Tsai, Chester E. See Liu, Shao Xue, **(84a:17003)**

Tyukavkin, L. V. On the model completeness of certain theories of modules. (Russian) **(84m:03056)**

17-XX NONASSOCIATIVE RINGS AND ALGEBRAS

17-01 Elementary exposition, textbooks

Zassenhaus, Hans J. ★ Lie groups, Lie algebras and representation theory. **84b:17001**

17-02 Advanced exposition (research surveys, monographs, etc.)

Benkart, Georgia M. The construction of examples of Lie-admissible algebras. **84a:17001**

Myung, Hyo Chul ★ Lie algebras and flexible Lie-admissible algebras. **84m:17001**

Seligman, George B. ★ Rational constructions of modules for simple Lie algebras. **84k:17001**

secondary classifications:

Bokut', L. A. Algorithmic problems and imbedding theorems: some open problems for rings, groups and semigroups. (Russian) **(84j:20001)**

Ol'shanetskii, M. A. (with Perelomov, A. M.) Quantum integrable systems related to Lie algebras. **(84k:81007)**

Perelomov, A. M. See Ol'shanetskii, M. A., **(84k:81007)**

- 17-03 Historical (must also be assigned at least one classification number from Section 01)

- 17-04 Explicit machine computation and programs (not the theory of computation or programming)

Bose, Asok Kumar Computation of Casimir operator eigenvalues. **84c:17002**

Lamont, P. J. C. Computer generated natural inner automorphisms of Cayley's algebra. **84g:17001**

- 17-06 Proceedings, conferences, etc.

Bokut', L. A. New results of the theory of associative and Lie rings. (Russian) **84c:17001**
secondary classifications:

(Amitsur, S. A.) See *Algebraists' homage: papers in ring theory and related topics*. **(84a:00007)**

(Jacobson, Nathan) See *Algebraists' homage: papers in ring theory and related topics*. **(84a:00007)**

(Saltman, David J.) See *Algebraists' homage: papers in ring theory and related topics*. **(84a:00007)**

(Seligman, George B.) See *Algebraists' homage: papers in ring theory and related topics*. **(84a:00007)**

Algebraists' homage: papers in ring theory and related topics ★ *Algebraists' homage: papers in ring theory and related topics*. **(84a:00007)**

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17Axx General nonassociative rings

17A01 General theory

secondary classifications:

Cedilnik, A. On Banach algebras without zero divisors. (Slovenian summary) **(84j:46078)**

Filippov, V. T. Generalized basis rank of varieties of algebras. (Russian) **(84g:08020)**

17A05 Power-associative

Benkart, Georgia M. (with Osborn, J. Marshall) Power-associative products on matrices. **84c:17002**

Osborn, J. Marshall See Benkart, Georgia M., **84c:17002**

17A10 Commutative power-associative

17A15 Noncommutative Jordan algebras

Khan, Mohd. Rais The Wedderburn principal theorem for quasicommutative Jordan algebras. **84c:17001**

17A20 Flexible algebras

Hentzel, Irvin Roy (with Smith, Harry F.) Generalized alternative and Mal'cev algebras. **84c:17003**

Okubo, Susumu Classification of flexible composition algebras. I, II. **84d:17001**

Smith, Harry F. See Hentzel, Irvin Roy, **84c:17003**

secondary classifications:

Agrawala, Vishnu K. Commutativity of products for adjoint operators. **(84c:17008)**

Benkart, Georgia M. (with Britten, Daniel J.; Osborn, J. Marshall) Real flexible division algebras. **(84a:17002)**

Britten, Daniel J. See Benkart, Georgia M.; et al., **(84a:17002)**

Myung, Hyo Chul See Okubo, Susumu, **(84c:17009)**

Okubo, Susumu (with Myung, Hyo Chul) Note on commutativity of adjoint operator algebras. **(84c:17009)**

Osborn, J. Marshall See Benkart, Georgia M.; et al., **(84a:17002)**

17A25 Nodal algebras

17A30 Algebras satisfying other identities

Bhandari, M. C. (with Radhakrishna, A.) A note on radicals in lattice ordered antilexible rings. **84d:17002**

Hentzel, Irvin Roy (with Piacentini Cattaneo, Giulia Maria) Right alternative alternator ideal algebras. **84f:17001**

Ng, Seong Nam Finitely generated semiprime (1, 1) algebras. **84f:17002**

Piacentini Cattaneo, Giulia Maria See Hentzel, Irvin Roy, **84f:17001**

Radhakrishna, A. See Bhandari, M. C., **84d:17002**

Sidorov, A. V. On Lie triple algebras. (Russian) **84c:17003**

Smith, Harry F. Equivalent nilpotencies in certain generalized right alternative rings. **84c:17001**

secondary classifications:

Benkart, Georgia M. The construction of examples of Lie-admissible algebras. **(84a:17001)**

Brodimas, G. N. See Sifarakis, P. D.; et al., **(84m:81082)**

Czech, Jerry Remarks on τ -rings and τ -groupoids. **(84f:20061)**

Ding, Ming Chao (with Guo, Yuan Chun) P -ideals and P -radicals of rings. (Chinese. English summary) **(84a:16008)**

Guo, Yuan Chun See Ding, Ming Chao, **(84a:16008)**

Jannussis, A. D. See Sifarakis, P. D.; et al., **(84m:81082)**

Meurman, Arne An embedding of $\text{PSL}(2, 13)$ in $G_2(\mathbb{C})$. **(84b:20046)**

Papaloucas, L. C. See Sifarakis, P. D.; et al., **(84m:81082)**

Sifarakis, P. D. (with Jannussis, A. D.; Brodimas, G. N.; Papaloucas, L. C.) q -algebras without interaction. **(84m:81082)**

17A35 Division algebras

Benkart, Georgia M. (with Britten, Daniel J.; Osborn, J. Marshall) Real flexible division algebras. **84a:17002**

Britten, Daniel J. See Benkart, Georgia M.; et al., **84a:17002**

Cohen, Stephen D. (with Ganley, Michael J.) Commutative semifields, two-dimensional over their middle nuclei. **84g:17002**

El-Mallah, Mohamed Lamei Quelques résultats sur les algèbres absolument valuées. [Some results on absolute-valued algebras] **84b:17002**

Ganley, Michael J. See Cohen, Stephen D., **84g:17002**

Lamont, P. J. C. The nonexistence of a factorization formula for Cayley numbers. **84m:17002**

Osborn, J. Marshall See Benkart, Georgia M.; et al., **84a:17002**

secondary classifications:

Hefendehl-Hebeker, Lisa Zur Struktur der vierdimensionalen quadratischen Algebren. (English summary) [On the structure of quadratic algebras of dimension four] **(84c:17003)**

Menichetti, Giampaolo Commutative division algebras. **(84f:51051)**

17A36 Automorphisms, derivatives, other operators

17A40 Ternary compositions

Lister, W. G. Bivariants of ternary rings. **84g:17003**

McCrimmon, Kevin Composition triples. **84f:17002**
Quadratic forms permitting triple composition. **84d:17003**

17A42 Other n -ary compositions

17A45 Quadratic algebras (not quadratic Jordan algebras)

Hefendehl-Hebeker, Lisa Zur Struktur der vierdimensionalen quadratischen Algebren. (English summary) [On the structure of quadratic algebras of dimension four] **84c:17003**

17A50 Free algebras

17A60 Structure theory in general nonassociative rings

Hentzel, Irvin Roy Nil-semisimple locally $(-1, 1)$ rings. **84b:17003a**

The alternator ideal of right alternative rings. **84b:17003b**

Liu, Shao Xue A proof of the existence of the Levitzki radical in a Jordan ring. (Chinese. English summary) **84j:17001**

(with Tsai, Chester E.) Wedderburn theorem on varieties of algebras. **84a:17003**

Tsai, Chester E. See Liu, Shao Xue, **84a:17003**

17A65 Radical theory in general nonassociative rings

Bhandari, M. C. (with Radhakrishna, A.) Radicals in lattice ordered nonassociative rings. **84c:17002**

Radhakrishna, A. See Bhandari, M. C., **84c:17002**

Rossa, R. F. Radicals of rings and subrings. **84d:17004**

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Bhandari, M. C. (with Radhakrishna, A.) A note on radicals in lattice ordered antilexible rings. **(84d:17002)**

Hué, Tran Trong A note on the construction of semisimple closure classes. **(84a:16011)**

Radhakrishna, A. See Bhandari, M. C., **(84d:17002)**

17A70 Super algebras

Bernstein, Joseph N. (with Leites, D. A.) The superalgebra $Q(n)$, the odd trace and the odd determinant. **84c:17003**

DeWitt, Bryce S. (with van Nieuwenhuizen, Peter) Explicit construction of the exceptional superalgebras $F(4)$ and $G(3)$. **84d:17005**

Hurni, J.-P. (with Morel, B.) Irreducible representations of the superalgebras type II. **84i:17004**

Leites, D. A. Representations of Lie superalgebras. (Russian. English summary) **84d:17006**

See also Bernstein, Joseph N., **84c:17003**

Morel, B. See Hurni, J.-P., **84i:17004**

van Nieuwenhuizen, Peter See DeWitt, Bryce S., **84d:17005**

Palev, Tchevdar D. (with Stoichev, O. Ts.) Finite-dimensional induced representations of the Lie superalgebra $\mathfrak{sl}(1, n)$. **84d:17007**

Parker, Monique Formes réelles des superalgèbres de Lie simples classiques. [Real forms of classical simple Lie superalgebras] **84m:17003**

- Shmelev, G. S. Differential operators that are invariant with respect to the Lie superalgebra $H(2, 2; \lambda)$ and its irreducible representations. (Russian) **84i:17003**
 Classification of indecomposable finite-dimensional representations of the Lie superalgebra $W(0, 2)$. (Russian) **84i:17002**

Stoichev, O. Ts. See Palev, Tchavdar D., **84i:17007**

secondary classifications:

- Aldaya, Victor (with de Azcárraga, José A.) Supergroup extensions: from central charges to quantization through relativistic wave equations. **(84e:81081)**
 de Azcárraga, José A. See Aldaya, Victor, **(84e:81081)**
 Berele, Allan (with Regev, Amitai) Hook Young diagrams, combinatorics and representations of Lie superalgebras. **(84d:05011)**
 Bergshoeff, E. (with de Roo, M.; de Wit, B.) Extended conformal supergravity. **(84e:83052)**
 Đào Vọng Đu'c (with Nguyen Thi Hong) On the supergroup $SU(m|n)$ and its superfield representations. **(84m:81178)**
 Ebner, Dieter W. The supergroups of supersymmetry and supergravity as ordinary real Lie groups. **(84m:81179)**
 Ferrara, S. (with Savoy, C. A.) Representations of extended supersymmetry on one- and two-particle states. (See **84j:83077**)
 Günaydin, M. Oscillator-like unitary representations of noncompact groups and supergroups and extended supergravity theories. (See **84k:00008**)
 Kamefuchi, S. See Ohnuki, Y., **(84f:81121a)** and **(84f:81121b)**
 Kirillova, R. Yu. Explicit solutions of superized Toda lattices. (Russian. English summary) **(84i:58057)**
 Kleeman, R. Aspects of modular quantization. **(84j:81051)**
 Leites, D. A. (with Semenov-Tyan-Shanskii, M. A.) Integrable systems and Lie superalgebras. (Russian. English summary) **(84g:58053)**
 See also Leznov, A. N.; et al., **(84f:58061)**
 Leznov, A. N. (with Savelev, M. V.; Leites, D. A.) The complete integrability of some nonlinear equations of the theory of strings. (Russian) **(84f:58061)**
 Nguyen Thi Hong. See Đào Vọng Đu'c, **(84m:81178)**
 Ohnuki, Y. (with Kamefuchi, S.) Fermi-Bose similarity, supersymmetry and generalized numbers. (Italian and Russian summaries) **(84f:81121a)**
 (with Kamefuchi, S.) Erratum: "Fermi-Bose similarity, supersymmetry and generalized numbers". **(84f:81121b)**
 Palev, Tchavdar D. Wigner approach to quantization. Noncanonical quantization of two particles interacting via a harmonic potential. **(84i:81019)**
 Regev, Amitai. See Berele, Allan, **(84d:05011)**
 de Roo, M. See Bergshoeff, E.; et al., **(84e:83052)**
 Ruegg, H. Labelling of irreducible representations of super Lie algebras. (See **84k:00008**)
 Savelev, M. V. See Leznov, A. N.; et al., **(84f:58061)**
 Savoy, C. A. See Ferrara, S., **(84j:83077)**
 Semenov-Tyan-Shanskii, M. A. See Leites, D. A., **(84g:58053)**
 Stelle, K. S. (with West, Peter C.) Realizing the supersymmetry algebra. (See **84j:83003**)
 Strathdee, J. Introduction to supersymmetry. (See **84j:83077**)
 Wegner, Franz Algebraic derivation of symmetry relations for disordered electronic systems. **(84e:82021)**
 West, Peter C. Representations of supersymmetry. (See **84j:83077**)
 See also Stelle, K. S., **(84j:83003)**
 de Wit, B. See Bergshoeff, E.; et al., **(84e:83052)**

17A75 Composition algebras

17A99 None of the above, but in this section

- Chen, Wei Xin The greatest (Neumann) regular ideal of a weak Γ_n -ring. (Chinese. English summary) **84j:17003**
 Green, H. S. Colour algebras and generalized statistics. (See **84k:00008**)
 Kalnay, Andrés J. Errata-corrige: "On fundamental realizations of Lie-admissible algebras: flexibility, centers, and nuclei" [Hadronic J. **3** (1979/80), no. 6, 1552-1564; MR **82h:17006**]. **84e:17004**
 Martindale, Wallace S., III Lie and Jordan mappings. (See **84a:00007**)
 Myung, Hyo Chul The exponentiation and deformations of Lie-admissible algebras. **84i:17001**
 Ribenboim, Paulo Orders in algebras. **84h:17004**
 Tomber, Marvin L. The history and methods of Lie-admissible algebras. **84h:17002**

secondary classifications:

- Dong, Nai Chang Commutativity of some nonassociative and associative rings with identity. (Chinese. English summary) **(84m:16026)**
 El-Mallah, Mohamed Lamei ★ Sur les algèbres normées non-associatives. (French) [Nonassociative normed algebras] **(84d:46075)**
 Feigelstock, Shalom A note on a paper of Ayoub. **(84c:16023)**
 Xie, Bang Jie A survey of recent developments concerning problems of commutativity. (Chinese) **(84e:16022)**

17Bxx Lie algebras {For Lie groups, see 22Exx.}

17B05 Structure theory

- Benkart, Georgia M. (with Osborn, J. Marshall) On the determination of rank one Lie algebras of prime characteristic. (See **84a:00007**)
 Delbourgo, R. (with Jarvis, P. D.) A generalised Baker-Campbell-Hausdorff formula with application to coset space parameterisation. **84i:17005**
 Giraud, Georges Décomposition d'une algèbre de Lie à l'aide de ses opérateurs symétriques. [Decomposition of a Lie algebra using its symmetric operators] **84e:17005**

- Jarvis, P. D. See Delbourgo, R., **84i:17005**
 Katsylo, P. I. Sections of sheets in a reductive algebraic Lie algebra. (Russian) **84k:17005**
 Kostrikin, A. I. (with Kostrikin, I. A.; Ufnarovskii, V. A.) Orthogonal decompositions of simple Lie algebras (type A_n). (Russian) **84g:17004**
 Kostrikin, I. A. See Kostrikin, A. I.; et al., **84g:17004**
 Lashkhi, A. A. Projection of wreath products of Lie algebras. (Italian summary) **84e:17006**
 Osborn, J. Marshall See Benkart, Georgia M., **(See 84a:00007)**
 Patera, J. (with Rousseau, Christiane; Schlomiuk, D.) Dimensions of orbits and strata in complex and real classical Lie algebras. **84e:17007**
 (with Winternitz, P.; Zassenhaus, Hans J.) Maximal abelian subalgebras of real and complex symplectic Lie algebras. **84i:17006**
 Rousseau, Christiane See Patera, J.; et al., **84e:17007**
 Schlomiuk, D. See Patera, J.; et al., **84e:17007**
 Ufnarovskii, V. A. See Kostrikin, A. I.; et al., **84g:17004**
 Varea, V. R. Supersolvable quasicenter and hypercenter of a Lie algebra. (Spanish. English summary) **84a:17004**
 Winternitz, P. See Patera, J.; et al., **84i:17006**
 Zassenhaus, Hans J. On the Cartan subalgebra of a Lie algebra. **84i:17007**
 See also Patera, J.; et al., **84i:17006**
 Zel'manov, E. I. Lie algebras with algebraic associated representation. (Russian) **84k:17006**

secondary classifications:

- Brylinski, Jean-Luc Differential operators on the flag varieties. **(84e:14035)**
 van Dijk, G. Orbits on real affine symmetric spaces. I. The infinitesimal case. **(84h:22042)**
 Mikhailichenko, G. G. Three-dimensional Lie algebras of the transformations plane. (Russian) **(84m:22012)**
 Pagon, Dushan Deformations of nilpotent graded Lie algebras. (Russian. English summary) **(84e:17015)**
 Papadoulas, L. C. Uncertainty relations and semigroups in B -algebras. **(84m:81036)**
 Stewart, I. N. Subideals and serial subalgebras of Lie algebras. **(84c:17011)**

17B10 Representations, algebraic theory (weights)

- Atsuyama, Kenji On the algebraic structures of graded Lie algebras of second order. **84g:17005**
 Benkart, Georgia M. (with Osborn, J. Marshall) Representations of rank one Lie algebras of characteristic p . **84e:17004**
 Bouaziz, Abderrazak Sur les représentations des algèbres de Lie semi-simples construites par T. Enright. [On the representations of semisimple Lie algebras constructed by T. Enright] **84j:17004**
 Sur les représentations induites des algèbres de Lie semisimples complexes. (English summary) [On the induced representations of complex semisimple Lie algebras] **84i:17008**
 Ermolaev, Yu. B. On the question of Cartan prolongations. (Russian) **84h:17003**
 Feigin, B. L. (with Fuks, D. B.) Verma modules over a Virasoro algebra. **84i:17009**
 Frenkel, I. B. (with Kac, Victor G.) Basic representations of affine Lie algebras and dual resonance models. **84f:17004**
 Fuks, D. B. See Feigin, B. L., **84i:17009**
 Gel'fand, S. I. (with MacPherson, Robert D.) Verma modules and Schubert cells: a dictionary. **84h:17004**
 Gruber, Bruno On indecomposable representations of the algebra $so(3, 1)$ of the Lorentz group. **84b:17004**
 Gupta, V. See Metha, M. L.; et al., **84m:17004**
 Hughes, J. W. B. $SU(2) \times SU(2)$ shift operators and representations of $SO(5)$. **84g:17006**
 Joseph, A. The Enright functor on the Bernstein-Gel'fand-Gel'fand category \mathcal{O} . **84j:17005**
 Kac, Victor G. See Frenkel, I. B., **84f:17004**
 MacPherson, Robert D. See Gel'fand, S. I., **84h:17004**
 Malliavin-Brameret, Marie-Paule Ultra-produits d'algèbres de Lie. [Ultraproducts of Lie algebras] **84k:17007**
 Metha, M. L. (with Normand, Jean-Marie; Gupta, V.) A property of the structure constants of finite-dimensional compact simple Lie algebras. **84m:17004**
 Molnar, Richard K. Tensor products and semisimple modular representations of finite groups and restricted Lie algebras. **84i:17005**
 Moody, R. V. (with Patera, J.) Fast recursion formula for weight multiplicities. **84a:17005**
 Normand, Jean-Marie See Metha, M. L.; et al., **84m:17004**
 Osborn, J. Marshall See Benkart, Georgia M., **84c:17004**
 Patera, J. (with Rousseau, Christiane) Complex orthogonal and symplectic matrices depending on parameters. **84b:17005**
 See also Moody, R. V., **84a:17005**
 Prasolov, V. V. Degenerate elements of representations of Lie algebras. (Russian) **84i:17005**
 Rocha-Caridi, Alvaro (with Wallach, Nolan R.) Highest weight modules over graded Lie algebras: resolutions, filtrations and character formulas. **84m:17005**
 Rousseau, Christiane See Patera, J., **84b:17005**
 Schue, John Representations of Lie p -algebras. **84d:17008**
 Seifert, Benedict Combinatorial and geometric properties of weight systems of irreducible finite-dimensional representations of simple split Lie algebras over fields of 0 characteristic. **84j:17006**
 Seligman, George B. Variations on even Clifford algebras. (See **84a:00007**)
 Shmelev, G. S. Invariant operators on a symplectic supermanifold. (Russian) **84j:17007**
 Wallach, Nolan R. See Rocha-Caridi, Alvaro, **84m:17005**
 Winter, David J. A combinatorial theory of symmetry and applications to Lie algebras. **84j:17008**
 Yan, Zhi Da (with Zhang, Da Gan) A method of classification of real irreducible representations of real semisimple Lie algebras. **84g:17007**
 Zhang, Da Gan See Yan, Zhi Da, **84g:17007**

secondary classifications:

- Aguirre, M. (with Buzzo, R.; Iommi Amunátegui, G.) A closed general reduction formula for $SU_n \rightarrow Sp_n$. (84c:22018)
- Bacławski, Kenneth Recursive algorithms for unitary and symplectic group representations. (84g:22003)
- Bayen, F. (with Maillard, Jean-Marie) Star exponentials of the elements of the inhomogeneous symplectic Lie algebra. (84c:58028)
- Berele, Allan (with Regev, Amitai) Hook Young diagrams, combinatorics and representations of Lie superalgebras. (84d:05011)
- Bose, Asok Kumar (with Navon, A.) Decomposition of the finite-dimensional fermion algebra into irreducible spaces. (84c:81026)
- Buzzo, R. See Aguirre, M.; et al., (84c:22018)
- El-Sharkawy, Nahid G. I. See King, Ronald Curtis, (84b:22032)
- Feigin, B. L. (with Fuks, D. B.) Casimir operators in modules over the Virasoro algebra. (Russian) (84b:17012)
- Fuks, D. B. See Feigin, B. L., (84b:17012)
- Iommi Amunátegui, G. See Aguirre, M.; et al., (84c:22018)
- Iwahori, Nagayoshi Some topics on Coxeter groups and Weyl groups. (84c:20040)
- King, Ronald Curtis (with El-Sharkawy, Nahid G. I.) The character generators of $SO(2k)$ and $SO(2k+1)$. (84b:22032)
- (with Wybourne, Brian G.) Some noteworthy spin plethysms. (84a:22031)
- Kuznetsov, M. I. Witt algebra and linear groups. (84b:17011)
- Leites, D. A. Invariant differential operators and irreducible representations of Lie superalgebras of divergence free vector fields. (Russian) (84b:17014)
- Representations of Lie superalgebras. (Russian, English summary) (84d:17006)
- Lepowsky, James (with Meurman, Arne) An E_7 -approach to the Leech lattice and the Conway group. (84a:10033)
- Maillard, Jean-Marie See Bayen, F., (84c:58028)
- Meurman, Arne See Lepowsky, James, (84a:10033)
- Meyberg, Kurt Okubo's quartic trace formula for exceptional Lie algebras. (84b:17011)
- Navon, A. See Bose, Asok Kumar, (84c:81026)
- Regev, Amitai See Berele, Allan, (84d:05011)
- Rowen, Louis Halle A simple proof of Kostant's theorem, and an analogue for the symplectic involution. (84d:16024)
- Sitaram, B. R. (with Tripathy, K. C.) Representations of graded Lie groups. (84c:22022)
- Solomon, Allan I. Dynamical groups and coexistence phenomena. (See 84c:00008)
- Tolpygo, A. K. Newton polyhedra and the inverse Borel-Weil theorem. (Russian) (84m:17009)
- Tripathy, K. C. See Sitaram, B. R., (84c:22022)
- Trofimov, V. V. Semi-invariants of the coadjoint representation of Borel subalgebras of simple Lie algebras. (Russian) (84m:22026)
- Williams, Floyd L. Unitarizable highest weight modules of the conformal group. (84b:22027)
- Wybourne, Brian G. See King, Ronald Curtis, (84a:22031)
- Yan, Zhi Da Applications of representation theory of Lie groups to differential geometry. (84j:53061)
- Zelevinskii, A. V. The p -adic analogue of the Kazhdan-Lusztig conjecture. (Russian) (84g:22039)

17B15 Representations, analytic theory

- Gauchman, Hillel On nonselfadjoint representations of Lie algebras. 84m:17006
- Rusinek, Jan A theorem on the integration of a Lie algebra representation. (Russian summary) 84b:17010

secondary classifications:

- Cushman, Richard (with Deprit, André; Mosak, Richard) Normal form and representation theory. (84j:58045)
- Deprit, André See Cushman, Richard; et al., (84j:58045)
- Doebner, Heinz-Dietrich See Gruber, Bruno; et al., (84f:22027)
- Feinsilver, Philip J. See Gruber, Bruno; et al., (84f:22027)
- Goncharov, A. B. Constructions of Weyl representations of some simple Lie algebras. (Russian) (84d:22023)
- Gruber, Bruno (with Doebner, Heinz-Dietrich; Feinsilver, Philip J.) Representations of the Heisenberg-Weyl algebra and group. (Spanish summary) (84f:22027)
- Ii, Kiyotaka Fourier-like transformation and a representation of the Lie algebra $\mathfrak{so}(n+1, 2)$. (84a:58040)
- Le Ngok T'euen Commutative sets of functions on orbits in general position of finite-dimensional Lie algebras. (Russian) (84m:58056)
- Lychagin, V. V. Spectral sequences and normal forms of Lie algebras of vector fields. (Russian) (84c:58188)
- Magnin, L. Analyticity and Lie generators. (84d:22033)
- Mishchenko, A. S. The structure of orbits of extensions of Lie algebras. (Russian) (84j:58057)
- Mosak, Richard See Cushman, Richard; et al., (84j:58045)
- Rosensteel, G. (with Rowe, D. J.) An analytic formula for $u(3)$ -boson matrix elements. (84m:81190)
- Rowe, D. J. See Rosensteel, G., (84m:81190)

17B20 Simple, semisimple, reductive algebras (roots)

- Antonyan, L. V. Classification of homogeneous elements of Z_2 -graded semisimple Lie algebras. (Russian, English summary) 84c:17006
- Askey, Richard A q -beta integral associated with BC_1 . 84b:17006b
- Block, Richard E. Restricted simple Lie algebras of rank 2 or of toral rank 2. (See 84a:00007)
- The classification problem for simple Lie algebras of characteristic p . 84g:17008
- Bowser, S. E. Normalizer towers in semisimple Lie algebras. 84g:17009

Gregory, Thomas B. On simple reducible depth-two Lie algebras with classical reductive null component. 84b:17005

Hurley, James F. Centers of Chevalley algebras. 84b:17006

Kumaresan, S. (with Ranjan, Akhil) On invariant convex cones in simple Lie algebras. 84b:17008

Macdonald, I. G. Some conjectures for root systems. 84b:17006a

Meyberg, Kurt Okubo's quartic trace formula for exceptional Lie algebras. 84b:17011

Ranjan, Akhil See Kumaresan, S., 84b:17006

Rubenthaler, Hubert Espaces préhomogènes de type parabolique. [Prehomogeneous spaces of parabolic type] 84j:17009

Construction de certaines sous-algèbres remarquables dans les algèbres de Lie semi-simples. [Construction of certain remarkable subalgebras in semisimple Lie algebras] 84g:17010

Stekol'shchik, R. B. See Subbotin, V. F., 84c:17007

Subbotin, V. F. (with Stekol'shchik, R. B.) Letter to the editors: "The Jordan form of the Coxeter transformation, and applications to representations of finite graphs" [Funktional. Anal. i Prilozhen. 12 (1978), no. 1, 84-85; MR 58 #16800] (Russian) 84c:17007

Wilson, Robert Lee Restricted simple Lie algebras with toral Cartan subalgebras. (See 84a:00007)

Zarkhin, Yu. G. Cohomology of algebraic varieties and representations of semisimple Lie algebras. (Russian) 84d:17009

secondary classifications:

- Baudisch, Andreas Decidability and stability of free nilpotent Lie algebras and free nilpotent p -groups of finite exponent. (84c:03019)
- Belavin, A. A. (with Drinfel'd, V. G.) Solutions of the classical Yang-Baxter equation for simple Lie algebras. (Russian) (84c:81034)
- Benkart, Georgia M. (with Osborn, J. Marshall) On the determination of rank one Lie algebras of prime characteristic. (See 84a:00007)
- Drinfel'd, V. G. See Belavin, A. A., (84c:81034)
- Farwell, R. S. (with Minami, Masatsugu) One-dimensional Toda molecule. I. General solution. (84j:58060)
- Gabeskiria, M. A. (with Sav'ev, M. V.) On reduction of a two-dimensional generalized Toda lattice to an ordinary differential equations system. (84b:58072)
- Imai, Takao (with Yokota, Ichiro) Noncompact simple Lie group E_{7-25} of type E_7 . (84f:22017a)
- (with Yokota, Ichiro) Noncompact simple Lie group E_{8-24} of type E_8 . (84f:22017b)
- (with Yokota, Ichiro) Simply connected compact simple Lie group $E_{9(-24)}$ of type E_9 . (84j:22028)
- Levasseur, Thierry Sur la dimension de Krull de l'algèbre enveloppante d'une algèbre de Lie semi-simple. [On the Krull dimension of the enveloping algebra of a semisimple Lie algebra] (84j:17011)
- Minami, Masatsugu See Farwell, R. S., (84j:58060)
- Mizani, Abdennabi Sur les L_1 -systèmes et espaces Z_2^j -symétriques. (English summary) [On L_1 -systems and Z_2^j -symmetric spaces] (84m:53059)
- Ol'shanetskii, M. A. (with Perelomov, A. M.) Integrable systems and Lie algebras. (84c:58112)
- Osborn, J. Marshall See Benkart, Georgia M., (See 84a:00007)
- Parker, Monique Formes réelles des superalgèbres de Lie simples classiques. [Real forms of classical simple Lie superalgebras] (84m:17003)
- Perelomov, A. M. See Ol'shanetskii, M. A., (84c:58112)
- Rossmann, W. Limit orbits in reductive Lie algebras. (84c:22021)
- Sav'ev, M. V. See Gabeskiria, M. A., (84b:58072)
- Seligman, George B. ★ Rational constructions of modules for simple Lie algebras. (84c:17001)
- Spaltenstein, Nicolas On unipotent and nilpotent elements of groups of type E_6 . (84b:20034)
- Stekol'shchik, R. B. Transforming elements connecting the Coxeter transforms and conditions for the regularity of roots. (Russian) (84d:15013)
- Wu, Alfred C. T. Cartan-Gram determinants for the simple Lie groups. (84f:22025)
- Yokota, Ichiro See Imai, Takao, (84f:22017a); (84f:22017b) and (84j:22028)

17B25 Exceptional algebras

secondary classifications:

- Atsuyama, Kenji On the algebraic structures of graded Lie algebras of second order. (84g:17005)
- Biedenharn, L. C. (with Truini, P.) Exceptional groups and elementary particle structures. (84a:81041)
- Djoković, Dragomir Ž. Classification of trivectors of an eight-dimensional real vector space. (84f:15036)
- Imai, Takao (with Yokota, Ichiro) Another definition of exceptional simple Lie groups of type $E_{7(-25)}$ and $E_{7(-133)}$. (84c:22029)
- Truini, P. See Biedenharn, L. C., (84a:81041)
- Yokota, Ichiro See Imai, Takao, (84c:22029)

17B30 Solvable, nilpotent algebras

- Bokut', L. A. On a condition for solvability of Lie algebras. (Russian) 84a:17006
- Santharoubane, L. J. Kac-Moody Lie algebras and the classification of nilpotent Lie algebras of maximal rank. 84b:17007
- Kac-Moody Lie algebras and the universal element for the category of nilpotent Lie algebras. 84g:17011
- Talapov, V. V. Polynilpotent Lie algebras that are defined by one defining relation. (Russian) 84c:17008
- Yamauchi, Satoru On some classes of nilpotent Lie algebras and their automorphism groups. 84c:17009

secondary classifications:

- Brown, Kenneth A.** The Dixmier map for certain enveloping algebras. (84d:17010)
Fliess, Michel (with Normand-Cyrot, Dorothee) Algèbres de Lie nilpotentes, formule de Baker-Campbell-Hausdorff et intégrales itérées de K. T. Chen. [Nilpotent Lie algebras, Baker-Campbell-Hausdorff formula and the iterated integrals of K. T. Chen] (84f:93052)
Gallardo, Léonard Capacités, mouvement brownien et problème de l'épine de Lebesgue sur les groupes de Lie nilpotents. (English summary) [Capacities, Brownian motion and the Lebesgue thorn problem on nilpotent Lie groups] (84a:60089)
Hermes, Henry Control systems which generate decomposable Lie algebras. (84h:49082)
Levasseur, Thierry Idéaux premiers et complétion dans les algèbres enveloppantes d'algèbres de Lie nilpotentes. [Prime ideals and completion in enveloping algebras of nilpotent Lie algebras] (84j:17010)
Normand-Cyrot, Dorothee See Fliess, Michel, (84f:93052)
Schue, John Representations of Lie p -algebras. (84d:17006)
Yau, Stephen S.-T. Continuous family of finite-dimensional representations of a solvable Lie algebra arising from singularities. (84c:58043)

17B35 Universal enveloping algebras, imbeddings

- Agrawal, Vishnu K.** Commutativity of products for adjoint operators. 84e:17008
Benoist, Yves Sur l'algèbre des opérateurs différentiels invariants sur un espace symétrique nilpotent. (English summary) [On the algebra of invariant differential operators on a nilpotent symmetric space] 84c:17009
Berdjis, F. A class of finite-dimensional Lie algebras, the Casimir operators of which are not of finite type. 84m:17007
Borho, Walter On the Joseph-Small additivity principle for Goldie ranks. 84a:17007 (with Brylinski, Jean-Luc) Differential operators on homogeneous spaces. I. Irreducibility of the associated variety for annihilators of induced modules. 84b:17007
Borovskii, Yu. V. Two-sided closed ideals in the superenvelope of a semisimple Lie algebra. (Russian) 84g:17012
Brown, Kenneth A. The Dixmier map for certain enveloping algebras. 84d:17010
Brylinski, Jean-Luc See Borho, Walter, 84b:17007
Frenkel, I. B. Representations of affine Lie algebras, Hecke modular forms and Korteweg-de Vries type equations. 84f:17006
Kac, Victor G. Some problems on infinite-dimensional Lie algebras and their representations. 84e:17010
Levasseur, Thierry Idéaux premiers et complétion dans les algèbres enveloppantes d'algèbres de Lie nilpotentes. [Prime ideals and completion in enveloping algebras of nilpotent Lie algebras] 84j:17010
 Sur la dimension de Krull de l'algèbre enveloppante d'une algèbre de Lie semi-simple. [On the Krull dimension of the enveloping algebra of a semisimple Lie algebra] 84j:17011
Malliavin-Bramet, Marie-Paule Grade et théorème d'intersection en algèbre non commutative. [Grade and intersection theorem in noncommutative algebra] 84h:17008a
 Erratum: "Grade and intersection theorem in noncommutative algebra". (French) 84h:17008b
Maury, Guy (with Reynaud, Dominique) Algèbres enveloppantes de R -algèbres de Lie sur certains anneaux R . (English summary) [Enveloping algebras of R -Lie algebras over certain rings R] 84e:17011
Moeglin, C. Idéaux bilatères des algèbres enveloppantes. (English summary) [Bilateral ideals of enveloping algebras] 84e:17012
Myung, Hyo Chul See Okubo, Susumu, 84e:17009
Okubo, Susumu (with Myung, Hyo Chul) Note on commutativity of adjoint operator algebras. 84e:17009
Ooms, Alfons I. The center of the quotient division ring of the universal envelope of a Lie algebra. 84e:17013
Razmyslov, Yu. P. Varieties of representations of finite-dimensional algebras in prime algebras. (Russian. English summary) 84d:17011
Reynaud, Dominique See Maury, Guy, 84e:17011
Smith, Martha K. Automorphisms of enveloping algebras. 84g:17013

secondary classifications:

- Barbasch, Dan** (with Vogan, David A., Jr.) Primitive ideals and orbital integrals in complex exceptional groups. (84h:22038)
Beau, Daniel Generalized Hooke groups and the mass-spectrum problem. (84h:22041)
Bincer, Adam M. Missing label operators in the reduction $O(p) \downarrow O(p-2) \times O(2)$. (84j:22025)
Cahen, Michel (with Gutt, Simone) Produits \star sur les orbites des groupes semi-simples de rang 1. (English summary) [Star products on the orbits of the semisimple groups of rank 1] (84j:22026)
Goodman, Roe (with Wallach, Nolan R.) Classical and quantum-mechanical systems of Toda lattice type. I. (84e:58031)
Gruber, Bruno Finite-dimensional representations of the Euclidean group in the plane. (84c:22020)
Gutt, Simone See Cahen, Michel, (84j:22026)
Jategaonkar, Arun Vinayak Solvable Lie algebras, polycyclic-by-finite groups and bimodule Krull dimension. (84d:16014)
Joseph, A. The Enright functor on the Bernstein-Gelfand-Gelfand category \mathcal{O} . (84j:17005)
Lorenz, Martin (with Small, Lance W.) On the Gelfand-Kirillov dimension of Noetherian P.I.-algebras. (84d:16022)
McConnell, J. C. The Nullstellensatz and Jacobson properties for rings of differential operators. (84a:16006)
Sjödin, Gunnar A characterization of local complete intersections in terms of the Ext-algebra. (84a:13015)
Small, Lance W. See Lorenz, Martin, (84d:16022)

Stafford, J. T. Corrigendum: "Generating modules efficiently; algebraic K -theory for noncommutative Noetherian rings" [J. Algebra 69 (1981), no. 2, 312-346; MR 82k:16018]. (84d:16019)

Vogan, David A., Jr. See Barbasch, Dan, (84h:22038)

Wallach, Nolan R. See Goodman, Roe, (84e:58031)

17B40 Automorphisms, derivations, other operators

- De Wilde, Marc** (with Lecomte, Pierre B. A.) Star-produits et déformations formelles associées aux variétés symplectiques exactes. (English summary) [Star-products and formal deformations associated with exact symplectic manifolds] 84g:17014
Hogeweij, G. M. D. Almost-classical Lie algebras. I, II. 84f:17007
Kukin, G. P. Derivations of free Lie p -algebras. (Russian) 84b:17008
Lecomte, Pierre B. A. See De Wilde, Marc, 84g:17014
Lichnerowicz, André Dérivations d'algèbres de Lie attachées à une algèbre de Lie locale de Kirillov. (English summary) [Derivations of the Lie algebras associated with a local Kirillov Lie algebra] 84c:17010

secondary classifications:

- Sternheimer, D.** Deformation theory applied to quantization and group representations. (84c:58100)
Yamaguchi, Satoru On some classes of nilpotent Lie algebras and their automorphism groups. (84c:17009)

17B45 Lie algebras of linear algebraic groups [See also 14Lxx and 20Gxx.]

Elashvili, A. G. Frobenius Lie algebras. (Russian) 84g:17015

secondary classifications:

- Azad, H.** Structure constants of algebraic groups. (84f:20046)
Kirillova, R. Yu. Explicit solutions of superized Toda lattices. (Russian. English summary) (84i:58057)
Koppinen, M. On the composition factors of Weyl modules. (84f:20048a)
 On the translation functors for a semisimple algebraic group. (84f:20048b)
Newman, Kenneth Sequences of divided powers in characteristic p . (84a:16015)
Satzberg, Betty Buildings and shadows. (84m:20047)
Takeuchi, Mitsuhiro Commutative Hopf algebras and cocommutative Hopf algebras in positive characteristic. (84a:16017)

17B50 Modular Lie algebras

- Brown, Gordon** Properties of a 29-dimensional simple Lie algebra of characteristic three. 84f:17008
Gashkov, I. B. On the irreducible representations of ten-dimensional simple Lie algebras. (Russian. English summary) 84b:17009
Humphreys, James E. Restricted Lie algebras (and beyond). 84d:17012
Kuznetsov, M. I. Witt algebra and linear groups. 84c:17011
Mohammed, I. B. Isomorphism conditions for the modular Lie algebras of Block type. 84d:17013
Rudakov, A. N. Reducible p -representations of a simple three-dimensional Lie p -algebra. (Russian. English summary) 84g:17016
Varea, V. R. Lie algebras whose maximal subalgebras are modular. 84c:17012

secondary classifications:

- Block, Richard E.** Restricted simple Lie algebras of rank 2 or of total rank 2. (See 84a:00007)
Gregory, Thomas B. On simple reducible depth-two Lie algebras with classical reductive null component. (84h:17005)

17B55 Homological methods in Lie algebras

secondary classifications:

- Pommaret, Jean-François** Cohomologie de déformation des équations de Lie. [Deformation cohomology of Lie equations] (84f:58119)

17B56 Cohomology of Lie algebras

- Borel, A.** Regularization theorems in Lie algebra cohomology. Applications. 84h:17009
De Wilde, Marc Local Chevalley cohomologies of the dynamical Lie algebra of a symplectic manifold. (See 84d:53003)
Dzhumadil'daev, A. S. Relative cohomology and deformations of the Lie algebras of Cartan types. (Russian) 84c:17012
Feigin, B. L. (with Fialovski, A.) The cohomology of nilpotent algebras of flows. (Russian) 84c:17013
Fel'dman, G. L. Ends of Lie algebras. (Russian) 84h:17010
Fialovski, A. See Feigin, B. L., 84c:17013
Fletcher, William T. On Whitehead's second lemma for Lie algebras. 84a:17008
Jacobsson, Calle On the double Poincaré series of the enveloping algebras of certain graded Lie algebras. 84c:17010a
 See also Löfwall, Clas, 84c:17010b
Löfwall, Clas Appendix to: "On the double Poincaré series of the enveloping algebras of certain graded Lie algebras" [Math. Scand. 51 (1982), no. 1, 45-58; MR 84c:17010a] by C. Jacobsson. 84c:17010b
Santharubane, L. J. Cohomology of Heisenberg Lie algebras. 84b:17010
Sullivan, John Brendan Lie algebra cohomology at irreducible modules. 84d:17014
Tarazona, Daniel Special squares in the category of Lie algebras. (Spanish. English summary) 84m:17008

- Tolpygo, A. K. Cohomology of Lie algebras and norms of polynomials. (Russian) **84c:17014**
 Newton polyhedra and the inverse Borel-Weil theorem. (Russian) **84m:17009**

secondary classifications:

- Bonora, L. (with Cotta-Ramusino, P.) Some remarks on BRS transformations, anomalies and the cohomology of the Lie algebra of the group of gauge transformations. **(84g:81030)**
 (with Cotta-Ramusino, P.; Reina, Cesare) Conformal anomaly and cohomology. **(84c:81129)**
 Cotta-Ramusino, P. See Bonora, L., **(84g:81030)** and **(84c:81129)**
 De Wilde, Marc Cohomologie de Chevalley de l'algèbre de Lie des champs de vecteurs d'une variété associée à la dérivée de Lie des formes. [Chevalley cohomology of the Lie algebra of vector fields of a manifold associated with the Lie derivative of forms] **(84c:58242)**
 Lambe, Larry A. (with Priddy, Stewart B.) Cohomology of nilmanifolds and torsion-free, nilpotent groups. **(84c:55018)**
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 Rosenberg, Jonathan L^2 -cohomology and Lie algebra cohomology. **(84c:22029)**
 Tsujishita, Toru Continuous cohomology of the Lie algebra of vector fields. **(84b:17015)**

17B60 Lie rings associated with other structures (associative, Jordan, etc.)
 [See also 15A30, 16A68, 17C40, 17C50.]

- Bakhturin, Yu. A. Special varieties of Lie algebras. (Russian) **84c:17009**
 Kakichi, Yoshiaki A construction of Lie-graded algebras by graded generalized Jordan pairs of second order. **84c:17013**
 Kikkawa, Michihiko Remarks on invariant forms of Lie triple algebras. **84m:17010**
 Rhinow, Gerd Eine Konstruktion von Lie-Algebren aus Jordan-Tripel-Systemen. (English summary) [A construction of Lie algebras from Jordan triple systems] **84d:17015**

secondary classifications:

- Khukhro, E. I. On the adjoint Lie ring of the free 2-generator group of prime period and on Hughes's conjecture for 2-generator p -groups. (Russian) **(84c:20045)**
 Radford, David E. On when a separable field extension in characteristic $p > 0$ is determined by its Frobenius structure. I. **(84m:12024)**

17B65 Infinite-dimensional Lie algebras [See also 22E65.]

- Agalakov, S. A. Basis of the free solvable product of Lie algebras. (Russian) **84c:17011**
 Alagia, Humberto R. Cartesian subalgebras of Banach-Lie algebras of operators. **84c:17010**
 De Wilde, Marc (with Lecomte, Pierre B. A.) Isomorphisms of Lie algebras of vector fields. **84d:17016**
 Feigin, B. L. (with Fuks, D. B.) Casimir operators in modules over the Virasoro algebra. (Russian) **84c:17012**
 Fialovski, A. Deformations of the Lie algebra of vector fields on the line. (Russian) **84m:17011**
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 Gabber, Ofer (with Kac, Victor G.) On defining relations of certain infinite-dimensional Lie algebras. **84c:17011**
 Hiller, Howard Affine Lie algebras and algebraic K -theory. **84c:17015**
 Honda, Masanobu Joins of weak subideals of Lie algebras. **84b:17012**
 Hamed, Yehiel On realizations of infinite-dimensional Lie-admissible algebras. II. **84b:17013**
 Kac, Victor G. See Gabber, Ofer, **84b:17011** and Peterson, Dale H., **84g:17017**
 Kubo, Fujio An infinite-dimensional semisimple Lie algebra. **84b:17014**
 Kukin, G. P. The word problem and free products of Lie algebras and associative algebras. (Russian) **84m:17012**
 Lecomte, Pierre B. A. See De Wilde, Marc, **84d:17016**
 Lepowsky, James Affine Lie algebras and combinatorial identities. **84c:17014**
 Macdonald, I. G. Affine Lie algebras and modular forms. **84c:17014**
 Peterson, Dale H. (with Kac, Victor G.) Infinite flag varieties and conjugacy theorems. **84g:17017**
 Ruegg, H. Labelling of irreducible representations of super Lie algebras. (See **84c:00008**)
 Stewart, I. N. Subideals and serial subalgebras of Lie algebras. **84c:17011**
 Tsujishita, Toru Continuous cohomology of the Lie algebra of vector fields. **84b:17015**
 Wilson, Robert Lee Euclidean Lie algebras are universal central extensions. **84c:17011**

secondary classifications:

- Bernstein, Joseph N. (with Leites, D. A.) Invariant differential operators and irreducible representations of Lie superalgebras of vector fields. **(84c:17015)**
 Brockett, Roger W. Nonlinear systems and nonlinear estimation theory. **(84g:93076)**
 Bytsenko, A. A. (with Tseitin, M. G.) Nonlinear systems with exponential interaction generated by Kähler chiral models. (Russian. English summary) **(84c:81038)**
 Chacín, Mauricio Orellana Prolongations and formal derivations in the algebra of relations of order one. (Portuguese) **(84b:58112)**
 Chau, Ling Lie Self-dual Yang-Mills as a totally integrable system. (See **84c:00008**)
 (with Ge, Mo Lin; Sinha, Anarendra; Wu, Yong Shi) Hidden-symmetry algebra for the self-dual Yang-Mills equation. **(84f:81055)**
 (with Wu, Yong Shi; Hou, Bo Yu; Ge, Mo Lin) H -transformation, Noether analysis of nonlocal infinitely conserved currents and Kac-Moody algebraic structure in chiral model and their extensions. **(84m:81099)**
 Date, Etsurō (with Jimbo, Michio; Kashiwara, Masaki; Miwa, Tetsuji) Transformation groups for soliton equations. III. Operator approach to the Kadomtsev-Petviashvili equation. **(84m:58117a)**

- (with Jimbo, Michio; Kashiwara, Masaki; Miwa, Tetsuji) Transformation groups for soliton equations. IV. A new hierarchy of soliton equations of KP-type. **(84m:58117b)**
 (with Jimbo, Michio; Kashiwara, Masaki; Miwa, Tetsuji) Landau-Lifshitz equation: solitons, quasiperiodic solutions and infinite-dimensional Lie algebras. **(84b:58070)**
 Davies, M. C. (with Houston, P. J.; Leinaas, J. M.; MacFarlane, A. J.) Hidden symmetries as canonical transformations for the chiral model. **(84f:81057)**
 De Wilde, Marc Local Chevalley cohomologies of the dynamical Lie algebra of a symplectic manifold. (See **84d:53003**)
 van Eck, H. N. The explicit form of the Lie algebra of Wahlquist and Estabrook. A presentation problem. **(84c:58105a)**
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 Eichenherr, H. Symmetry algebras of the Heisenberg model and the nonlinear Schrödinger equation. **(84c:81058)**
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 (with Fuks, D. B.) Verma modules over a Virasoro algebra. **(84i:17009)**
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 Hazewinkel, Michiel On deformations, approximations and nonlinear filtering. **(84i:93138)**
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 (with Marcus, Steven I.; Sussmann, Hector J.) Nonexistence of finite-dimensional filters for conditional statistics of the cubic sensor problem. **(84c:93067)**
 Hermann, Robert Dynamical systems defined on infinite dimensional Lie algebras of the "current algebra" or "Kac-Moody" type. (See **84c:76002**)
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 Koikawa, Takao (with Sasaki, Ryu) Some remarks on the symmetry algebras of soliton equations. **(84m:58121)**
 Krishnaprasad, P. S. (with Marcus, Steven I.) On the Lie algebra of the identification problem. (See **84d:93002**)
 Ktorides, C. N. (with Papaloucas, L. Ch.) Derivation properties of a deformed Poisson algebra and the quantisation problem. **(84c:58041)**
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 Lepowsky, James (with Wilson, Robert Lee) A Lie theoretic interpretation and proof of the Rogers-Ramanujan identities. **(84d:05021)**
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 Leznov, A. N. (with Savelev, M. V.; Smirnov, V. G.) The theory of group representations and integration of nonlinear dynamical systems. (Russian. English summary) **(84c:58042)**
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 Lichnerowicz, André Automorphisms of formal algebras associated by deformation with a symplectic manifold. (See **84j:83001**)
 Sur les algèbres de Lie locales de Kirillov-Shiga. (English summary) [Local Lie algebras in the sense of Kirillov-Shiga] **(84c:58097)**
 MacFarlane, A. J. See Davies, M. C.; et al., **(84f:81057)**
 Makhankov, V. G. (with Pashaev, O. K.) A new integrable model of quantum field theory in the state space with indefinite metric. **(84d:81045)**
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 Ne'eman, Yuval Algebraic insights on quantized strings, membranes and lumps. **(84c:81120)**
 Palev, Tchevdar D. Causal A -statistics. I. General properties. **(84m:81079a)**
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 Pashaev, O. K. See Makhankov, V. G., **(84d:81045)**
 Pohlmeyer, K. A group-theoretical approach to the quantization of the free relativistic closed string. **(84b:81076)**
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 Svinolupov, S. I. (with Sokolov, V. V.) Evolution equations with nontrivial conservation laws. (Russian) **(84j:35152)**
 Talapov, V. V. Polynilpotent Lie algebras that are defined by one defining relation. (Russian) **(84c:17008)**

- Tomozeva, Yukio. See Levine, R. V., (84m:81182)
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 Ueno, Kimio. Infinite-dimensional Lie algebras acting on chiral fields and the Riemann-Hilbert problem. (84i:81075)
 Varea, V. R. Lie algebras whose maximal subalgebras are modular. (84i:17012)
 Wilson, George. The affine Lie algebra $C_2^{(1)}$ and an equation of Hirota and Satsuma. (84c:58046)
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 Wu, Yong Shi. Extension of the hidden symmetry algebra in classical principal chiral models. (84m:81135)
 See also Chan, Ling Lie; et al., (84f:81055) and (84m:81099)
 Zou, Guang Zhou (with Ge, Mo Lin). Infinite nonlocal conserved currents and Kac-Moody algebraic structure in loop space. (Chinese. English summary) (84c:81053)

17B70 Graded Lie algebras

- Backhouse, N. B. On representations of the superalgebra $osp(2, 1)$. 84g:17018
 Bernstein, Joseph N. (with Leites, D. A.) Invariant differential operators and irreducible representations of Lie superalgebras of vector fields. 84i:17015
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 Crumeyrolle, Albert. Algèbres et faisceaux d'algèbres de Lie graduées, associées à des espaces spinoriels et fibrations spinorielles par un principe de dualité. [Algebras and sheaves of graded Lie algebras associated with spinor spaces and spinor fibrations by a principle of duality] 84g:17019
 El'sting, G. O. An invariant characterization of the spaces of the induced filtration in some simple graded Lie p -algebras. (Russian) 84i:17012
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 van Holten, J. W. (with van Proeyen, A.) $N=1$ supersymmetry algebras in $d=2, 3, 4$ mod 8. 84g:17020
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 Kaplansky, Irving. The Virasoro algebra. 84c:17012
 Kuznetsov, M. I. Graded Lie algebras with zero component equal to a sum of commuting ideals. (Russian) 84c:17016
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 Muller, Iris (with Rubenthaler, Hubert; Schiffmann, Gérard) Sur la structure de certaines algèbres de Lie graduées. (English summary) [On the structure of certain graded Lie algebras] 84c:17016
 Pagon, Dushan. Deformations of nilpotent graded Lie algebras. (Russian. English summary) 84c:17015
 Graded deformations of almost free Lie algebras. (Russian. English summary) 84c:17016
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 Schiffmann, Gérard. See Muller, Iris; et al., 84c:17016
 Sergeev, A. N. Invariant polynomial functions on Lie superalgebras. (Russian) 84h:17015
 Sourlas, D. See Brodimas, G. N.; et al., 84d:17017
 Zisis, V. See Brodimas, G. N.; et al., 84d:17017

secondary classifications:

- Atsuyama, Kenji. On the algebraic structures of graded Lie algebras of second order. (84g:17005)
 Braconnier, Jean. Éléments d'algèbre différentielle graduée. [Elements of graded differential algebra] (84c:13027)
 Date, Etsurō. See Kashiwara, Masaki; et al., (84m:58053)
 De Wilde, Marc (with Lecomte, Pierre B. A.) Star-produits et déformations formelles associées aux variétés symplectiques exactes. (English summary) [Star-products and formal deformations associated with exact symplectic manifolds] (84g:17014)
 DeWitt, Bryce S. (with van Nieuwenhuizen, Peter) Explicit construction of the exceptional superalgebras $F(4)$ and $G(3)$. (84d:17005)
 Félix, Yves (with Halperin, Stephen; Thomas, Jean-Claude) Sur certaines algèbres de Lie de dérivations. (English summary) [Some Lie algebras of derivations] (84m:55011)
 Ferreira, E. (with Petitjean, A.) Algèbres de Lie régulières. [Regular Lie algebras] (84g:58111)
 Green, H. S. Colour algebras and generalized statistics. (See 84c:00008)
 Gruber, Bruno (with Santhanam, T. S.) Indecomposable representations for para-Bose algebras. (84f:81039)
 Günaydin, M. (with Sacliglu, Cihan) Oscillator-like unitary representations of noncompact groups with a Jordan structure and the noncompact groups of supergravity. (84g:22040)
 Halperin, Stephen. See Félix, Yves; et al., (84m:55011)
 Jimbo, Michio. See Kashiwara, Masaki; et al., (84m:58053)
 Kashiwara, Masaki (with Jimbo, Michio; Date, Etsurō; Miwa, Tetsuji) Kac-Moody Lie algebras and soliton equations. (Japanese) (84m:58053)
 Lecomte, Pierre B. A. See De Wilde, Marc, (84g:17014)
 Leznov, A. N. (with Sav'ev, M. V.) Two-dimensional nonlinear string-type equations and their exact integration. (84a:58050)
 (with Sav'ev, M. V.) Two-dimensional exactly and completely integrable dynamical systems. Monopoles, instantons, dual models, relativistic strings, Lund-Regge model, generalized Toda lattice, etc. (84m:58057)
 (with Sav'ev, M. V.) Two-dimensional equations of string type and their complete integration. (Russian. English summary) (84m:58058)
 Miwa, Tetsuji. See Kashiwara, Masaki; et al., (84m:58053)
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 Rocha-Caridi, Alvaro (with Wallach, Nolan R.) Highest weight modules over graded Lie algebras: resolutions, filtrations and character formulas. (84m:17005)
 Roos, Jan-Erik. On the use of graded Lie algebras in the theory of local rings. (84g:13026)
 Sacliglu, Cihan. See Günaydin, M., (84g:22040)
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 Shmelev, G. S. Differential operators that are invariant with respect to the Lie superalgebra $H(2, 2; \lambda)$ and its irreducible representations. (Russian) (84f:17003)
 Irreducible representations of infinite-dimensional Hamiltonian and Poisson Lie superalgebras, and invariant differential operators. (Russian) (84k:58088a)
 Irreducible representations of Poisson Lie superalgebras and invariant differential operators. (Russian) (84k:58088b)
 Sjödin, Gunnar. Hopf algebras and derivations. (84a:16016)
 Thomas, Jean-Claude. See Félix, Yves; et al., (84m:55011)
 Wallach, Nolan R. See Rocha-Caridi, Alvaro, (84m:17005)
- 17B99 None of the above, but in this section
- Kamiya, Noriaki. Semiprime ideals and prime ideals of Lie triple systems. 84g:17021
 Klarès, Bernard (with Sadler, Charles) Systèmes de Pfaff et algèbres de Lie libres. Étude d'une singularité polaire normale. (English summary) [Pfaffian forms and free Lie algebras. Study of a normal polar singularity] 84g:17022
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 Wisluczyński, J. Zur Darstellung von Pro- p -Gruppen und Lieschen Algebren durch Erzeugende und Relationen. [On the presentation of pro- p -groups and Lie algebras by generators and relations] 84i:17016
- secondary classifications:
- Arveson, William. Quantization and the uniqueness of invariant structures. (84j:58056)
 Charbonnel, Jean-Yves. Sur les orbites de la représentation coadjointe. [On the orbits of the coadjoint representation] (84d:22029)
 De Wilde, Marc (with Lecomte, Pierre B. A.) Algebraic characterizations of the algebra of functions and of the Lie algebra of vector fields of a manifold. (84h:58012)
 Gardner, B. J. Radical properties defined by the absence of free subobjects. (84d:16047)
 Gavrilov, S. P. Geodesics of left-invariant metrics on a connected two-dimensional nonabelian Lie group. (Russian) (84h:53059)
 Ge, Mo Lin. See Wu, Yong Shi, (84h:58153)
 Jantzen, Robert T. Generalized quaternions and spacetime symmetries. (84h:83021)
 Kaneda, Masaharu (with Seitz, Gary M.) On the Lie algebra of a finite group of Lie type. (84g:20084)
 Lecomte, Pierre B. A. See De Wilde, Marc, (84h:58012)
 Leites, D. A. (with Semenov-Tyān-Shanskii, M. A.) Integrable systems and Lie superalgebras. (Russian. English summary) (84g:58053)
 Morris, A. O. Representations of Weyl groups over an arbitrary field. (84h:20031)
 Myung, Hyo Chul. The exponentiation and deformations of Lie-admissible algebras. (84h:17001)
 (with Santilli, Ruggero Maria) Foundations of the hadronic generalization of the atomic mechanics. II. Modular-isotopic Hilbert space formulation of the exterior strong problem. (84j:81020a)
 Palev, Tshavdar D. Wigner approach to quantization. Noncanonical quantization of two particles interacting via a harmonic potential. (84i:81019)
 Santilli, Ruggero Maria. Lie-isotopic lifting of the special relativity for extended deformable particles. (84k:83003)
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 Shitneva, L. V. Lie algebras of perfect s -spaces. (Russian) (84h:53068)
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 Strandberg, M. W. P. Abstract matrix band theory for one-dimensional lattices: canonical representations and functions: a wave vector addition theorem. (84e:81009)
 Tomber, Marvin L. The history and methods of Lie-admissible algebras. (84h:17002)
 Wu, Yong Shi (with Ge, Mo Lin) A simplified derivation of the Geroch group in two-dimensional reduced gravity. (84h:58153)
- 17Cxx Jordan algebras (commutative)
- 17C05 Identities
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- Faulkner, John R. An apology for Jordan algebras in quantum theory. (See 84a:00007)
- 17C10 Structure theory
- Bix, Robert. Separable Jordan algebras over commutative rings. II. 84c:17013
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(with Ng, Seong Nam) Middle nucleus=center in semiprime Jordan algebras.

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See also Ng, Seong Nam, 84i:17018

Ng, Seong Nam (with McCrimmon, Kevin) Minimal ideals in quadratic Jordan algebras.

84i:17018

See also McCrimmon, Kevin, 84a:17013

Zel'manov, E. I. Absolute zero divisors and algebraic Jordan algebras. (Russian)

84c:17014

17C15 Representations

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Behncke, Horst Finite-dimensional representations of JB algebras. (84c:46079)

17C20 Simple, semisimple algebras

Neher, Erhard Jordan triple forms of Jordan algebras. 84k:17017

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McCrimmon, Kevin See Ng, Seong Nam, (84i:17018)

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17C25 Universal enveloping algebras

17C30 Automorphisms, derivations, other operators

17C35 Formally real domains of positivity [See also 32Nxx.]

secondary classifications:

Dorfmeister, Josef Homogeneous Siegel domains. (84b:32042)

17C40 Exceptional Jordan algebras and associated Lie groups

Petersson, Holger P. (with Racine, Michel) Exceptional Jordan division algebras. (See

84a:00007)

Racine, Michel See Petersson, Holger P., (See 84a:00007)

secondary classifications:

Biedenharn, L. C. (with Truini, P.) Exceptional groups and elementary particle structures. (84a:81041)

Imai, Takao On bounded symmetric domains of exceptional type. (84b:32044)

Truini, P. See Biedenharn, L. C., (84a:81041)

17C45 Homological methods in Jordan algebras

17C46 Cohomology of Jordan algebras

secondary classifications:

McCrimmon, Kevin Compatible Peirce decompositions of Jordan triple systems. (84c:17018)

17C50 Jordan rings associated with other structures [See also 16A68, 17B60.]

Shestakov, I. P. Finitely generated special Jordan and alternative PI-algebras. (Russian) 84k:17018

secondary classifications:

Faulkner, John R. Measurement systems and Jordan algebras. (84b:81005)

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Ayupov, Sh. A. On the construction of Jordan algebras of selfadjoint operators. (Russian) (84b:46071)

Extension of traces and type criteria for Jordan algebras of selfadjoint operators. (84a:46125)

Boydziev, Khristo N. Unbounded dissipative operators on Jordan-Banach algebras and B^* algebras. (84c:47037)

Braun, Robert Burkhard Structure and representations of noncommutative C^* -Jordan algebras. (84c:46060)

Bunce, L. J. Type I JB-algebras. (84b:46096)

Friedman, Yaakov (with Russo, Bernard) Contractive projections on operator triple systems. (84m:46090)

Kaup, Wilhelm Über die Klassifikation der symmetrischen hermiteschen Mannigfaltigkeiten unendlicher Dimension. II. [On the classification of symmetric Hermitian manifolds of infinite dimension. II.] (84d:32045)

King, W. P. C. Semifinite traces on JBW-algebras. (84d:46110)

Russo, Bernard See Friedman, Yaakov, (84m:46090)

Stacey, P. J. Type I_2 JBW-algebras. (84b:46057)

Upmeyer, Harald Derivations and automorphisms of Jordan C^* -algebras. (84a:46142)

17C99 None of the above, but in this section

McCrimmon, Kevin Strong nilpotence of solvable ideals in quadratic Jordan algebras. 84c:17019

secondary classifications:

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Sidorov, A. V. On Lie triple algebras. (Russian) (84i:17003)

Truini, P. (with Biedenharn, L. C.) An $\mathbb{R}_\infty \otimes \mathbb{R}(1)$ invariant quantum mechanics for a Jordan pair. (84j:81021)

17Dxx Other nonassociative rings and algebras

17D05 Alternative rings

Abian, Alexander Jacobson's theorem for alternative rings. 84d:17018

Anderson, Tim (with Wiegandt, Richard) Semisimple classes of alternative rings.

84f:17011

Faulkner, John R. Stable range and linear groups for alternative rings. 84m:17013

de Guzman, I. P. Annihilator alternative algebras. 84c:17016

Kleinfeld, Erwin Anticommutative elements in alternative rings. 84g:17023

Medvedev, Yu. A. Alternative algebras with maximal condition. (Russian) 84i:17019

Newcomb, Robert W. Differential systems on alternative algebras. (See 84g:93005b)

Shestakov, I. P. Alternative algebras with the identity $[x, y]^n = 0$. (Russian) 84d:17019

Widiger, Alfred Decomposition of Artinian alternative rings. 84g:17024

Alternative rings in which every proper right ideal is maximal. 84k:17020

Wiegandt, Richard See Anderson, Tim, 84f:17011

secondary classifications:

Filippov, V. T. Free Mal'tsev algebras and alternative algebras. (Russian) (84c:17015)

Gardner, B. J. Radical properties defined by the absence of free subobjects. (84d:16047)

de Guzman Molina, I. P. (with Sanz Jiménez, F.) On alternative annihilator and dual algebras. (Spanish) (84d:46087)

Hentzel, Irvin Roy Nil-semisimple locally $(-1, 1)$ rings. (84b:17003a)

The alternator ideal of right alternative rings. (84b:17003b)

(with Smith, Harry F.) Generalized alternative and Mal'cev algebras. (84i:17003)

(with Piacentini Cattaneo, Giulia Maria) Right alternative alternator ideal

algebras. (84f:17001)

Kilambi, Srinivasacharyulu Sur une caractérisation spectrale des algèbres de Banach complexes et alternées. (English summary) [On a spectral characterisation of complex alternative Banach algebras] (84f:46067)

Korshunov, M. K. Alternative and Leibniz algebras of distributions. (Russian)

(84a:46090)

Lamont, P. J. C. The nonexistence of a factorization formula for Cayley numbers.

(84m:17002)

Park, Young Lim Conditions for rings of type-A to be Boolean. (84c:17016)

Piacentini Cattaneo, Giulia Maria See Hentzel, Irvin Roy, (84f:17001)

Sanz Jiménez, F. See de Guzman Molina, I. P., (84d:46087)

Shestakov, I. P. Finitely generated special Jordan and alternative PI-algebras. (Russian) (84k:17018)

Smith, Harry F. Equivalent nilpotencies in certain generalized right alternative rings.

(84c:17001)

See also Hentzel, Irvin Roy, (84i:17003)

17D10 Mal'cev (Mal'tsev) rings

Filippov, V. T. Free Mal'tsev algebras and alternative algebras. (Russian) 84c:17015

secondary classifications:

Filippov, V. T. Generalized basis rank of varieties of algebras. (Russian) (84g:08020)

17D15 Right alternative rings

17D20 (γ, δ) -rings

17D25 Lie admissible algebras

Kálnay, Andrés J. A procedure for generating realizations of Lie-admissible and other nonassociative algebras. 84b:17017

Sagle, Arthur A. Reductive Lie-admissible algebras applied to H -spaces and connections. 84i:17019

Wene, G. P. Subspace decompositions invariant under ad_L for Lie-admissible algebras. 84k:17021

secondary classifications:

Benkart, Georgia M. The construction of examples of Lie-admissible algebras. (84a:17001)

Brodimas, G. N. See Jannussis, A. D.; et al., (84b:81049)

Jannussis, A. D. (with Brodimas, G. N.; Sourlas, D.; Streclas, A.; Sifarakis, P. D.; Papaloucas, L. C.; Tsangas, N.) Foundations of the Lie-admissible Fock space of the hadronic mechanics. (84b:81049)

Kálnay, Andrés J. Lie-admissible structure of a quantized Nambu's generalized Hamiltonian dynamics. (84f:81040)

Myung, Hyo Chul (with Santilli, Ruggero Maria) Foundations of the hadronic generalization of the atomic mechanics. II. Modular-isotopic Hilbert space formulation of the exterior strong problem. (84j:81020a)

(with Santilli, Ruggero Maria) Foundations of the hadronic generalization of the atomic mechanics. III. Bimodular-genotopic Hilbert space formulation of the interior strong problem. (84j:81020b)

★ Lie algebras and flexible Lie-admissible algebras. (84m:17001)

Okubo, Susumu Schrödinger equation for nonassociative quantum mechanics and no-go theorem. (84b:81013)

Papaloucas, L. C. See Jannussis, A. D.; et al., (84b:81049)

Santilli, Ruggero Maria Introduction to the Lie-admissible treatment of nonpotential interactions in Newtonian, statistical, and particle mechanics. (84c:70013)

★ Foundations of theoretical mechanics. II. (84b:70002)

A possible, Lie-admissible, time-asymmetric model for open nuclear reactions. (84i:81127)

See also Myung, Hyo Chul, (84j:81020a) and (84j:81020b)

Siafarikas, P. D. See Jannussis, A. D.; et al., (84b:81049)

Sourlas, D. See Jannussis, A. D.; et al., (84b:81049)

Streclas, A. See Jannussis, A. D.; et al., (84b:81049)

Trostel, Robert The Lie-admissible formulation of differential systems of even order. (84c:58031)

Tsangas, N. See Jannussis, A. D.; et al., (84b:81049)

17D92 Genetic algebras

McHale, D. (with Ringwood, G. A.) Haldane linearisation of baric algebras. 84f:17012
Ringwood, G. A. See McHale, D., 84f:17012

secondary classifications:

Wörz-Busekros, Angelika Algebraic methods in genetics. (See 84j:92003)

17D99 None of the above, but in this section

Ilamed, Yehiel On extensions of Heisenberg's equations. 84g:17025

Park, Young Lim Conditions for rings of type-A to be Boolean. 84c:17016

Reiner, David L. A q -analog of the Campbell-Baker-Hausdorff formula. 84g:17026

Stitzinger, Ernest L. Engel's theorem for a class of algebras. 84f:17013

secondary classifications:

Kirschenhofer, Peter (with Tichy, Robert Franz) Polynomialalgebren und Diskrepanz. [Polynomial algebras and discrepancy] (84b:68109)

Liu, Shao Xue (with Tsai, Chester E.) Wedderburn theorem on varieties of algebras. (84a:17003)

Santilli, Ruggero Maria An intriguing legacy of Einstein, Fermi, Jordan, and others: the possible invalidation of quark conjectures. (84b:81105)

Tichy, Robert Franz See Kirschenhofer, Peter, (84b:68109)

Tsai, Chester E. See Liu, Shao Xue, (84a:17003)

18-XX CATEGORY THEORY, HOMOLOGICAL ALGEBRA

secondary classifications:

Baumgartner, Karlheinz ★ Fragmente: meine Konstruktion und die sie begleitenden allgemeinen Strukturtheorien. (German) [Fragments: my construction and the general structure theories that accompany it] (84b:08008)

18-01 Elementary exposition, textbooks

18-02 Advanced exposition (research surveys, monographs, etc.)

Kelly, Gregory Maxwell ★ Basic concepts of enriched category theory. 84e:18001

secondary classifications:

Herrlich, Horst Categorical topology 1971-1981. (84d:54016)

18-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

(Ehresmann, Andrée Charles) See Ehresmann, Charles, (84f:01118)

Ehresmann, Charles Œuvres complètes et commentées. II-1. Structures locales. [Collected and annotated works. II-1. Local structures] (84f:01118)

18-04 Explicit machine computation and programs (not the theory of computation or programming)

18-06 Proceedings, conferences, etc.

(Brümmer, G. C. L.) See Proceedings: Symposium on Categorical Algebra and Topology, 84e:18002

(Dennis, R. Keith) See Algebraic K-theory, 84a:18001a and 84a:18001b

(Hardie, K. A.) See Proceedings: Symposium on Categorical Algebra and Topology, 84e:18002

Algebraic K-theory ★ Algebraic K-theory. Part I. 84a:18001a

★ Algebraic K-theory. Part II. 84a:18001b

Cape Town ★ Proceedings of the Symposium on Categorical Algebra and Topology, 84e:18002

Conference:

Algebraic K-Theory ★ Algebraic K-theory. Part I. 84a:18001a

★ Algebraic K-theory. Part II. 84a:18001b

Oberwolfach ★ Algebraic K-theory. Part I. 84a:18001a

★ Algebraic K-theory. Part II. 84a:18001b

Proceedings:

Symposium on Categorical Algebra and Topology ★ Proceedings of the Symposium on Categorical Algebra and Topology. 84e:18002

Symposium:

Categorical Algebra and Topology ★ Proceedings of the Symposium on Categorical Algebra and Topology. 84e:18002

secondary classifications:

(Gankrelidze, R. V.) See Algebra. Topology. Geometry, (84a:22002)

(Onishchik, A. L.) See Problems in group theory and homological algebra, (84g:20001)

Algebra. Topology. Geometry ★ Алгебра. Топология. Геометрия. Том 20. (Russian) [Algebra. Topology. Geometry. Vol. 20] (84a:22002)

Itogi Nauki i Tekhniki ★ Алгебра. Топология. Геометрия. Том 20. (Russian) [Algebra. Topology. Geometry. Vol. 20] (84a:22002)

Problems in group theory and homological algebra ★ Вопросы теории групп и гомологической алгебры. (Russian) [Problems in group theory and homological algebra] (84g:20001)

18Axx General theory of categories and functors

18A05 Definitions, generalizations

Vázquez, R. A proper setting for connection theory. (Spanish) 84j:18001

Velinov, Y. P. Polycategories. Elementary properties. (Russian and Bulgarian summaries) 84g:18001

Vorster, Roelof Restricted adjoints and topological functors. 84m:18001

secondary classifications:

Coppey, Laurent Quelques problèmes typiques concernant les graphes multiplicatifs. [Some typical problems of multiplicative graphs] (84g:18002)

Skornyakov, L. A. A general view of representations of monoids. (Russian) (84e:20078)

Topencharov, Vladimir V. Représentation binaire des (n) -catégories. (Russian and Bulgarian summaries) [Binary representation of (n) -categories] (84f:18013)

18A10 Graphs, diagram schemes, precategories, neocategories [See also 20Lxx.]

Coppey, Laurent Quelques problèmes typiques concernant les graphes multiplicatifs. [Some typical problems of multiplicative graphs] 84g:18002

Algèbres de décompositions et précatégories. [Decomposition algebras and precategories] 84h:18001

Spircu, Tiberiu Extensions of a theorem of P. Gabriel. 84c:18001

secondary classifications:

Coppey, Laurent Sur quelques structures de base pour définir les structures. [Some basic structures for defining structures] (84h:18011)

Cury, F. Systèmes de générateurs et relations pour les catégories enrichies. [Systems of generators and relations for enriched categories] (84d:18007)

Guitart, René (with Lair, C.) Existence de diagrammes localement libres. [Existence of locally free diagrams] (84g:18006a)

(with Lair, C.) Existence de diagrammes localement libres. II. [Existence of locally free diagrams. II] (84g:18006b)

Lair, C. See Guitart, René, (84g:18006a) and (84g:18006b)

18A15 Foundations, relations to logic and deductive systems [See also 03-XX.]

Reichman, Jack Z. Semicontinuous real numbers in a topos. 84j:18002

secondary classifications:

Bell, John L. Category theory and the foundations of mathematics. (84e:00012)

Buszkowski, Wojciech Some decision problems in the theory of syntactic categories. (84m:03014)

Horiguchi, Hiroshi Limits in the category of Boolean-valued models. (84d:03046a)

Strict Boolean-valued models. (84d:03046b)

Möbus, Axel Syntactical theory of functors. (84a:03081)

18A20 Epimorphisms, monomorphisms, special classes of morphisms, null morphisms, factorization (bicatagories)

Burgess, Walter D. (with Caicedo Ferrer, Xavier) Congruences in regular categories. (Spanish summary) 84c:18002

Caicedo Ferrer, Xavier See Burgess, Walter D., 84c:18002

Hoffmann, Rudolf-E. Factorization of cones. II. With applications to weak Hausdorff spaces. 84h:18002

Melton, A. (with Strecker, G. E.) On the structure of factorization structures. 84b:18001

Schröder, Johann Factorizations in general categories (submonotone quotient, superlight). 84e:18003

Schwab, Emil Ordnungsisomorphismen in \ast -regulären Kategorien mit Faserprodukten. [Order isomorphisms in \ast -regular categories with fiber products] 84h:18003

Stramaccia, Luciano Monomorphisms and epimorphisms of inverse systems. 84k:18001

Strecker, G. E. See Melton, A., 84b:18001

secondary classifications:

Pasztor, Ana Surjections of complete posets and of continuous algebras. (84i:06004)

18A22 Special properties of functors (faithful, full, etc.)

Giuli, Eraldo (with Strecker, G. E.; Tozzi, Anna) On E -dense hulls and shape theory. 84g:18003

Hoffmann, Rudolf-E. Minimal topological completion of ${}_K\text{Ban} \rightarrow {}_K\text{Vec}$. 84c:18003

Lair, C. Conditions syntaxiques de plongement. I. Prolongements de foncteurs et extensions de Kan. [Syntactic conditions of embedding. I. Extensions of functors and Kan extensions] 84g:18004

Strecker, G. E. (with Titcomb, T.) Faithfulness vs. topologicity. 84f:18001

See also Giuli, Eraldo; et al., 84g:18003

Titcomb, T. See Strecker, G. E., 84f:18001

Tozzi, Anna See Giuli, Eraldo; et al., 84g:18003

secondary classifications:

Melton, A. (with Strecker, G. E.) On the structure of factorization structures. (84b:18001)

Nico, William R. Wreath products and extensions. (84f:18002)

Strecker, G. E. See Melton, A., (84b:18001)

18A23 Natural morphisms, dinatural morphisms

18A25 Functor categories, comma categories

Cheng, Charles Ching-an Exact limits. 84d:18001

Nico, William R. Wreath products and extensions. 84f:18002

Tozzi, Anna On factorization structures and epdense hulls. 84j:18003

secondary classifications:

Foltz, François Légitimité des catégories de préfaïssceaux. [Legitimacy of categories of presheaves] (84g:18027a)

Comment on: "Legitimacy of categories of presheaves". (French) (84g:18027b)

Heller, Alex Homotopy in functor categories. (84j:55009a)

Erratum to: "Homotopy in functor categories". (84j:55009b)

Höinghaus, Dorothea (with Richter, Günther) Hilbert basis quivers. (84j:16011)

Richter, Günther See Höinghaus, Dorothea, (84j:16011)

Stramaccia, Luciano Monomorphisms and epimorphisms of inverse systems. (84i:18001)

Vorster, Roelof Restricted adjoints and topological functors. (84m:18001)

18A30 Limits and colimits (products, sums, directed limits, pushouts, fiber products, equalizers, kernels, ends and coends, etc.)

Foltz, François Sur la commutation des limites. [The commutation of limits] 84g:18005

Guitart, René (with Lair, C.) Existence de diagrammes localement libres. [Existence of locally free diagrams] 84g:18006a

(with Lair, C.) Existence de diagrammes localement libres. II. [Existence of locally free diagrams. II] 84g:18006b

(with Lair, C.) Limites et co-limites pour représenter les formules. [Limits and colimits for representing formulas] 84m:18002

Lair, C. See Guitart, René, 84g:18006a; 84g:18006b and 84m:18002

Trnková, Věra Unnatural isomorphisms of products in a category. 84c:18004

secondary classifications:

Bourn, Dominique A canonical action on indexed limits: an application to coherent homotopy. (84a:18013)

Burgess, Walter D. (with Caicedo Ferrer, Xavier) Congruences in regular categories. (Spanish summary) (84c:18002)

Caicedo Ferrer, Xavier See Burgess, Walter D., (84c:18002)

Carboni, A. (with Magno, R. Celia) The free exact category on a left exact one. (84g:18017)

Fourné, René Le collage d'enveloppes est une amalgamation. (English summary) [The gluing of hulls is an amalgamation] (84h:52002)

Magno, R. Celia See Carboni, A., (84g:18017)

Tozzi, Anna On factorization structures and epdense hulls. (84j:18003)

18A32 Factorization of morphisms (via images, coimages, dominions, codominions), substructures, quotient structures, congruences, amalgams

MacDonald, John (with Tholen, Walter) Decomposition of morphisms into infinitely many factors. 84c:18005

Melton, A. Hereditary factorization structures on Top and T_0 . 84g:18007

Németi, István On notions of factorization systems and their applications to cone-injective subcategories. 84a:18002

Tholen, Walter See MacDonald, John, 84c:18005

secondary classifications:

Činčura, Juraj A remark on factorization systems and reflective subcategories. (Russian and Slovak summaries) (84f:18003)

Coppey, Laurent Algèbres de décompositions et précatégories. [Decomposition algebras and precategories] (84h:18001)

Giuli, Eraldo (with Strecker, G. E.; Tozzi, Anna) On E -dense hulls and shape theory. (84g:18003)

Margiocco, Marco (with Mora, Fulvio) The category of exact categories. (Italian. English summary) (84d:18009)

Melton, A. (with Strecker, G. E.) On the structure of factorization structures. (84b:18001)

Mora, Fulvio See Margiocco, Marco, (84d:18009)

Strecker, G. E. See Melton, A., (84b:18001) and Giuli, Eraldo; et al., (84g:18003)

Tozzi, Anna See Giuli, Eraldo; et al., (84g:18003)

18A35 Categories admitting limits (complete categories), functors commuting with limits, continuous functors, completions

Takahashi, Michihiro Completeness and C -cocompleteness of the category of semimodules. 84g:18008

Tholen, Walter Completions of categories and shape theory. 84g:18009

secondary classifications:

Adámek, Jiri (with Koubek, V.) Cartesian closed concrete categories. (84g:18023)

Diers, Yves Catégories multiéquationnelles. [Multiequational categories] (84m:18009)

Koubek, V. See Adámek, Jiri, (84g:18023)

Lair, C. Conditions syntaxiques de plongement. I. Prolongements de foncteurs et extensions de Kan. [Syntactic conditions of embedding. I. Extensions of functors and Kan extensions] (84g:18004)

Simon, Daniel On the structure of locally finite pure semisimple Grothendieck categories. (84c:18021)

18A40 Adjoint functors (representable functors, universal constructions, reflective subcategories, reflections, etc.), constructions of adjoints (Kan extensions, etc.)

Činčura, Juraj A remark on factorization systems and reflective subcategories. (Russian and Slovak summaries) 84f:18003

Frei, Armin Kan extensions and systems of imprimitivity. 84c:18006

Shape and induced representations. 84f:18004

Giuli, Eraldo Topological categories with both epi-reflective and coreflective proper subcategories. 84c:18002

Goebel, Rotraut Generalized adjoint situations concerning categories of graphs with certain Hamiltonian properties (questions of existence). (German and Russian summaries) 84h:18004

MacDonald, John (with Stone, Arthur) Essentially monadic adjunctions. 84d:18002

Stone, Arthur See MacDonald, John, 84d:18002

Stramaccia, Luciano Reflective subcategories and dense subcategories. 84c:18004

secondary classifications:

Banaschewski, Bernhard On lattices of continuous functions. (84c:54012)

Cerruti, Umberto Completion of L -fuzzy relations. (84i:03093)

Giuli, Eraldo (with Strecker, G. E.; Tozzi, Anna) On E -dense hulls and shape theory. (84g:18003)

(with Tozzi, Anna) On epdense subcategories of topological categories. (84m:18008)

Kashu, A. I. Duality between localizations and colocalizations in an adjoint situation. (Russian) (84b:16030)

Kelly, Gregory Maxwell Two addenda: "A unified treatment of transfinite constructions for free algebras, free monoids, colimits, associated sheaves and so on" [Bull. Austral. Math. Soc. 22 (1980), no. 1, 1-83; MR 82h:18003]. (84a:18011)

On the essentially-algebraic theory generated by a sketch. (84g:18019)

Lair, C. Conditions syntaxiques de plongement. I. Prolongements de foncteurs et extensions de Kan. [Syntactic conditions of embedding. I. Extensions of functors and Kan extensions] (84g:18004)

Melton, A. (with Strecker, G. E.) On the structure of factorization structures. (84b:18001)

Nel, L. D. Bornological L_1 -functors as Kan extensions and Riesz-like representations. (84j:46095)

Ohlfeld, H. J. K. Semitopological functors that induce idempotent monads. (84g:18011)

Another characterization of bicoreflective subcategories. (84g:18012)

Porst, Hans-E. Adjoint diagonals for topological completions. (84a:18008)

Richter, Günther Algebraic categories of topological spaces. (84c:18013)

Ruiz Salguero, Carlos (with Ruiz Salguero, Roberto) Conditions for a realization functor to commute with finite products. (Spanish summary) (84c:18009)

Ruiz Salguero, Roberto See Ruiz Salguero, Carlos, (84c:18009)

Schwarz, Friedhelm Exponential objects in categories of (pre)topological spaces and their natural function spaces. (84g:18016)

Stramaccia, Luciano Monomorphisms and epimorphisms of inverse systems. (84i:18001)

Strecker, G. E. (with Titcomb, T.) Faithfulness vs. topologicity. (84f:18001)

See also Melton, A., (84b:18001) and Giuli, Eraldo; et al., (84g:18003)

Tholen, Walter Completions of categories and shape theory. (84g:18009)

Titcomb, T. See Strecker, G. E., (84f:18001)

Tozzi, Anna See Giuli, Eraldo; et al., (84g:18003) and (84m:18008)

Vorster, Roelof Restricted adjoints and topological functors. (84m:18001)

18A99 None of the above, but in this section

Burešová, Libuše Über Mengen von Derivationen. II. [On sets of derivations. II] 84a:18003

Gelfand, I. M. (with Ponomarev, V. A.) Gabriel's theorem is also valid for representations of equipped graphs by relations. (Russian) 84c:18001

Höppner, Michael A note on the structure of injective diagrams. 84g:18010

Lair, C. Catégories modelables et catégories esquissables. [Modelizable categories and sketchable categories] 84g:18004

- Ohlhoff, H. J. K. Semitopological functors that induce idempotent monads. **84j:18011**
 Another characterization of bioreflexive subcategories. **84j:18012**
 Ponomarev, V. A. See Gelfand, I. M., **84i:18001**

secondary classifications:

- Benecke, Klaus (with Reichel, Horst) Equational partiality. (**84j:08016**)
 Kasumov, N. M. Fuzzy objects in categories. (Russian. English and Azerbaijani summaries) (**84f:18010**)
 Liu, Ying Ming A generation of fuzzy category and constructions of invertible elements in the fuzzy category. (**84m:03078**)
 Negoită, Constantin Virgil On the stability of fuzzy systems. (See **84c:92002**)
 Reichel, Horst See Benecke, Klaus, (**84j:08016**)

18Bxx Special categories

- Olivier, Jean-Pierre (with Serrato, Dany) ★Catégories de Dedekind et correspondances dans les catégories classiques et ailleurs. (French) [Dedekind categories and correspondences in classical categories and elsewhere] **84f:18005**
 Serrato, Dany See Olivier, Jean-Pierre, **84f:18005**

18B05 Category of sets, characterizations [See also 03--XX.]

secondary classifications:

- Guitart, René Théorie des bornes. I. [Theory of bounds. I] (**84i:03089a**)
 Théorie des bornes. II. [Theory of bounds. II] (**84i:03089b**)
 Rosický, Jiří Théorie des bornes. III. [Theory of bounds. III] (**84i:03089c**)
 Servi, Mario Categories and sets. (Italian) (See **84k:03006**)

18B10 Category of relations, additive relations

- Bankston, Paul Obstacles to duality between classes of relational structures. **84j:18005**
 Mora, Ferdinando (with Mora, Fulvio) Quotients, fractions, symmetrizations. **84m:18003**
 Mora, Fulvio See Mora, Ferdinando, **84m:18003**
 Pultr, Aleš Subdirect irreducibility and congruences. **84a:18004**

secondary classifications:

- Burgess, Walter D. (with Caicedo Ferrer, Xavier) Congruences in regular categories. (Spanish summary) (**84c:18002**)
 Caicedo Ferrer, Xavier See Burgess, Walter D., (**84c:18002**)
 Guitart, René Carrés exacts et carrés deductifs. [Exact squares and deductive squares] (**84f:18028**)

18B15 Imbedding theorems, universal categories [See also 18E20.]

- Lair, C. Conditions syntaxiques de plongement. II. Prolongements de faisceaux et faisceaux associés. [Syntactic conditions of embedding. II. Extensions of sheaves and associated sheaves] **84j:18006**

secondary classifications:

- Lair, C. Conditions syntaxiques de plongement. I. Prolongements de foncteurs et extensions de Kan. [Syntactic conditions of embedding. I. Extensions of functors and Kan extensions] (**84g:18004**)

18B20 Categories of machines, automata, operative categories [See also 03D05, 68Dxx, 68F10.]

- Clément, Michel F. Systèmes dynamiques et fibrations. Concept d'opt-automate. [Dynamic systems and fibrations. The concept of opt-automaton] **84h:18005**
 Pfender, M. (with Reiter, Reimund; Sartorius, M.) Constructive arithmetics. **84d:18003**
 Reiter, Reimund See Pfender, M.; et al., **84d:18003**
 Sartorius, M. See Pfender, M.; et al., **84d:18003**
 Wätjen, Dietmar A generalization of the input and output process approach to categorical automata theory. (German and Russian summaries) **84f:18006a**
 A comparison between two approaches to categorical automata theory. (English and Russian summaries) **84f:18006b**

secondary classifications:

- Fernández Rodríguez, R. M. ★Categorías fibradas y funtores algebraicos. (Spanish) [Fibered categories and algebraic functors] (**84d:18008**)
 Melikadze, N. L. Automata in categories. The decomposition problem. (**84c:68058**)
 Merzenich, W. Co-algebras as machines for the interpretations of flow diagrams. (**84f:68043**)
 Novotný, Jiří The category of Pawlak machines. (**84h:68065**)
 Novotný, Miroslav Characterization of the category of connected machines. (**84k:68041**)
 Warner, M. W. Representations of (M, R) -systems by categories of automata. (**84f:68044**)
 Alébra See Fernández Rodríguez, R. M., (**84d:18008**)

18B25 Topoi [See also 03G25.]

- Acuña-Ortega, Osvaldo Tertium non datur in a topos of finite sets. (Spanish. English summary) **84a:18005a**
 On a characterization of toposes of finite cardinals. (Spanish. English summary) **84a:18005b**
 A characterization of k -finite decidable objects. (Spanish. English summary) **84f:18007**
 Internally projective objects and equivalence relations. (Spanish. English summary) **84f:18008**

- Borceux, Francis On algebraic localizations. **84c:18007**
 Fourman, M. P. T_1 spaces over topological sites. **84m:18004**
 Geanău, M. Quelques propriétés de l'exponentielle dans la catégorie abélienne des objets groupes abéliens dans un topos élémentaire. (Romanian summary) [Some properties of the exponentiation in the abelian category of abelian group objects in an elementary topos] **84j:18007**

See also Murchiston, G. S., **84d:18004**

- Guitart, René Extenseurs. [Extensors] **84c:18008**
 Harting, Roswitha Locally injective abelian groups in a topos. **84m:18005**
 Hayashi, Susumu On set theories in toposes. **84h:18002**
 Ioniță, Cătălin Algebraic toposes and topologies. **84g:18013**
 Johnstone, Peter T. Quotients of decidable objects in a topos. **84h:18006**
 Kennison, John F. Separable algebraic closure in a topos. **84h:18007**
 Kurata, Reijiro Foundations of topos. I. Topoi in logic. (Japanese) **84m:18006**
 Lambek, J. (with Scott, P. J.) Algebraic aspects of topos theory. **84c:18005**
 Toposes are monadic over categories. **84b:18003**

- Murchiston, G. S. Note on paper of M. Geanău: "Abelian cohomology in an elementary topos" [Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) **26**(74) (1982), no. 1, 51–57; MR **83j:18008**]. **84d:18004**

- Radu, Alexandru Gh. ★Teoria toposurilor. Vol. II. (Romanian) [Theory of topos. Vol. II] **84g:18014**

- Rosenthal, Kimmo I. Quotient systems in Grothendieck topos. **84m:18007**
 Scott, P. J. See Lambek, J., **84c:18005**
 Tavakoli, Javad Normal forms of matrices in topos. **84c:18009**
 Elements of free modules in topos. **84a:18006**
 Ulbrich, Karl-Heinz Sur les extensions de groupes à noyau abélien. (English summary) [On extensions of groups with abelian kernel] **84a:18007**

secondary classifications:

- Adelman, M. (with Johnstone, Peter T.) Serre classes for toposes. (**84a:18018**)
 Blass, Andreas (with Ščedrov, Andrej) Boolean classifying topos. (**84c:03078**)
 (Bochvar, D. A.) See Goldblatt, R., (**84m:03100**)
 Bucur, Ionel ★Căpitole speciale de algebră. (Romanian) [Special chapters of algebra] (**84c:14001**)
 Bunge, Marta Synthetic aspects of C^∞ -mappings. (**84h:58019**)
 Daputo, Carlo Interpretation in an elementary topos. (Italian summary) (**84f:03056**)
 (Galburà, Gh.) See Bucur, Ionel, (**84c:14001**)
 Goldblatt, R. ★Топосы. (Russian) [Topoi] (**84m:03100**)
 (Grishin, V. N.) See Goldblatt, R., (**84m:03100**)
 Harting, Roswitha Locally injective G -sheaves of abelian groups. (**84a:18022**)
 Johnstone, Peter T. The point of pointless topology. (**84f:01043**)
 See also Adelman, M., (**84a:18018**)
 Mehdi Ebrahimi, M. Equational compactness of sheaves of algebras on a Noetherian locale. (**84c:08010**)
 Moerdijk, Ieke Gluing topos and higher order disjunction and existence. (**84k:03149**)
 Equational classes of toposes. (**84g:03106**)
 Mulvey, C. J. (with Pelletier, Joan Wick) The dual locale of a seminormed space. (**84k:46052**)
 Negoită, Constantin Virgil Fuzzy sets in topos. (**84c:03080**)
 (Onicescu, Octav) See Bucur, Ionel, (**84c:14001**)
 Pelletier, Joan Wick (with Rosebrugh, Robert) On subcategories of Banach spaces in sheaves. (**84k:46051**)
 See also Mulvey, C. J., (**84k:46052**)
 Pitts, A. M. Fuzzy sets do not form a topos. (**84c:03081**)
 Ponashe, D. Some remarks on the category $\text{Fuz}(H)$ of M. Eytan. (**84c:03082**)
 Reichman, Jack Z. Semicontinuous real numbers in a topos. (**84j:18002**)
 Rosebrugh, Robert See Pelletier, Joan Wick, (**84k:46051**)
 Ščedrov, Andrej See Blass, Andreas, (**84c:03078**)
 Servi, Mario Categories and sets. (Italian) (See **84k:03006**)
 (Shokurov, V. V.) See Goldblatt, R., (**84m:03100**)
 Uesu, Tadahiro Intuitionistic theories and toposes. (**84f:03057**)
 Van Osdol, Donovan H. A Borel topos. (**84h:18013**)

18B30 Categories of topological spaces and continuous mappings [See also 54--XX.]

- Giuli, Eraldo (with Tozzi, Anna) On epimorphic subcategories of topological categories. **84m:18008**
 González Acuña, F. See de Neymet de Christ, S., **84c:18011**
 Ladegaillerie, Yves Les 2-catégories 1-isotopiques et le produit 2-fibré. (English summary) [1-isotopic 2-categories and 2-fibered products] **84g:18015**
 Lellahi, Kazem Construction de foncteurs topologiques. [Construction of topological functors] **84c:18010**
 de Neymet de Christ, S. (with González Acuña, F.) A generalization of Fox's spread completion. **84c:18011**
 Ohlhoff, H. J. K. (with Schoeman, M. J.) Radical and semisimple classes in TopGrp . **84f:18009**
 Forst, Hans-E. Adjoint diagonals for topological completions. **84a:18008**
 Raha, Asit Baran Projectives in some categories of Hausdorff spaces. **84c:18012**
 Richter, Günther Algebraic categories of topological spaces. **84c:18013**
 Salicrú López, Graciela Normal connection subcategories. **84h:18008**
 Schoeman, M. J. See Ohlhoff, H. J. K., **84f:18009**
 Schwarz, Friedhelm Exponential objects in categories of (pre)topological spaces and their natural function spaces. **84g:18016**
 Cartesian closedness, exponentiality, and final hulls in pseudotopological spaces. **84d:18005**
 Tozzi, Anna See Giuli, Eraldo, **84m:18008**

secondary classifications:

- Banaschewski, Bernhard** The power of the ultrafilter theorem. (84f:03043)
(with Brümmer, G. C. L.; Hardie, K. A.) Biframes and bispaces. (84h:06012)
- Bourdaud, Gérard** Quelques aspects de la dualité en analyse fonctionnelle. [Some aspects of duality in functional analysis] (84i:46072)
- Brandenburg, H.** (with Hušek, Miroslav) A remark on Cartesian closedness. (84a:18014)
- Brümmer, G. C. L.** See **Banaschewski, Bernhard**; et al., (84h:06012) and *Proceedings: Symposium on Categorical Algebra and Topology*, (84e:18002)
- Činčura, Jura** Tensor products in categories of closure spaces. (Russian and Slovak summaries) (84c:18017)
- Giuli, Eraldo** (with Strecker, G. E.; Tozzi, Anna) On E -dense hulls and shape theory. (84g:18003)
- Topological categories with both epireflective and coreflective proper subcategories. (84c:18002)
- Hardie, K. A.** See **Banaschewski, Bernhard**; et al., (84h:06012) and *Proceedings: Symposium on Categorical Algebra and Topology*, (84e:18002)
- Hastings, Maryam Shayegan** On hemineariness spaces. (84c:54047)
- Herrlich, Horst** Are there convenient subcategories of \mathbf{Top} ? (84c:54015)
- Hušek, Miroslav** Applications of category theory to uniform structures. (84c:54045)
See also **Brandenburg, H.**, (84a:18014)
- Kriegel, A.** Die richtigen Räume für Analysis im Unendlich-Dimensionalen. (English summary) [The "right" spaces for analysis in infinite dimensions] (84c:46044)
- Lugojan, Sorin** Generalized topology. (Romanian. English summary) (84c:54005)
- Némethi, Csaba** Topological functors and invariant objects. (Romanian summary) (84c:18014)
- Niefield, S. B.** Cartesian spaces over T and locales over $\Omega(T)$. (84c:54016)
- Strecker, G. E.** (with Titcomb, T.) Faithfulness vs. topologicity. (84f:18001)
See also **Giuli, Eraldo**; et al., (84g:18003)
- Thiruvikraman, T.** Wallman-type compactification as a reflection. (84c:54041)
- Titcomb, T.** See **Strecker, G. E.**, (84f:18001)
- Tozzi, Anna** On factorization structures and epdense hulls. (84j:18003)
See also **Giuli, Eraldo**; et al., (84g:18003)
- Vázquez, R.** A proper setting for connection theory. (Spanish) (84j:18001)
- Cape Town** ★ *Proceedings of the Symposium on Categorical Algebra and Topology*. (84e:18002)
- Proceedings:**
Symposium on Categorical Algebra and Topology ★ *Proceedings of the Symposium on Categorical Algebra and Topology*. (84e:18002)
- Symposium:**
Categorical Algebra and Topology ★ *Proceedings of the Symposium on Categorical Algebra and Topology*. (84e:18002)

18B35 Preorders, orders and lattices (viewed as categories) [See also 06-XX.]

secondary classifications:

- Niefield, S. B.** Exactness and projectivity. (84c:18016)
- Plotkin, G. D.** See **Smyth, M. B.**, (84d:68052)
- Smyth, M. B.** (with Plotkin, G. D.) The category-theoretic solution of recursive domain equations. (84d:68052)

18B40 Groupoids, semigroupoids, semigroups, groups (viewed as categories) [See also 20Axx, 20Lxx, 20Mxx.]

secondary classifications:

- Batbedat, A.** (with Reilly, Norman R.) Categories and binary semigroups. (84e:20080)
- Castellini, Gabriele** Epireflections in the category of abelian topological groups. (Italian summary) (84b:22002)
- Guitart, René** Getting started towards algebraic analysis. (84b:58013)
- Reilly, Norman R.** See **Batbedat, A.**, (84e:20080)

18B99 None of the above, but in this section

- Carboni, A.** (with Magno, R. Celia) The free exact category on a left exact one. (84g:18017)
- Carrega, J.-C.** The categories \mathbf{Set} and \mathbf{Fuz} . (84c:18002)
- Ehresmann, Andrée Charles** Catégories localement triviales. Catégories microtransitives. [Locally trivial categories. Microtransitive categories] (84h:18009)
- Kasumov, N. M.** Fuzzy objects in categories. (Russian. English and Azerbaijani summaries) (84f:18010)
- Magno, R. Celia** See **Carboni, A.**, (84g:18017)
- Némethi, Csaba** Topological functors and invariant objects. (Romanian summary) (84c:18014)
- Testa, Stefano** On a universe of monotone devices. (Italian) (84b:18004)
- Wiweger, Antoni** Categories of kits, coloured graphs, and games. (84a:18009)

secondary classifications:

- Banaschewski, Bernhard** On categories of algebras equivalent to a variety. (84g:08025)
- Bankston, Paul** (with Fox, Ralph) On categories of algebras equivalent to a quasivariety. (84g:08026)
On productive classes of function rings. (84c:03056)
- Burmeister, Peter** (with Reichel, Horst) Stand und Entwicklungstendenzen der Theorie partieller Algebren. [Level and trends of development of the theory of partial algebras] (84m:08007)
- Căzănescu, Virgil Emil** (with Ștefănescu, Gheorghe) The category of ordered algebras. (Romanian. English summary) (84a:06012)

- Cerruti, Umberto** Graphs and fuzzy graphs. (84f:05078)
- Day, R. J.** A note on powers of Hausdorff fields. (84b:13038)
- Dodson, C. T. J.** A new generalisation of graph theory. (84c:05068)
- Fox, Ralph** See **Bankston, Paul**, (84g:08026)
- Goebel, Rotraut** Generalized adjoint situations concerning categories of graphs with certain Hamiltonian properties (questions of existence). (German and Russian summaries) (84b:18004)
- Hitchcock, A. G.** Categorical anatomy of closed graph and open mapping theorems. (84i:46010)
- Hušek, Miroslav** Applications of category theory to uniform structures. (84c:54045)
- Huwig, H.** Ein Modell des $P=NP$ -Problems mit einer positiven Lösung. (English summary) [A model of the $P=NP$ -problem with a positive solution] (84f:03037)
- Joyal, André** Une théorie combinatoire des séries formelles. (English summary) [A combinatorial theory of formal series] (84d:05025)
- Ladegaillier, Yves** Les 2-catégories 1-isotopiques de surfaces à bord et de plongements de 1-complexes dans les surfaces. (English summary) [The 1-isotopic 2-categories of 2-manifolds with boundaries and of embeddings of 1-complexes into surfaces] (84c:57003)
- Nešetřil, Jaroslav** (with Prömel, H. J.; Rödl, Vojtěch; Voigt, Bernd) Canonical ordering theorems, a first attempt. (84f:05014)
- Pims, A. G.** Full imbeddings of categories of algebraic systems and determinability of a model by the semigroup of its endomorphisms. (Russian) (84c:03036)
- Porter, Timothy** Internal categories and crossed modules. (84c:18015)
- Prömel, H. J.** See **Nešetřil, Jaroslav**; et al., (84f:05014)
- Puystjens, Roland** (with Robinson, Donald W.) The Moore-Penrose inverse of a morphism with factorization. (84h:15006)
- Reichel, Horst** See **Burmeister, Peter**, (84m:08007)
- Robinson, Donald W.** See **Puystjens, Roland**, (84h:15006)
- Rodabaugh, S. E.** A categorical accommodation of various notions of fuzzy topology. (84c:54005)
- Rödl, Vojtěch** See **Nešetřil, Jaroslav**; et al., (84f:05014)
- Seda, Anthony Karel** On the categories $\mathbf{Sp}(X)$ and $\mathbf{Ban}(X)$. (84g:58009)
- Skala, Heinz J.** Modelling vagueness. (84m:03072)
- Skornyakov, L. A.** Stochastic acts and comonules. (84f:20073)
- Sontag, Eduardo D.** Remarks on piecewise-linear algebra. (84h:52015)
- Ștefănescu, Gheorghe** The characterization of universal-effective monomorphisms in the category of universal algebras and relational systems. (Romanian. English summary) (84b:08011)
See also **Căzănescu, Virgil Emil**, (84a:06012)
- Sterna-Karwat, Alicja** Some categorical properties of convex processes. (84h:90066)
On weak monomorphisms in the category of convex processes. (84d:90086)
- Takahashi, Michihito** Completeness and C -cocompleteness of the category of semimodules. (84g:18008)
Extensions of semimodules. I. (84b:16024)
- Tishin, A. I.** Theory of categories and systems research in sociology. (Russian) (See 84d:92046)
- Voigt, Bernd** See **Nešetřil, Jaroslav**; et al., (84f:05014)
- Wang, Pei Zhuang** Fuzzy sets and categories of fuzzy sets. (Chinese) (84i:03107)
- Zelikovskii, A. Z.** Graphs of particular categories of contractions. (Russian) (84b:05081)
- Zelinsky, Daniel** Similarity of nilpotent, integer matrices, or, four elementary categories. (84f:13007)

18Cxx Categories and algebraic theories

18C05 Equational categories [See also 03-XX, 08C05.]

- Isbell, John R.** Generic algebras. (84b:18010)
- Rosický, Jiří** On algebraic categories. (84a:18010)

secondary classifications:

- Lambek, J.** (with Scott, P. J.) Algebraic aspects of topos theory. (84c:18005)
- Mehdi Ebrahimi, M.** Equational compactness of sheaves of algebras on a Noetherian locale. (84c:08010)
- Pigozzi, Don** On the structure of equationally complete varieties. II. (84f:08007)
- Porter, Timothy** Reduced powers, ultrapowers and exactness of limits. (84h:55017)
- Scott, P. J.** See **Lambek, J.**, (84c:18005)

18C10 Theories (e.g. algebraic theories), structure, and semantics [See also 03-XX.]

- Coppey, Laurent** Sur quelques structures de base pour définir les structures. [Some basic structures for defining structures] (84b:18011)
- Gähler, W.** A topological approach to general structure theory. (84g:18018)
- Guitart, René** (with Lair, C.) Calcul syntaxique des modèles et calcul des formules internes. [Syntactic calculus of models and calculus of internal formulas] (84b:18012)
- Kelly, Gregory Maxwell** On the essentially-algebraic theory generated by a sketch. (84g:18019)
- Lair, C.** Conditions syntaxiques d'existence de co-adjoints aux foncteurs algébriques. [Syntactic conditions for the existence of coadjoints to algebraic functors] (84b:18003)
See also **Guitart, René**, (84b:18012)

secondary classifications:

- Andréka, Hajnal** (with Némethi, István) A general axiomatizability theorem formulated in terms of cone-injective subcategories. (84a:03031a)
- Borceux, Francis** On algebraic localizations. (84c:18007)
- Gurevich, R.** Löwenheim-Skolem problem for functions. (84g:08027)
- Isbell, John R.** Generating the algebraic theory of $C(X)$. (84c:08004)

- Lair, C.** Condition syntaxique de triplabilité d'un foncteur algébrique esquissé. [Syntactic condition of tripleability of a sketched algebraic functor] (84c:18004)
- Lascar, Daniel** On the category of models of a complete theory. (84g:03055)
- Németi, István** (with Sain, Ildikó) Cone-implicational subcategories and some Birkhoff-type theorems. (84a:0301b)
- See also **Andriksa, Hajnal**, (84a:0301a)
- Richter, Günther** Algebraic categories of topological spaces. (84c:18013)
- Sain, Ildikó** See **Németi, István**, (84a:0301b)

18C15 Triples (= standard construction, monad or triad), algebras for a triple, homology and derived functors for triples [See also 18Gxx.]

- Diers, Yves** Monades et multimonades de rang α sur les catégories localement α -multiprésentables. [Monads and multimonads of rank α on locally α -multipresentable categories] (84c:18003)
- Hong, S. S.** (with Nel, L. D.) Spectral dualities involving mixed structures. (84c:18005)
- Kelly, Gregory Maxwell** Two addenda: "A unified treatment of transfinite constructions for free algebras, free monoids, colimits, associated sheaves and so on" [Bull. Austral. Math. Soc. 22 (1980), no. 1, 1-83; MR 82h:18003]. (84c:18011)
- Lair, C.** Condition syntaxique de triplabilité d'un foncteur algébrique esquissé. [Syntactic condition of tripleability of a sketched algebraic functor] (84c:18004)
- Meseguer Guaita, José** Order completion monads. (84c:18005)
- Nel, L. D.** See **Hong, S. S.**, (84c:18005)
- Porter, Timothy** Internal categories and crossed modules. (84c:18015)
- Rosický, Jiří** A note on algebraic categories. (84c:18004)

secondary classifications:

- Fernández Rodríguez, R. M.** ★Categorías fibradas y funtores algebraicos. (Spanish) [Fibered categories and algebraic functors] (84d:18008)
- Lair, C.** Conditions syntaxiques d'existence de co-adjoints aux foncteurs algébriques. [Syntactic conditions for the existence of coadjoints to algebraic functors] (84c:18003)
- Ohlhoff, H. J. K.** Semitopological functors that induce idempotent monads. (84g:18011)
- Pachluschvili, V. A.** The cohomology of abelian matched pairs of connected Hopf algebras. (Russian. English and Georgian summaries) (84j:18009)
- Álgebra** See **Fernández Rodríguez, R. M.**, (84d:18008)

18C20 Algebras and Kleisli categories associated with monads

secondary classifications:

- Coppey, Laurent** Algèbres de décompositions et précatégories. [Decomposition algebras and precategories] (84c:18001)
- MacDonald, John** (with Tholen, Walter) Decomposition of morphisms into infinitely many factors. (84c:18005)
- Tholen, Walter** See **MacDonald, John**, (84c:18005)

18C99 None of the above, but in this section

- Diers, Yves** Catégories multiequationnelles. [Multiequational categories] (84m:18009)
- Guitart, René** (with Lair, C.) Critères de rigidification des morphismes souples entre structures internes. [Criteria for rigidifying soft morphisms between internal structures] (84g:18020)
- From where do figurative algebras come? (84f:18011)
- Lair, C.** See **Guitart, René**, (84g:18020)
- Van den Bril, Luc** Exactitude dans les Yoneda-structures. [Exactness in Yoneda structures] (84a:18012)

secondary classifications:

- Bloom, Stephen L.** (with Wright, Jesse B.) Finitary quasivarieties. (84b:08012)
- Coppey, Laurent** Sur quelques structures de base pour définir les structures. [Some basic structures for defining structures] (84b:18011)
- Wright, Jesse B.** See **Bloom, Stephen L.**, (84b:08012)

18Dxx Categories with structure

18D05 Double categories, 2-categories, bicategories, hypercategories

- Belcastro, Alessandro** (with Margiocco, Marco) On biquaternary expansions of a category. (Italian summary) (84f:18012)
- Betti, R.** (with Carboni, A.) Notion of topology for bicategories. (84m:18010)
- Bourn, Dominique** A canonical action on indexed limits: an application to coherent homotopy. (84c:18013)
- Carboni, A.** See **Betti, R.**, (84m:18010)
- Margiocco, Marco** See **Belcastro, Alessandro**, (84f:18012)
- Penon, J.** Théories de catégories. [Category theories] (84g:18021)
- Redi, E.** Principal left ideals and Green's \mathcal{E} -equivalence in polycategories. (Russian. English and Estonian summaries) (84m:18011)
- Isotopy in polycategories. (Russian. English and Estonian summaries) (84m:18012)
- Street, Ross** Conspicuous of variable categories. (84c:18006)
- Characterizations of bicategories of stacks. (84d:18006)
- Topencharov, Vladimir V.** Représentation binaire des $[n]$ -catégories. (Russian and Bulgarian summaries) [Binary representation of $[n]$ -categories] (84f:18013)
- Velinov, Y. P.** Polycategories and strict monoidal categories. I. (Russian and Bulgarian summaries) (84f:18014)
- Wood, R. J.** Abstract proarrows. I. (84g:18022)

secondary classifications:

- Betti, R.** (with Walters, R. F. C.) The symmetry of the Cauchy-completion of a category. (84c:18019)
- Van den Bril, Luc** Exactitude dans les Yoneda-structures. [Exactness in Yoneda structures] (84a:18012)
- Walters, R. F. C.** See **Betti, R.**, (84c:18019)

18D10 Monoidal categories (= multiplicative categories)

- Bozapalides, Syméon** (with Firarides, Anestis) Formal translation monoid and algebra congruences in a monoidal category. (84c:18007)
- Firarides, Anestis** See **Bozapalides, Syméon**, (84c:18007)
- Niefield, S. B.** Exactness and projectivity. (84c:18016)

secondary classifications:

- Coppey, Laurent** Quelques problèmes typiques concernant les graphes multiplicatifs. [Some typical problems of multiplicative graphs] (84g:18002)
- Velinov, Y. P.** Polycategories and strict monoidal categories. I. (Russian and Bulgarian summaries) (84f:18014)

18D15 Closed categories (closed monoidal and Cartesian closed categories, etc.)

- Adámek, Jiri** (with Koubek, V.) Cartesian closed concrete categories. (84g:18023)
- Barja Pérez, J. M.** Sur les objets profinis et progénérateurs dans les catégories fermées. [On profinite and progenerator objects in closed categories] (84g:18024)
- See also **López López, M. P.**, (84a:18015)
- Brandenburg, H.** (with Hušek, Miroslav) A remark on Cartesian closedness. (84a:18014)
- Činčura, Juraj** Tensor products in categories of closure spaces. (Russian and Slovak summaries) (84c:18017)
- Greve, Georg** General construction of monoidal closed structures in topological, uniform and nearness spaces. (84b:18005)
- Hušek, Miroslav** See **Brandenburg, H.**, (84a:18014)
- Koubek, V.** See **Adámek, Jiri**, (84g:18023)
- López López, M. P.** (with Barja Pérez, J. M.) Nonadditive aspects of progenerator and profinite objects. (Spanish. English summary) (84a:18015)
- Mac Lane, Saunders** Why commutative diagrams coincide with equivalent proofs. (84c:18018)

secondary classifications:

- Herrlich, Horst** Are there convenient subcategories of Top? (84c:54015)
- Schwarz, Friedhelm** Cartesian closedness, exponentiality, and final hulls in pseudotopological spaces. (84d:18005)

18D20 Enriched categories (over closed or monoidal categories)

- Betti, R.** (with Walters, R. F. C.) The symmetry of the Cauchy-completion of a category. (84c:18019)
- Cury, F.** Systèmes de générateurs et relations pour les catégories enrichies. [Systems of generators and relations for enriched categories] (84d:18007)
- Gray, John W.** Enriched algebras, spectra and homotopy limits. (84c:18020)
- Lindner, Harald** Enriched categories and enriched modules. (84f:18015)
- Walters, R. F. C.** See **Betti, R.**, (84c:18019)

secondary classifications:

- Betti, R.** (with Carboni, A.) Cauchy-completion and the associated sheaf. (84g:18026)
- Carboni, A.** See **Betti, R.**, (84g:18026)
- Kelly, Gregory Maxwell** ★Basic concepts of enriched category theory. (84c:18001)
- On the essentially-algebraic theory generated by a sketch. (84g:18019)
- Wood, R. J.** Abstract proarrows. I. (84g:18022)

18D25 Strong functors, strong adjunctions

18D30 Fibered categories

- Fernández Rodríguez, R. M.** ★Categorías fibradas y funtores algebraicos. (Spanish) [Fibered categories and algebraic functors] (84d:18008)
- Álgebra** See **Fernández Rodríguez, R. M.**, (84d:18008)

secondary classifications:

- Ladegaillerie, Yves** Les 2-catégories 1-isotopiques et le produit 2-fibré. (English summary) [1-isotopic 2-categories and 2-fibered products] (84g:18015)

18D35 Structured objects in a category (group objects, etc.)

- Takeuchi, Mitsuhiro** (with Ulbrich, Karl-Heinz) Complexes of categories with abelian group structure. (84g:18025)
- Ulbrich, Karl-Heinz** See **Takeuchi, Mitsuhiro**, (84g:18025)

secondary classifications:

- Geaniu, M.** Quelques propriétés de l'exponentielle dans la catégorie abélienne des objets groupes abéliens dans un topos élémentaire. (Romanian summary) [Some properties of the exponentiation in the abelian category of abelian group objects in an elementary topos] (84j:18007)

18D99 None of the above, but in this section

Min, Kyung Chan Exponential laws for ordered "topological" vector spaces. **84f:18016**

18Exx Abelian categories

18E05 Preadditive, additive categories

Smith, John Howard Schur complements and LDU decomposition in an additive category. **84j:18008**

18E10 Exact categories, abelian categories

Margiocco, Marco (with Mora, Fulvio) The category of exact categories. (Italian. English summary) **84d:18009**

Mora, Fulvio See Margiocco, Marco, **84d:18009**

secondary classifications:

Datashvili, T. I. On the homological dimension of extensions of abelian categories. (Russian. English summary) **(84g:18031)**

18E15 Grothendieck categories

Bueso, José Luis (with Torrecillas Jover, Blas) Local cohomology and noncommutative torsion theories. (Spanish. English summary) **84a:18016**

Simson, Daniel On the structure of locally finite pure semisimple Grothendieck categories. **84c:18021**

Torrecillas Jover, Blas See Bueso, José Luis, **84a:18016**

18E20 Imbedding theorems [See also 18B15.]

18E25 Derived functors and satellites

Skyarenko, E. G. Poincaré duality and correlations between the functors Ext and Tor. (Russian) **84a:18017**

secondary classifications:

Gultart, René Getting started towards algebraic analysis. **(84b:58013)**

18E30 Derived categories, triangulated categories

18E35 Localization of categories

Adelman, M. (with Johnstone, Peter T.) Serre classes for toposes. **84a:18018**

Johnstone, Peter T. See Adelman, M., **84a:18018**

Ohtake, Koichiro Equivalence between colocalization and localization in abelian categories with applications to the theory of modules. **84c:18022**

secondary classifications:

Verschoren, A. Exact sequences for relative Brauer groups and Picard groups. **(84c:13017)**

18E40 Torsion theories, radicals [See also 13D30, 16A63.]

Márki, L. (with Wiegandt, Richard) Remarks on radicals in categories. **84a:18019**

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secondary classifications:

Albu, Toma (with Năstăsescu, Constantin) Local cohomology and torsion theory. I. **(84b:13012)**

Boyle, A. K. (with Serven, R. J.) Krull dimension and torsion radicals. **(84c:16027)**

Bueso, José Luis (with Torrecillas Jover, Blas) Local cohomology and noncommutative torsion theories. (Spanish. English summary) **(84a:18016)**

Dugas, Manfred (with Herden, Gerhard) Arbitrary torsion classes and almost free abelian groups. **(84c:16034)**

Happel, Dieter (with Ringel, Claus Michael) Tilted algebras. **(84d:16027)**

Herden, Gerhard See Dugas, Manfred, **(84c:16034)**

Ikeyama, Tamotsu Finitely hereditary torsion theories. **(84c:16017)**

Generalizations of hereditary torsion classes. **(84j:16016)**

Katayama, Hisao On rings for which various types of nonzero preradicals are cofaithful. **(84c:16018)**

Năstăsescu, Constantin See Albu, Toma, **(84b:13012)**

Okoh, Frank Baer modules. **(84c:16028)**

Ringel, Claus Michael See Happel, Dieter, **(84d:16027)**

Serven, R. J. See Boyle, A. K., **(84c:16027)**

Torrecillas Jover, Blas See Bueso, José Luis, **(84a:18016)**

18E99 None of the above, but in this section

Aznar García, E. R. A categorical definition of the augmentation ideal. (Spanish) **84c:18023**

Cegarra, Antonio M. (with Garzon, Antonio R.) Balanced categories and the three-term sequence. (Spanish) **84c:18024**

Garzon, Antonio R. See Cegarra, Antonio M., **84c:18024**

Höppner, Michael On the freeness of Whitehead diagrams. **84c:18025**

Khadzhiev, Dzh. Notions of irreducibility and the notion of an invariant for actions of groups in general categories. (Russian) **84c:18006**

Yu, Yong Xi The category of left R - n modules and the Hom functor. (Chinese. English summary) **84c:18006**

secondary classifications:

Lecoutre, Guilaïne Représentations relatives d'algèbres. [Relative representations of algebras] **(84m:16024)**

18Fxx Categories and geometry

18F05 Local categories and functors

secondary classifications:

Othoff, H. J. K. Semitopological functors that induce idempotent monads. **(84g:18011)**

18F10 Grothendieck topologies [See also 14F20.]

Betti, R. (with Carboni, A.) Cauchy-completion and the associated sheaf. **84g:18026**

Carboni, A. See Betti, R., **84g:18026**

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Van Osdol, Donovan H. A Borel topos. **84h:18013**

secondary classifications:

Betti, R. (with Carboni, A.) Notion of topology for bicategories. **(84m:18010)**

Carboni, A. See Betti, R., **(84m:18010)**

Ioniță, Cătălin Algebraic toposes and topologies. **(84g:18013)**

Johnstone, Peter T. Quotients of decidable objects in a topos. **(84h:18006)**

18F15 Abstract manifolds and fiber bundles [See also 55Rxx, 57Pxx.]

secondary classifications:

Frölicher, Alfred Smooth structures. **(84g:58008)**

18F20 Presheaves and sheaves [See also 14F05, 32C35, 32L10, 54B40, 55N30.]

Diers, Yves Un critère de représentabilité par sections continues de faisceaux. [A criterion for representability by continuous sections of sheaves] **84c:18007**

Une description axiomatique des catégories de faisceaux de structures algébriques sur les espaces topologiques booléens. [An axiomatic description of categories of sheaves of algebraic structures on Boolean topological spaces] **84m:18013**

Foltz, François Légitimité des catégories de préfaisceaux. [Legitimacy of categories of presheaves] **84g:18027a**

Comment on: "Legitimacy of categories of presheaves". (French) **84g:18027b**

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Fourman, M. P. T_1 spaces over topological sites. **(84m:18004)**

Harting, Roswitha Locally injective abelian groups in a topos. **(84m:18005)**

Kapranov, M. M. The derived category of coherent sheaves on Grassmann varieties. (Russian) **(84c:14014)**

Le Bruyn, Lieven Homogenization of sheaves and kernel functors. **(84f:16003)**

Nguyễn Xuân Tuyền On finite-order extensions of quasimodules. (Vietnamese. Russian summary) **(84j:18011)**

Pechanec-Dražoš, J. Sheaves of metric lattices. (Russian and Czech summaries) **(84d:54017)**

Embedding of presheaves into dual unit balls. (Russian and Czech summaries) **(84d:54018)**

Pelletier, Joan Wick (with Rosebrugh, Robert) On subcategories of Banach spaces in sheaves. **(84c:46051)**

Rosebrugh, Robert See Pelletier, Joan Wick, **(84c:46051)**

Street, Ross Characterizations of bicategories of stacks. **(84d:18006)**

Verschoren, A. Localization of (pre-) sheaves of modules and structure sheaves. **(84c:16002)**

Separable couples, Azumaya couples and sheaves. **(84b:16009)**

Walters, R. F. C. See Betti, R., **(84c:18019)**

18F25 Algebraic K -theory and L -theory [See also 10Cxx, 12-XX, 13D15, 14Cxx, 16A54, 57R65, 57R67.]

Anderson, Douglas R. Steenrod's equivariant Moore space problem for cohomologically trivial modules. **84d:18011**

Berrick, A. Jon ★An approach to algebraic K -theory. **84g:18028**

Charney, Ruth K -theory of ideals. **84f:18017**

Dennis, R. Keith (with Igusa, Kiyoshi) Hochschild homology and the second obstruction for pseudoisotopy. **84m:18014**

Dress, Andreas W. M. (with Kuku, Aderemi O.) A convenient setting for equivariant higher algebraic K -theory. **84c:18007**

Fiedorowicz, Zbigniew (with Priddy, Stewart B.) An automorphism of orthogonal algebraic K -theory. **84a:18020**

Franco Fernández, L. See Rodríguez Fernández, C., **84a:18021**

Geller, Susan C. (with Weibel, Charles A.) $K_*(A, B, I)$. **84h:18014**

- Hsiang, W. C. (with Staffeldt, R. E.) A model for computing rational algebraic K -theory of simply connected spaces. **84h:18015**
- Igusa, Kiyoshi. See Dennis, R. Keith, **84m:18014**
- Kassel, Christian. La K -théorie stable. (English summary) [Stable K -theory] **84f:18018**
Calcul algébrique de l'homologie de certains groupes de matrices. [Algebraic calculation of the homology of certain groups of matrices] **84m:18015**
- Kolster, Manfred. On injective stability for K_2 . **84f:18019**
- Kuku, Aderemi O. See Dress, Andreas W. M., **84k:18007**
- Munkholm, Hans J. (with Pedersen, Erik K.) Transfers in algebraic K - and L -theory induced by S^1 -bundles. **84f:18020**
(with Ranicki, Andrew A.) The projective class group transfer induced by an S^1 -bundle. **84f:18021**
- Oliver, Robert. SK_1 for finite group rings. IV. **84g:18029**
- Pedersen, Erik K. See Munkholm, Hans J., **84f:18020**
- Priddy, Stewart B. See Fiedorowicz, Zbigniew, **84a:18020**
- Puebla, Emilio Luis (with Snaith, Victor Percy) Determination of $K_2(F_p[t]/(t^2))$ for primes $p \geq 5$. **84d:18012**
- Ranicki, Andrew A. See Munkholm, Hans J., **84f:18021**
- Rodríguez Fernández, C. (with Franco Fernández, L.) Baer invariants and K -theory. (Spanish. English summary) **84a:18021**
- Snaith, Victor Percy. A brief survey of Bott periodic algebraic K -theory. **84e:18008**
See also Puebla, Emilio Luis, **84d:18012**
- Solov'ev, Yu. P. Equivalence of two definitions of the algebraic K -theory of spaces. (Russian. English summary) **84f:18022**
- Staffeldt, R. E. See Hsiang, W. C., **84h:18015**
- Suslin, A. A. Algebraic K -theory. (Russian) **84b:18006**
Mennicke symbols and their applications in the K -theory of fields. **84f:18023**
- Thomason, R. W. The Lichtenbaum-Quillen conjecture for $K/I_n[\beta^{-1}]$. **84f:18024**
- Vogel, Pierre. Localisation non commutative de formes quadratiques. [Noncommutative localization of quadratic forms] **84h:18016**
- Vogtmann, K. A Stiefel complex for the orthogonal group of a field. **84b:18007**
- Wagoner, J. B. A picture description of the boundary map in algebraic K -theory. **84d:18013**
Relative K_2 for powers of an ideal. **84c:18026**
- Waldhausen, Friedhelm. Algebraic K -theory of spaces, a manifold approach. **84f:18025**
- Weibel, Charles A. Mayer-Vietoris sequences and mod p K -theory. **84f:18026**
See also Geller, Susan C., **84h:18014**

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- Bachmuth, Seymour (with Mochizuki, Horace Y.) $E_2 \neq SL_2$ for most Laurent polynomial rings. (84a:20056)
- Bak, Anthony. $\star K$ -theory of forms. (84m:10012)
- Berrick, A. Jon. Characterisation of plus-constructive fibrations. (84m:55013)
- (Bukhshtaber, V. M.) See Snaith, Victor Percy, (84c:57021)
- Chu, Hua. Some class of non-GE $_2$ rings. (84a:13013)
- Coombes, K. R. (with Srinivas, V.) Relative K -theory and vector bundles on certain singular varieties. (84e:14015)
- Relative algebraic K -theory. (84e:14016)
- (Dennis, R. Keith) See Algebraic K -theory, (84a:18001a) and (84a:18001b)
- Dwyer, William (with Friedlander, Eric M.; Snaith, Victor Percy; Thomason, Robert) Algebraic K -theory eventually surjects onto topological K -theory. (84i:14015)
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- Fried, David. Homological identities for closed orbits. (84g:58088)
- Friedlander, Eric M. See Dwyer, William; et al., (84i:14015)
- (Gamkrelidze, R. V.) See Algebra. Topology. Geometry, (84a:22002)
- Gerstein, Larry J. A remark on the quadratic analogue of the Quillen-Suslin theorem. (84h:13028)
- Gillet, Henri. Universal cycle classes. (84j:14016)
- Guin, Daniel. Sur le groupe K_2 d'un anneau. [On the K_2 group of a ring] (84h:13018)
- Hauschild, H. See Fiedorowicz, Zbigniew; et al., (84h:57023)
- Hausmann, Jean-Claude. Poincaré spaces with the homology of a sphere. (84j:57015)
- Hiller, Howard. Affine Lie algebras and algebraic K -theory. (84k:17015)
- Hsiang, W. C. (with Jahren, B.) The rigid handlebody theory. I. (84f:57019)
- Huebschmann, Johannes. Stem extensions of the infinite general linear group and large Steinberg groups. (84e:20049)
- Hurrelbrink, Jürgen. $K_2(o)$ for two totally real fields of degree three and four. (84d:12009)
- On the size of certain K -groups. (84d:12010)
- Jahren, B. See Hsiang, W. C., (84f:57019)
- Karoubi, Max. Connexions, courbures et classes caractéristiques en K -théorie algébrique. [Connections, curvatures and characteristic classes in algebraic K -theory] (84f:57013)
- Kato, Kazuya. Algebraic K -theory: its number-theoretic aspects. (Japanese) (84c:12011)
- May, J. P. See Fiedorowicz, Zbigniew; et al., (84h:57023)
- Merkur'ev, A. S. (with Suslin, A. A.) K -cohomology of Severi-Brauer varieties and the norm residue homomorphism. (Russian) (84i:12007)
- Mochizuki, Horace Y. See Bachmuth, Seymour, (84a:20056)
- Pardon, William. A "Gersten conjecture" for Witt groups. (84e:13016)
- Snaith, Victor Percy. A topological "proof" of a theorem of Ribet. (84g:12013)
- \star Алгебраический коборизм и K -теория. (Russian) [Algebraic cobordism and K -theory] (84k:57021)
- See also Dwyer, William; et al., (84i:14015)
- Soulé, Christophe. On K -theory and values of zeta functions. (84j:12012)
- Srinivas, V. See Coombes, K. R., (84e:14015)
- Stienstra, Jan. Operations in the higher K -theory of endomorphisms. (84d:14012)
- Suslin, A. A. Quaternion homomorphism for the field of functions on a conic. (Russian) (84a:12030)
- See also Merkur'ev, A. S., (84i:12007)
- Thomason, Robert. See Dwyer, William; et al., (84i:14015)

- Waldhausen, Friedhelm. Operations in the algebraic K -theory of spaces. (84d:55006)
- Weiss, Michael S. Surgery and bordism invariants. (84h:57020)
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- Algebraic K -theory. \star Algebraic K -theory. Part I. (84a:18001a)
 \star Algebraic K -theory. Part II. (84a:18001b)
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Algebraic K -Theory. \star Algebraic K -theory. Part I. (84a:18001a)
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18F30 Grothendieck groups [See also 13D15, 16A54.]

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- Lady, E. L. Grothendieck rings for certain categories of quasihomomorphisms of torsion free modules over Dedekind domains. (84h:13019)
- 18F99 None of the above, but in this section
- secondary classifications:
- Cherenack, Paul. A Cartesian closed extension of a category of affine schemes. (84j:14007)
- Verschoren, A. Les extensions et les schémas non-commutatifs. [Extensions and noncommutative schemes] (84c:16036)

18Gxx Homological algebra [See also 55Uxx.]

secondary classifications:

- Putinar, Mihai. Some invariants for semi-Fredholm systems of essentially commuting operators. (84b:58009)
- 18G05 Projectives and injectives [See also 13C10, 13C11, 16A50, 16A52.]
- Feigelson, Shalom (with Klein, Aaron) Retracts and injectives. **84c:18027**
- Harting, Roswitha. Locally injective G -sheaves of abelian groups. **84a:18022**
- Klein, Aaron. See Feigelson, Shalom, **84c:18027**

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- Cheng, Charles Ching-an. Exact limits. (84d:18001)
- Mehdi Ebrahimi, M. Algebra in a Grothendieck topos: injectivity in quasi-equational classes. (84d:18010)
- Raha, Asit Baran. Projectives in some categories of Hausdorff spaces. (84c:18012)
- Rakviashvili, G. G. Inductive theorems and projective modules over crossed group rings. (Russian. English summary) (84k:16011)

18G10 Resolutions; derived functors [See also 18E25.]

- Franco Fernández, L. See Rodríguez Fernández, C., **84j:18010**
- Lannes, Jean (with Zarati, Said) Foncteurs dérivés de la déstabilisation. (English summary) [Derived functors of destabilization] **84c:18008**
- Pachuvashvili, V. A. The cohomology of abelian matched pairs of connected Hopf algebras. (Russian. English and Georgian summaries) **84j:18009**
- Rodríguez Fernández, C. (with Franco Fernández, L.) Simplicial method and Baer-invariants. **84j:18010**
- Zarati, Said. See Lannes, Jean, **84c:18008**

secondary classifications:

- Pitiş, Gheorghe. J -resolutions of a projective system. (Romanian. French summary) (84j:20052)

18G15 Ext and Tor, generalizations, Künneth formula [See also 55U25.]

- Fedin, S. N. Proper classes corresponding to the functors n -Ext. (Russian. English summary) **84f:18027**
- Mdzinarishvili, L. D. A generalization of Künneth's formula. (Russian. English and Georgian summaries) **84g:18030**
- Nguyễn Xuân Tuyền. On finite-order extensions of quasimodules. (Vietnamese. Russian summary) **84j:18011**
- Vale Gonsalves, M. J. \star Torsores, extensiones y cohomología. (Spanish) [Torsors, extensions and cohomology] **84b:18008**

secondary classifications:

- Beachy, John A. Stable torsion radicals over FBN rings. (84b:16001)
- Douglas, Ronald G. On the smoothness of elements of Ext. (84f:46093)
- Fay, Temple H. A homological algebra for valued groups. (84h:20058)
- Legrand, André. Classes associées à un π -module différentiel. (English summary) [Classes associated with a differential π -module] (84m:55016)
- Santharoubane, L. J. Cohomology of Heisenberg Lie algebras. (84b:17010)
- Sklyarenko, E. G. Poincaré duality and correlations between the functors Ext and Tor. (Russian) (84a:18017)
- Ulbrich, Karl-Heinz. Sur les extensions de groupes à noyau abélien. (English summary) [On extensions of groups with abelian kernel] (84a:18007)

18G20 Homological dimension [See also 13Dxx, 16A60, 16A62.]

Datashvili, T. I. On the homological dimension of extensions of abelian categories. (Russian. English summary) **84g:18031**

Hill, Paul (with White, Errin) The projective dimension of valued vector spaces. **84d:18014**

White, Errin See Hill, Paul, **84d:18014**

secondary classifications:

Bieri, Robert ★ Homological dimension of discrete groups. (**84h:20047**)

Brune, Hermann On the global dimension of the functor category $((\text{mod } R)^{\text{op}}, \text{Ab})$ and a theorem of Kulikov. (**84d:16035**)

Bueso, José Luis (with Torrecillas Jover, Blas) Local cohomology and noncommutative torsion theories. (Spanish. English summary) (**84a:18016**)

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Krichevets, A. N. Calculation of the global dimension of tensor products of Banach algebras and a generalization of a theorem of Phillips. (Russian) (**84g:46103**)

Nachev, N. The global dimension of incidence rings. I, II. (Bulgarian. English and Russian summaries) (**84a:16047**)

Torrecillas Jover, Blas See Bueso, José Luis, (**84a:18016**)

Wong, Roman W. See Cheng, Charles Ching-an, (**84j:16013**)

18G25 Relative homological algebra, projective classes

Fedin, S. N. The concept of inductive closure of a proper class. (Russian) **84g:18032**

Ferrer Santos, Walter Ricardo Cohomology of comodules. **84k:18009**

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18G30 Simplicial sets, simplicial objects (in a category) [See also 55U10.]

secondary classifications:

Fritsch, Rudolf Topologische Räume, semisimpliziale Mengen und kleine Kategorien.

[Topological spaces, semisimplicial sets and small categories] (**84c:55022**)

Golasinski, Marek On weak homotopy equivalence of simplicial and cubical nerve. (**84a:55018**)

18G35 Chain complexes [See also 18E30, 55U15.]

Coelho, Michel (with Pezennec, Jean) Cohomologie d'une limite inductive de complexes. Applications aux fantômes de finitude en cohomologie tordue. (English summary) [Cohomology of a direct limit of complexes. Applications to the finiteness phenomena for the twisted cohomology] **84a:18023**

Golasinski, Marek (with Gromadzki, Grzegorz) The homotopy category of chain complexes is a homotopy category. **84k:18010**

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Pezennec, Jean See Coelho, Michel, **84a:18023**

secondary classifications:

Thron, Reinhard Über das Zutreffen einer Eigenschaft einer Menge auf die Elemente der Potenzmenge. [On the validity of a property of a set for the elements of its power set] (**84j:20063**)

18G40 Spectral sequences, hypercohomology [See also 55Txx.]

Davitadze, A. V. The functor \lim and the sheaf cohomology group. (Russian. English and Georgian summaries) **84k:18011**

Katamadze, R. D. Exact sequences for the relative Hochschild cohomology. (Russian. English and Georgian summaries) **84g:18033**

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Santharoubane, L. J. Cohomology of Heisenberg Lie algebras. (**84b:17010**)

Sawka, John Odd primary Steenrod operations in first-quadrant spectral sequences. (**84h:55016**)

18G50 Nonabelian homological algebra

Guitart, René Carrés exacts et carrés deductifs. [Exact squares and deductive squares] **84f:18028**

(with Van den Bril, Luc) Note sur la détermination des homologies par les carrés exacts. [On determining homologies by exact squares] **84f:18029**

Van den Bril, Luc See Guitart, René, **84f:18029**

18G55 Nonabelian homotopical algebra

Brown, Ronald (with Higgins, Philip J.) Crossed complexes and nonabelian extensions. **84b:18009**

Higgins, Philip J. See Brown, Ronald, **84b:18009**

Ruiz Salguero, Carlos (with Ruiz Salguero, Roberto) Conditions for a realization functor to commute with finite products. (Spanish summary) **84e:18009**

Ruiz Salguero, Roberto See Ruiz Salguero, Carlos, **84e:18009**

secondary classifications:

Heller, Alex Homotopy in functor categories. (**84j:55009a**)

Erratum to: "Homotopy in functor categories". (**84j:55009b**)

18G99 None of the above, but in this section

Cegarra, Antonio M. The coproduct theorem in cohomology. (Spanish) **84c:18028**

Pachuašvili, V. A. Cohomology in the monoidal category. (Russian. English and Georgian summaries) **84k:18012a**

Spectral sequence for the cohomology in the monoidal category. (Russian. English and Georgian summaries) **84k:18012b**

Pirashvili, T. I. The degree of a functor and the spectral sequence of an epimorphism. (Russian. English and Georgian summaries) **84a:18024**

Thomason, R. W. The homotopy limit problem. **84j:18012**

Todua, Z. B. Relative homology and cohomology groups of a distributive lattice over a pair of coefficient groups. (Russian. English and Georgian summaries) **84f:18030**

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Ballico, Edoardo (with Ferreira, Arturo V.; Napolitani, Pier Daniele) On first Čech groups H^0 , H^1 of maximal ideal spaces. (Italian summary) (**84j:46097**)

Barja Pérez, J. M. Sur les objets profinis et progénérants dans les catégories fermées. [On profinite and progenating objects in closed categories] (**84g:18024**)

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Belcastro, Alessandro (with Margiocco, Marco) On biquaternary expansions of a category. (Italian summary) (**84f:18012**)

Cheng, Charles Ching-an (with Mitchell, Barry) Posets of cohomological dimension one with finitely many tails. (**84f:06005**)

Cordier, Jean-Marc (with Porter, Timothy) Functors between shape categories. (**84c:55003**)

Cuntz, Joachim K -theory for certain C^* -algebras. (**84c:46058**)

Ferreira, Arturo V. See Ballico, Edoardo; et al., (**84j:46097**)

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Kadeishvili, T. V. The algebraic structure in the homology of an $A(\infty)$ -algebra. (Russian. English and Georgian summaries) (**84k:55009**)

Lemaire, Claude Localisation relative et actions. [Relative localization and actions] (**84f:20030**)

López López, M. P. (with Barja Pérez, J. M.) Nonadditive aspects of progenator and profinite objects. (Spanish. English summary) (**84a:18015**)

Margiocco, Marco See Belcastro, Alessandro, (**84f:18012**)

Mitchell, Barry See Cheng, Charles Ching-an, (**84f:06005**)

Napolitani, Pier Daniele See Ballico, Edoardo; et al., (**84j:46097**)

Porter, Timothy See Cordier, Jean-Marc, (**84c:55003**)

Van den Bril, Luc See Guitart, René, (**84f:18029**)

Wong, Y. L. Chain homotopy pullbacks and pushouts. (**84c:55023**)

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(Churkin, V. A.) See American Mathematical Society Translations, Ser. 2, **84m:20001** and Kourova notebook, **84m:20002**

(Johnson, D. J.) See American Mathematical Society Translations, Ser. 2, **84m:20001**

(Leifman, Lev J.) See American Mathematical Society Translations, Ser. 2, **84m:20001**

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(Merzlyakov, Yu. I.) See American Mathematical Society Translations, Ser. 2, **84m:20001** and Kourova notebook, **84m:20002**

All-union symposium:

Group theory ★ Койровская тетрадь. (Russian) [Kourova notebook] **84m:20002**

American Mathematical Society Translations, Ser. 2 ★ American Mathematical Society Translations, Ser. 2, Vol. 121. **84m:20001**

Kourova notebook ★ Койровская тетрадь. (Russian) [Kourova notebook] **84m:20002** ★ American Mathematical Society Translations, Ser. 2, Vol. 121. **84m:20001**

Problems:

Group theory ★ Койровская тетрадь. (Russian) [Kourova notebook] **84m:20002**

Suny ★ Койровская тетрадь. (Russian) [Kourova notebook] **84m:20002**

20-01 Elementary exposition, textbooks

Belger, Martin (with Ehrenberg, Lothar) ★ Theorie und Anwendung der

Symmetriegruppen. (German) [Theory and application of symmetry groups] **84d:20001**

Duffy, L. Richard An elementary proof of the isomorphism $C^* \approx S^1$. **84c:20001**

Ehrenberg, Lothar See Belger, Martin, **84d:20001**

James, Gordon D. ★ Теория представлений симметрических групп. (Russian) [The representation theory of the symmetric groups] **84c:20002**

Joshi, A. W. ★ Elements of group theory for physicists. **84f:20001**

(Kerov, S. V.) See James, Gordon D., **84c:20002**

Robinson, Derek John Scott ★ A course in the theory of groups. **84k:20001**

(Vershik, A. M.) See James, Gordon D., **84c:20002**

(Zelivinskii, A. V.) See James, Gordon D., **84c:20002**

secondary classifications:

Bandelow, Christoph ★ Einführung in die Cubologie. (German) [Introduction to cubology] (**84a:20007a**)

★ Inside Rubik's cube and beyond. (**84a:20007b**)

Golan, Jonathan S. ★ 'Iyunim bälgebräh mödemit. Kerek I. (Hebrew) [Studies in modern algebra. Vol. I] (**84b:00002a**)

★ 'Iyunim bälgebräh mödemit. Kerek II. (Hebrew) [Studies in modern algebra. Vol. II] (**84b:00002b**)

Lemay, Fernand Le dodécaèdre et la géométrie projective d'ordre 5. [The dodecahedron and projective geometry of order 5] (**84h:51026**)

(Moser, Lucy) See Bandelow, Christoph, (**84a:20007b**)

- Srinivasan, Bhamu Characters of finite groups: some uses and mathematical applications. 84d:20013
(84d:20013)
(Zehnder-Reitinger, Jeannette) See Bandelow, Christoph. (84a:20007b)

20-02 Advanced exposition (research surveys, monographs, etc.)

- Arnold, David M. ★Finite rank torsion free abelian groups and rings. 84d:20002
Beyl, F. Rudolf (with Tappe, Jürgen) ★Group extensions, representations, and the Schur multiplier. 84f:20002
Blackburn, Norman See Huppert, Bertram. 84i:20001
Bokut', L. A. Algorithmic problems and imbedding theorems: some open problems for rings, groups and semigroups. (Russian) 84j:20001
Bray, Henry G. (with Deskins, W. E.; Johnson, David; Humphreys, John F.; Puttaswamaiah, B. M.; Venzke, Paul; Walls, Gary L.) ★Between nilpotent and solvable. 84c:20002
Deskins, W. E. See Bray, Henry G.; et al., 84c:20002
Gorenstein, Daniel ★Finite simple groups. 84j:20002
Humphreys, John F. See Bray, Henry G.; et al., 84c:20002
Huppert, Bertram (with Blackburn, Norman) ★Finite groups. II. 84i:20001a
(with Blackburn, Norman) ★Finite groups. III. 84i:20001b
Johnson, David See Bray, Henry G.; et al., 84c:20002
Johnson, David Lawrence ★Topics in the theory of group presentations. 84f:20003
Puttaswamaiah, B. M. See Bray, Henry G.; et al., 84c:20002
Springer, T. A. ★Linear algebraic groups. 84i:20002
Tappe, Jürgen See Beyl, F. Rudolf. 84f:20002
Tobin, S. J. Groups with exponent four. 84c:20003
Venzke, Paul See Bray, Henry G.; et al., 84c:20002
Walls, Gary L. See Bray, Henry G.; et al., 84c:20002
Weinstein, Michael See Bray, Henry G.; et al., 84c:20002
Wiegold, James The Schur multiplier: an elementary approach. 84b:20001

secondary classifications:

- Laue, Reinhard Zur Konstruktion und Klassifikation endlicher auflösbarer Gruppen. [On the construction and classification of finite solvable groups] (84c:20018)
Lotz, Siegfried A survey on hyperdiffuse measures. IV. (84b:28014)
Neubüser, J. An elementary introduction to coset table methods in computational group theory. (84f:20004)
Robinson, Derek John Scott Applications of cohomology to the theory of groups. (84d:20052)
Shaw, Ronald ★Linear algebra and group representations. Vol. I. (84m:15002)
★Linear algebra and group representations. Vol. II. (84m:15003)

20-03 Historical (must also be assigned at least one classification number from Section 01)

- Polcino Milles, Francisco César A glance at the early history of group rings. 84c:20004

secondary classifications:

- (Kasperek, Christopher) See Rejewski, Marian. (84c:01049)
Rejewski, Marian Mathematical solution of the Enigma cipher. (84c:01049)
Stensholt, Eivind Ludvig Sylow and his theorems. (Norwegian. English summary) (84f:01031)
(Sylow, Ludwig) See Stensholt, Eivind. (84f:01031)

20-04 Explicit machine computation and programs (not the theory of computation or programming)

- Bludov, V. V. (with Kokorin, A. I.) Use of computers in solving well-known algebra problems. 84i:20003
Butler, Gregory Computing normalizers in permutation groups. 84j:20003
Frame, J. S. Recursive computation of tensor power components. 84a:20001
Huang, Bing Chao An algorithm for inverting permutations. (Chinese summary) 84c:20001
Kokorin, A. I. See Bludov, V. V., 84i:20003
Neubüser, J. An elementary introduction to coset table methods in computational group theory. 84f:20004

secondary classifications:

- Arrell, David G. (with Manrai, S.; Worboys, Michael) A procedure for obtaining simplified defining relations for a subgroup. (84a:20041)
Avenhaus, J. (with Madlener, K.) An algorithm for the word problem in HNN extensions and the dependence of its complexity on the group representation. (French summary) (84g:20061)
Bachlowski, Kenneth Recursive algorithms for unitary and symplectic group representations. (84g:22003)
Caliri Greco, Maria Construction of the permutation that follows a given permutation. (Italian. English summary) (84i:20006)
Chen, Jin Quan (with Gao, Mei Juan) ★Reduction coefficients of the permutation groups and their applications. (Chinese) (84a:20021)
Gao, Mei Juan See Chen, Jin Quan. (84a:20021)
Havas, George (with Richardson, J. S.) Groups of exponent five and class four. (84c:20035)
(with Newman, Morris) Minimal presentations for finite groups of prime-power order. (84c:20015)
Kaluzhnin, A. A. (with Sushchanskii, V. I.; Ustimenko-Bakumovskii, V. A.) Application of electronic computers in the theory of substitution groups and its applications. (84m:20012)

- Madlener, K. See Avenhaus, J., (84g:20061)
Manrai, S. See Arrell, David G.; et al., (84a:20041)
Newman, Morris See Havas, George. (84c:20015)
Richardson, J. S. See Havas, George. (84f:20035)
Sushchanskii, V. I. See Kaluzhnin, A. A.; et al., (84m:20012)
Ustimenko-Bakumovskii, V. A. See Kaluzhnin, A. A.; et al., (84m:20012)
Worboys, Michael See Arrell, David G.; et al., (84a:20041)

20-06 Proceedings, conferences, etc.

- (Borevich, Z. I.) See Modules and algebraic groups. 84i:20004
(Gilezan, Koriolan) See Conference: Algebraic. 84a:20002
(Göbel, Rüdiger) See Abelian group theory. 84j:20004
(Hofmann, Karl Heinrich) See Recent developments in the algebraic, analytical, and topological theory of semigroups. 84j:20005
(Jürgensen, Helmut) See Recent developments in the algebraic, analytical, and topological theory of semigroups. 84j:20005
(Lady, E. L.) See Abelian group theory. 84j:20004
(Lajos, Sándor) See Notes on semigroups. 84d:20003
(Mader, Adolf) See Abelian group theory. 84j:20004
(Onishchik, A. L.) See Problems in group theory and homological algebra. 84g:20001
(Skopin, A. I.) See Modules and algebraic groups. 84i:20004
(Weinert, Hanns Joachim) See Recent developments in the algebraic, analytical, and topological theory of semigroups. 84j:20005
(Yoshida, Reikichi) See Proceedings: Symposium on Semigroups. 84a:20003
Abelian group theory ★Abelian group theory. 84j:20004
Conference:

- Abelian group theory ★Abelian group theory. 84j:20004
Algebraic ★Algebraic Conference. 84a:20002
Recent developments in the algebraic, analytical, and topological theory of semigroups ★Recent developments in the algebraic, analytical, and topological theory of semigroups. 84j:20005

Honolulu, Hawaii ★Abelian group theory. 84j:20004

Kyoto ★Proceedings of the 6th Symposium on Semigroups. 84a:20003

Modules and algebraic groups ★Модули и алгебраические группы. 2. (Russian)

[Modules and algebraic groups. 2] 84i:20004

Notes on semigroups ★Notes on semigroups. VIII. 84d:20003

Novi Sad ★Algebraic Conference. 84a:20002

Oberwolfach ★Recent developments in the algebraic, analytical, and topological theory of semigroups. 84j:20005

Problems in group theory and homological algebra ★Вопросы теории групп и гомологической алгебры. (Russian) [Problems in group theory and homological algebra] 84g:20001

Proceedings:

Symposium on Semigroups ★Proceedings of the 6th Symposium on Semigroups. 84a:20003

Recent developments in the algebraic, analytical, and topological theory of semigroups ★Recent developments in the algebraic, analytical, and topological theory of semigroups. 84j:20005

Symposium:

Semigroups ★Proceedings of the 6th Symposium on Semigroups. 84a:20003

Topics in Finite Group Theory ★Topics in finite group theory. 84d:20004

Topics in finite group theory ★Topics in finite group theory. 84d:20004

Topics in the theory of algebraic groups ★Topics in the theory of algebraic groups. 84c:20005

secondary classifications:

- (Belyavskaya, G. B.) See Quasigroups and Latin squares. (84c:20083)
(Eigenthaler, Günther) See Contributions to general algebra. (84i:00014)
(Gherardelli, Francesco) See Invariant theory. (84i:14004)
(Kaiser, Hans K.) See Contributions to general algebra. (84i:00014)
(Müller, Winfried B.) See Contributions to general algebra. (84i:00014)
(Nöbauer, Wilfried) See Contributions to general algebra. (84i:00014)
(Oskolkov, A. P.) See All-Union Conference: Algebra. (84i:00013a) and (84i:00013b)
(Valutsë, I. I.) See Quasigroups and Latin squares. (84c:20083)
All-Union Conference:
Algebra ★XVI Всесоюзная Алгебраическая Конференция. Часть 1. (Russian) [XVI All-Union Algebra Conference. Part 1] (84i:00013a)
★XVI Всесоюзная Алгебраическая Конференция. Часть 2. (Russian) [XVI All-Union Algebra Conference. Part 2] (84i:00013b)

Conference:

Contributions to general algebra ★Contributions to general algebra. 2. (84i:00014)

Contributions to general algebra ★Contributions to general algebra. 2. (84i:00014)

Invariant theory ★Invariant theory. (84i:14004)

Klagenfurt ★Contributions to general algebra. 2. (84i:00014)

Leningrad ★XVI Всесоюзная Алгебраическая Конференция. Часть 1. (Russian) [XVI All-Union Algebra Conference. Part 1] (84i:00013a)

★XVI Всесоюзная Алгебраическая Конференция. Часть 2. (Russian) [XVI All-Union Algebra Conference. Part 2] (84i:00013b)

Montecatini ★Invariant theory. (84i:14004)

Paris ★Séminaire sur les groupes finis. Tome I. (French) [Seminar on finite groups. Vol. I] (84c:20008)

Quasigroups and Latin squares ★Квазигруппы и латинские квадраты. (Russian) [Quasigroups and Latin squares] (84c:20083)

Seminar:

Finite groups ★Séminaire sur les groupes finis. Tome I. (French) [Seminar on finite groups. Vol. I] (84c:20008)

Session:

CIME, invariant theory ★Invariant theory. (84i:14004)

20Axx Foundations

20A05 Axiomatics and elementary properties

- Brailovskii, L. V. (with Freiman, G. A.) On two-element subsets in groups. **84i:20003**
 Freiman, G. A. See Brailovskii, L. V., **84i:20003**
 Hauptmann, Wolfgang Gruppenähnliche Strukturen. [Grouplike structures] **84b:20002**
 Kaur, Gurprit See Singh, Prahlad, **84d:20006**
 Sen, M. K. Characterization of groups. **84d:20005**
 Singh, Prahlad (with Kaur, Gurprit) A note on cover of a subgroup. **84d:20006**

secondary classifications:

- Ecker, A. Über die mathematischen Grundlagen einiger Chiffrierverfahren. (English summary) [On the mathematical foundations of some cryptosystems] **(84d:94023)**
 Ferrara, Ugo Mutually dual binary operations. (Italian. English summary) **(84e:08001)**
 Hausner, Melvin Applications of a simple counting technique. **(84e:05005)**

20A10 Metamathematical considerations {For word problems, see 20F10.}

secondary classifications:

- Chiti, Emanuela Saturated models of particular theories of ordered abelian groups. (Italian. English summary) **(84c:03061)**

20A15 Applications of logic to group theory

- Cherlin, Gregory (with Felgner, Ulrich) Quantifier eliminable groups. **84d:20007**
 Felgner, Ulrich See Cherlin, Gregory, **84d:20007**
 Shelah, Saharon On the number of nonconjugate subgroups. **84i:20005**
 Wilson, John S. The algebraic structure of N_0 -categorical groups. **84c:20006**

secondary classifications:

- Applebaum, C. H. An introduction to ω -extensions of ω -groups. **(84b:03104)**
 Apps, A. B. On the structure of N_0 -categorical groups. **(84b:03079)**
 Baudisch, Andreas Decidability and stability of free nilpotent Lie algebras and free nilpotent p -groups of finite exponent. **(84e:03019)**
 Combase, Joel An introduction to naive set theory through the notion of normal filter. (See **84c:03006**)
 van den Dries, L. P. D. (with Glass, A. M. W.; Macintyre, Angus; Mekler, Alan H.; Poland, John) Elementary equivalence and the commutator subgroup. **(84g:03041)**
 Dugas, Manfred (with Herden, Gerhard) Arbitrary torsion classes of abelian groups. **(84f:20058)**
 Eklof, Paul C. (with Huber, Martin) On the p -ranks of $\text{Ext}(A, G)$, assuming CH. **(84c:20060)**
 The structure of ω_1 -separable groups. **(84c:03124)**
 Glass, A. M. W. See van den Dries, L. P. D.; et al., **(84g:03041)**
 Herden, Gerhard See Dugas, Manfred, **(84f:20058)**
 Huber, Martin See Eklof, Paul C., **(84c:20060)**
 Huber-Dyson, Verena Symmetric groups and the open sentence problem. **(84j:20032)**
 Macintyre, Angus See van den Dries, L. P. D.; et al., **(84g:03041)**
 Megibben, Charles Crawley's problem on the unique ω -elongation of p -groups is undecidable. **(84m:20058)**
 Meirembekov, K. A. Spectra of superstable abelian groups. (Russian) **(84c:03098)**
 Mekler, Alan H. See van den Dries, L. P. D.; et al., **(84g:03041)**
 Mez, Hans-Christian Existentially closed linear groups. **(84a:20050)**
 Myasnikov, A. G. (with Remeslennikov, V. N.) Definability of the set of Mal'tsev bases and elementary theories of finite-dimensional algebras. I. (Russian) **(84d:03039)**
 Poland, John See van den Dries, L. P. D.; et al., **(84g:03041)**
 Remeslennikov, V. N. See Myasnikov, A. G., **(84d:03039)**
 Schmitt, Peter H. The elementary theory of torsion-free abelian groups with a predicate specifying a subgroup. **(84b:03053)**
 Wald, Burkhard Martinaxiom und die Beschreibung gewisser Homomorphismen in der Theorie der N_1 -freien abelschen Gruppen. (English summary) [Martin's axiom and the description of certain homomorphisms in the theory of N_1 -free abelian groups] **(84g:20095)**

20A99 None of the above, but in this section

- Ma, Ji Liang (with Yu, Chun Hai) Fuzzy groups. I. (Chinese. English summary) **84b:20003**
 Meng, Dao Ji Fuzzy groups. (Chinese. English summary) **84m:20003**
 Niemenmaa, Markku Ideal systems in groups. **84c:20002**
 Yu, Chun Hai See Ma, Ji Liang, **84b:20003**

secondary classifications:

- Anellis, Irving H. Boolean groups. **(84g:03102)**

20Bxx Permutation groups

20B05 General theory for finite groups

- Babai, László (with Cameron, Peter J.; Pálfi, P. P.) On the orders of primitive groups with restricted nonabelian composition factors. **84c:20003**
 Butler, Gregory (with McKay, John) The transitive groups of degree up to eleven. **84f:20005**

- Caliri Greco, Maria Construction of the permutation that follows a given permutation. (Italian. English summary) **84i:20006**

- Cameron, Peter J. Finite permutation groups and finite simple groups. (Russian) **84m:20004**

See also Babai, László; et al., **84c:20003**

- Gel'fand, A. V. An algorithm for construction of all possible permutations, based on factorization of symmetric groups by means of cyclic subgroups. (Russian) **84c:20007**
 Liebeck, Martin W. Bounds for the orders of some transitive permutation groups. **84c:20004**

- Extensions of a theorem of Jordan on primitive permutation groups. **84f:20006**
 McKay, John See Butler, Gregory, **84f:20005**

- Pálfi, P. P. A polynomial bound for the orders of primitive solvable groups. **84c:20007**

See also Babai, László; et al., **84c:20003**

- Saxl, Jan Groups on points and sets. (See **84c:05001**)
 Siemons, Johannes On partitions and permutation groups on unordered sets. **84j:20006**
 Suprunenko, D. A. Solvable minimal transitive permutation groups of degree pq . (Russian) **84g:20002**

- (Syskin, S. A.) See Cameron, Peter J., **84m:20004**

- Vuza, Dan Aspects mathématiques dans la théorie modale d'Anatol Vieru. II. [Mathematical aspects of the modal theory of Anatol Vieru. II] **84m:20005**

secondary classifications:

- Butler, Gregory Computing normalizers in permutation groups. **(84j:20003)**
 Fang, Yüan (with Meldrum, J. D. P.) The endomorphism near-ring of the symmetric group of degree four. **(84a:16066)**
 Gluck, David Trivial set-stabilizers in finite permutation groups. **(84c:20008)**
 Huang, Bing Chao An algorithm for inverting permutations. (Chinese summary) **(84c:20001)**
 Meldrum, J. D. P. See Fang, Yüan, **(84a:16066)**
 Proulx, Viera Krňanová On the genus of symmetric groups. **(84a:05025)**

20B07 General theory for infinite groups

- Cameron, Peter J. Orbits of permutation groups on unordered sets. III. Imprimitivity groups. **84f:20007a**
 Orbits of permutation groups on unordered sets. IV. Homogeneity and transitivity. **84f:20007b**
 Dmitruk, Yu. V. Sylow 2-subgroups of the countable alternating group. (Russian) **84b:20001**
 Macpherson, H. D. The action of an infinite permutation group on unordered subsets of a set. **84m:20006**

20B10 Characterization theorems

- Berkovich, Ya. G. Minimal permutation representations of finite groups. (Russian) **84b:20005**
 Gluck, David Trivial set-stabilizers in finite permutation groups. **84c:20008**
 Guralnick, Robert M. Subgroups of prime power index in a simple group. **84m:20007**
 Lyubich, M. Yu. On logarithmic property of a degree of finite group. **84b:20004**
 Mäurer, Helmut Die harmonischen Involutionen der Permutationsgruppe $\text{PTL}_2(K)$. [The harmonic involutions of the permutation group $\text{PTL}_2(K)$] **84m:20009**
 Ronse, Christian On finite permutation groups in which involutions fix at most 15 points. **84g:20003**
 Siemons, Johannes On doubly homogeneous groups. **84i:20008**

secondary classifications:

- Matthews, Rex Some generalisations of Chebyshev polynomials and their induced group structure over a finite field. **(84f:12010)**

20B15 Uniprimitive groups

- Jones, Gareth A. (with Soomro, K. D.) On a theorem of Wielandt concerning simply primitive groups. **84a:20005**
 Soomro, K. D. See Jones, Gareth A., **84a:20005**

20B20 Multiply transitive finite groups

- Atsumi, Tsuyoshi Normal subgroups of multiply transitive permutation groups. **84i:20009**
 Bhattacharya, Prabir On the tensor product of permutation modules. **84i:20010**
 Fomin, A. N. See Mansurov, V. V., **84g:20004**
 Key, Jennifer D. Note on a consequence for affine groups of the classification theorem for finite simple groups. **84m:20008**
 Kühnbrandt, Harold Algebraisierung scharf 2-fach transitiver Permutationsmengen durch Quasibereiche. (English summary) [Algebraization of sharply 2-transitive sets of permutations by quasidomains] **84d:20008**
 Mansurov, V. V. (with Fomin, A. N.) Transitive permutation groups in which an almost central involution stabilizes exactly one point. (Russian) **84g:20004**
 Trofimov, V. I. Transitive permutation groups with a solvable one-point stabilizer. (Russian) **84c:20004**
 Ward, Harold N. Binary views of ternary codes. **84a:20006**

secondary classifications:

- Deza, Michel Some new generalizations of sharply t -transitive groups and sets. **(84g:05010)**
 Mäurer, Helmut Permutationsgruppen ohne Pseudoinvolutionen, in deren Standgruppen die Involutionen regulär operieren. [Permutation groups without pseudoinvolutions in whose stabilizer subgroups the involutions act regularly] **(84m:20010)**

20B22 Multiply transitive infinite groups

Mäurer, Helmut Permutationsgruppen ohne Pseudoinvolutionen, in deren Standgruppen die Involutionen regulär operieren. [Permutation groups without pseudoinvolutions in whose stabilizer subgroups the involutions act regularly] **84m:20010**

secondary classifications:

Kühlbrandt, Harold Algebraisierung scharf 2-fach transitiver Permutationsmengen durch Quasiberreiche. (English summary) [Algebraization of sharply 2-transitive sets of permutations by quasidomains] **(84d:20006)**

20B25 Finite automorphism groups of algebraic, geometric, or combinatorial structures [See also 05Bxx, 12F10, 20G40, 20H30, 51-XX.]

Bandelow, Christoph ★Einführung in die Cubologie. (German) [Introduction to cubology] **84a:20007a**

★Inside Rubik's cube and beyond. **84a:20007b**

Godsil, Christopher D. On Cayley graph isomorphisms. **84m:20011**

Hintze, Wolfgang ★Der ungarische Zauberwürfel. (German) [The Hungarian magic cube] **84b:20006**

Kaluzhnin, A. A. (with Sushchanskii, V. I.; Ustimenko-Bakumovskii, V. A.) Application of electronic computers in the theory of substitution groups and its applications. **84m:20012**

(Moser, Lucy) See Bandelow, Christoph, **84a:20007b**

Mrowka, Michael (with Weber, Wolfgang J.) Der Viererwürfel. [The quadruple cube] **84j:20007**

Plesken, Wilhelm Counting with groups and rings. **84a:20008**

Reifart, A. (with Stroth, Gernot) On finite simple groups containing perspectives. **84j:20005**

Senechal, Marjorie Coloring symmetrical objects symmetrically. **84f:20008**

Stroth, Gernot On Chevalley groups acting on projective planes. **84j:20006**

See also Reifart, A., **84j:20005**

Sushchanskii, V. I. See Kaluzhnin, A. A.; et al., **84m:20012**

Ustimenko-Bakumovskii, V. A. See Kaluzhnin, A. A.; et al., **84m:20012**

Walker, Michael On central root automorphisms of finite generalised hexagons. **84c:20009**

On the generalised Fitting subgroup of collineation groups generated by central root automorphisms. **84c:20004**

Weber, Wolfgang J. See Mrowka, Michael, **84j:20007**

Yuster, Thomas Orbit sizes under automorphism actions in finite groups. **84m:20013**

Zassenhaus, Hans J. Rubik's cube: a toy, a Galois tool, group theory for everybody. **84c:20010**

(Zehnder-Reitinger, Jeannette) See Bandelow, Christoph, **84a:20007b**

secondary classifications:

Aschbacher, Michael (with Smith, Stephen D.) Tits geometries over GF(2) defined by groups over GF(3). **(84j:51009)**

Babai, László (with Godsil, Christopher D.) On the automorphism groups of almost all Cayley graphs. **(84d:05092)**

Billiet, Yves See Rolley Le Coz, Monique; et al., **(84j:51021)**

Bridges, W. G. (with Mena, R. A.) On the rational spectra of graphs with abelian Singer groups. **(84c:05059)**

Burton, Catherine T. See Chakravarti, I. M., **(84d:51011)**

Cameron, Peter J. (with Praeger, Cheryl E.) Graphs and permutation groups with projective subconstituents. **(84g:05073)**

Chakravarti, I. M. (with Burton, Catherine T.) Symmetries (group of automorphisms) of Desarguesian finite projective and affine planes and their role in statistical model construction. **(84d:51011)**

Cori, Robert (with Machi, Antonio) Construction of maps with prescribed automorphism group. **(84a:05035)**

Erokhin, V. A. Groups of automorphisms of 24-dimensional even unimodular lattices. (Russian) **(84f:10041)**

Fisk, Steve Automorphisms of graphs. **(84i:05060)**

Fournelle, Thomas A. Finite groups of automorphisms of infinite groups. II. **(84j:20070)**

Girstmair, Kurt On the computation of resolvents and Galois groups. **(84m:12023)**

Godsil, Christopher D. See Babai, László, **(84d:05092)**

Gould, Matthew Rectangular bands in universal algebra: two applications. **(84f:08004)**

Gronau, Hans-Dietrich O. F. (with Larisch, Hans-Herbert) On the SOMA-cube-puzzle. **(84d:05063)**

Hahn, Géza The automorphism group of a product of hypergraphs. **(84c:05084)**

Hering, Christoph On Beweglichkeit in affine planes. **(84k:51011)**

Ito, Noboru Note on Hadamard matrices of type Q. **(84c:05024)**

Doubly regular tournaments of Szekeres type. **(84c:05037)**

Jha, Vikram On spreads admitting large autotopism groups. **(84f:51025)**

Kerber, Adalbert (with Thürlings, Karl-Josef) Counting symmetry classes of functions by weight and automorphism group. **(84f:05010)**

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Raev, R. V. See Tonchev, V. D., **(84e:05026)**

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Schnabel, Rudolf Der Satz von Frucht. [Frucht's theorem] **(84g:05077)**

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secondary classifications:

Chau, T. C. A note concerning Fox's paper on Fenchel's conjecture. **(84m:20038)**

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Trofimov, V. I. Bounded automorphisms of graphs and the characterization of grids. (Russian) **(84h:05067)**

20B30 Symmetric groups, general

Silberger, Donald Morison Are primitive words universal for infinite symmetric groups? **84c:20011**

20B35 Subgroups of symmetric groups

Berkovich, Ya. G. Generalization of the theorem of P. Hall and J. Thompson on Hall subgroups of a symmetric group. I. (Russian) **84j:20008**

Bhattacharya, Prabir Permutation groups containing projective special linear groups of the same degree: a problem of Mathieu. **84c:20005**

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Lorch, Edgar R. On the isomorphisms of certain groups of permutations of the integers. **84j:20009**

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Roth, Richard L. Color symmetry and group theory. **84c:20012**

secondary classifications:

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20Cxx Representation theory of groups

20C05 Group rings of finite groups and their modules [See also 16A26.]

Barannik, A. F. (with Barannik, L. F.) Crossed group rings with the condition of trivial solvability of the equation $x^n - \mu = 0$. (Russian) **84m:20016**

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20C07 Group rings of infinite groups and their modules [See also 16A27.]

Berman, S. D. (with Mollov, T. Zh.) Isomorphism of semisimple group algebras of uncountable abelian p -groups. (Russian) **84c:20009**

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20C10 Integral representations of finite groups

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Lilling, M. See Bovier, Anton; et al., **84a:20012**

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20C11 p -adic representations of finite groups

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20C12 Integral representations of infinite groups

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Rodney, David Conjugacy in elementary abelian subgroups of finite groups. **84a:20015**

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[Extension of simple symplectic modules] **84c:20011**

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Digne, François (with Michel, Jean) Foncteur de Lusztig et fonctions de Green généralisées. (English summary) [Lusztig functor and generalized Green functions] (84i:20047)

Donkin, Stephen Locally finite representations of polycyclic-by-finite groups. (84c:16020a)

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Khadzhiiev, Dzh. Notions of irreducibility and the notion of an invariant for actions of groups in general categories. (Russian) (84k:18006)

Merris, Russell Extensions of the Minkowski determinant theorem. (84c:15009)

Induced bases of symmetry classes of tensors. (84c:15027)

Michel, Jean See Digne, François, (84i:20047)

Romanovskii, A. V. Characterization of simple Zassenhaus groups. (Russian) (84c:20021)

Shtern, A. I. Factorization and irreducible representations of a direct product of groups. (Russian. English summary) (84c:22008)

Veitsblit, A. I. (with Zhmud', É. M.) Generalized Zassenhaus groups. (Russian) (84c:20049)

van der Waal, Robert W. On the structure of normal subgroups of monomial groups. (84g:20032)

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20C20 Modular representations and characters

Burry, David W. Scott modules and lower defect groups. **84a:20016**

Erdmann, Karin Projective modules in blocks with elementary abelian defect groups. **84g:20016**

Feit, Walter Some consequences of the classification of finite simple groups. (Russian) **84m:20021**

Iizuka, Kenzo (with Ohmori, Futoru; Watanabe, Atumi) A remark on the representations of finite groups. VI. (Japanese. English summary) **84g:20017**

Juhász, Arye Some remarks on Brauer's third main theorem. **84a:20017**

On the distribution of the components of a reduced module into blocks. **84g:20018**

Michler, Gerhard O. Nonsolvable finite groups with cyclic Sylow p -subgroups have nonprincipal p -blocks. **84i:20011**

Ninomiya, Yasushi On p -nilpotent groups with extremal p -blocks. **84c:20019**

On the Cartan invariants of p -solvable groups. **84f:20015**

Ohmori, Futoru See Iizuka, Kenzo; et al., **84g:20017**

Okuyama, Tetsuro (with Tsuchida, Yukio) Local properties of p -block algebras of finite groups. **84i:20012**

Parshall, Brian J. Modular representations of algebraic groups. **84f:20016**

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Sasaki, Hiroki Green correspondence and transfer theorems of Wielandt type for G -functors. **84a:20018**

Schneider, Gerhard J. A. The vertices of the simple modules of M_{12} over a field of characteristic 2. **84i:20013**

(Syskin, S. A.) See Feit, Walter, **84m:20021**

Thévenaz, Jacques Representations of groups of order ph in characteristic p' . **84a:20019**

Tsuchida, Yukio A note on Cartan integers for p -solvable groups. **84j:20016**

See also Okuyama, Tetsuro, **84i:20012**

Wada, Tomoyuki On the number of irreducible characters in a finite group. **84d:20014**

Watanabe, Atumi Relations between blocks of a finite group and its subgroup. **84b:20009**

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Yoshida, Tomoyuki On G -functors. II. Hecke operators and G -functors. **84b:20010**

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Andersen, Henning Haahr (with Jørgensen, Jens; Landrock, Peter) The projective indecomposable modules of $SL(2, p^n)$. (84f:20044)

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Beyl, F. Rudolf (with Tappe, Jürgen) ★ Group extensions, representations, and the Schur multiplier. (84f:20002)

Chastkofsky, Leonard Variations on Hulsurka's matrix with applications to representations of algebraic Chevalley groups. (84m:20045)

Evens, L. See Alperin, J. L., (84a:20057)

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Koshitani, Shigeo Group algebras of finite p -solvable groups with radicals of the fourth power zero. (84b:20007)

Kratzer, Charles Rationalité des représentations de groupes finis. [Rationality of representations of finite groups] (84j:20015)

Landrock, Peter See Andersen, Henning Haahr; et al., (84f:20044)

Okawa, Yoshito An application of Evens' norm mapping. (84b:20061)

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Ye, Jia Chen The Cartan invariants of $SL(3, p^n)$. (Chinese. English summary) (84g:20087)

20C25 Projective representations and multipliers

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Kleppner, Adam Multiplier representations of discrete groups. (84k:22007)

Opolka, Hans Irreducible primitive characters of finite solvable groups. (84f:20013)

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20C30 Representations of finite symmetric groups and other special finite groups

Akin, Kaan (with Buchsbaum, David A.; Weyman, Jerzy) Schur functors and Schur complexes. **84c:20021**

Benson, D. J. The Loewy structure of the projective indecomposable modules for A_5 in characteristic 2. **84c:20006b**

The Loewy structure of the projective indecomposable modules for

A_5 in characteristic 2. **84c:20006a**

Beyens, D. See Ceulemans, A., **84d:20015**

Buchsbaum, David A. See Akin, Kaan; et al., **84c:20021**

Ceulemans, A. (with Beyens, D.) Monomial representation of point-group symmetries. **84d:20015**

Chen, Jin Quan (with Gao, Mei Juan) ★ Reduction coefficients of the permutation groups and their applications. (Chinese) **84a:20021**

Dupont, Jean-Pierre (with Dussaud, René; Idée, Edwige) Représentations du groupe symétrique et résolubles non galoisiennes. [Representations of the symmetric group and non-Galois resolvents] **84c:20022**

- Dussaud, René See Dupont, Jean-Pierre; et al., 84c:20022
 Gao, Mei Juan See Chen, Jin Quan, 84a:20021
 Gérardin, Paul Relevement des représentations du groupe $GL(n)$ sur un corps fini, d'après T. Shintani. [Lifting of representations of $GL(n)$ over a finite field, following T. Shintani] 84h:20005
 Hoffman, P. Exponential maps and λ -rings. 84c:20013
 Idée, Edwige See Dupont, Jean-Pierre; et al., 84c:20022
 Iommi Amunátegui, G. A nonrecursive expression for the number of irreducible representations of the symmetric group S_n . 84c:20022
 Merris, Russell Majorization of characters of the symmetric group. 84h:20012
 Murphy, G. E. The idempotents of the symmetric group and Nakayama's conjecture. 84c:20007
 Pan, Ji Zhi See Wang, Ru Lin; et al., 84f:20017
 Regev, Amitai Combinatorial sums, identities and trace identities of the 2×2 matrices. 84h:20006
 On the height of the Kronecker product of S_n characters. 84g:20019
 Tappe, Jürgen Local wreath product modules. 84b:20013
 Wang, Ru Lin (with Pan, Ji Zhi; Zhang, Yu Shun; Wang, Wei Wei) Orthogonal units of the symmetric group S_n . (Chinese. English summary) 84f:20017
 Wang, Wei Wei See Wang, Ru Lin; et al., 84f:20017
 Weyman, Jerzy See Akin, Kaan; et al., 84c:20021
 Zhang, Yu Shun See Wang, Ru Lin; et al., 84f:20017

secondary classifications:

- Baclawski, Kenneth Recursive algorithms for unitary and symplectic group representations. (84g:22003)
 Berele, Allan (with Regev, Amitai) Hook Young diagrams, combinatorics and representations of Lie superalgebras. (84d:05011)
 Clausen, Michael (with Stötzner, Friedrich) Pictures and skew (reverse) plane partitions. (84f:05007)
 Cohen, Paula (with Regev, Amitai) Asymptotic estimates of some S_n characters and the identities of the 2×2 matrices. (84k:05016)
 Franzblau, D. S. (with Zeilberger, Doron) A bijective proof of the hook-length formula. (84b:05016)
 Girardi, G. (with Sciarrino, A.; Sorba, P.) Generalized Young tableaux and Kronecker products of $SO(n)$ representations. (84g:22029)
 Hall, S. R. Semivariant vectors for centred space groups. (84h:20058)
 Hoffman, P. Hopf algebras from branching rules. (84b:16011)
 James, Gordon D. ★Теория представлений симметрических групп. (Russian) [The representation theory of the symmetric groups] (84c:20002)
 Kantor, William M. (with Liebler, Robert A.) The rank 3 permutation representations of the finite classical groups. (84h:20040)
 (Kerov, S. V.) See James, Gordon D., (84c:20002)
 Liebler, Robert A. See Kantor, William M., (84h:20040)
 Macdonald, I. G. ★Symmetric functions and Hall polynomials. (84g:05003)
 Morris, A. O. Representations of Weyl groups over an arbitrary field. (84h:20031)
 Pálly, P. P. (with Szalay, M.) The distribution of the character degrees of the symmetric p -groups. (84h:20073)
 Regev, Amitai A polynomial rate of growth for the multiplicities in cocharacters of matrices. (84g:16013)
 See also Berele, Allan, (84d:05011) and Cohen, Paula, (84k:05016)
 Sciarrino, A. See Girardi, G.; et al., (84g:22029)
 Sorba, P. See Girardi, G.; et al., (84g:22029)
 Stanley, Richard P. Factorization of permutations into n -cycles. (84g:05014)
 Stötzner, Friedrich See Clausen, Michael, (84f:05007)
 Szalay, M. See Pálly, P. P., (84h:20073)
 Tang, You Qi ★Duichenxing yuanli. II. (Chinese) [Principles of symmetry. II] (84c:20052)
 (Vershik, A. M.) See James, Gordon D., (84c:20002)
 Zeilberger, Doron See Franzblau, D. S., (84b:05016)
 (Zelevinskii, A. V.) See James, Gordon D., (84c:20002)

20C32 Representations of infinite symmetric groups and other special infinite groups

- Golembiowski, Andreas Zur Darstellungstheorie der abzählbar unendlichen symmetrischen Gruppe über Körpern der Charakteristik 0. (English summary) [On the representation theory of the countably infinite symmetric group over fields of characteristic 0] 84g:20020

secondary classifications:

- Berman, S. D. (with Buzási, Károly) Representations of a group containing an infinite cyclic subgroup of finite index. (Russian) (84d:20010)
 Buzási, Károly See Berman, S. D., (84d:20010)

20C35 Applications to physics

- Aroyo, M. I. See Kotzev, J. N., 84f:20018a; 84f:20018b; 84f:20018c and (See 84k:00008)
 Chan, K. S. (with Newman, Douglas John) Unique labelling of symmetry coordinates and cyclic regions in crystals. 84c:20014
 Flodmark, Stig (with Jansson, Per-Olof) Irreducible representations of finite groups. 84a:20023
 Jansson, Per-Olof See Flodmark, Stig, 84a:20023
 Kotzev, J. N. (with Aroyo, M. I.) Clebsch-Gordan coefficients for the corepresentations of Shubnikov point groups. II. Cubic groups. 84f:20018a
 (with Aroyo, M. I.) Clebsch-Gordan coefficients for the corepresentations of Shubnikov point groups. III. Groups of tetragonal, orthorhombic, monoclinic and triclinic crystal systems. 84f:20018b

- (with Aroyo, M. I.) Clebsch-Gordan coefficients for the corepresentations of Shubnikov point groups. IV. Groups of hexagonal and trigonal systems. 84f:20018c
 (with Aroyo, M. I.) Generalized and symmetrized Clebsch-Gordan coefficients for antiunitary groups. (See 84k:00008)
 Lulek, T. Weight and step operators for dihedral groups. 84d:20016
 See also Mucha, M., 84c:20007
 Mucha, M. (with Lulek, T.) Permutational symmetry of Clebsch-Gordan coefficients for the metacyclic groups. 84h:20007
 Newman, Douglas John Combinatorial enumeration and group representations. 84i:20015
 See also Chan, K. S., 84c:20014
 Sivardière, Jean Groupes commutatifs des groupes cristalllographiques. (English summary) [Commutator groups of crystallographic groups] 84c:20023
 Smirnov, Yu. F. See Sviridov, D. T.; et al., 84j:20017
 Sviridov, D. T. (with Sviridov, S. D.; Smirnov, Yu. F.) Decomposition of direct products of irreducible representations of the space group C_{2v} (lattices of the wurtzite and ZnO type). (Russian) 84j:20017
 Sviridov, S. D. See Sviridov, D. T.; et al., 84j:20017
 Wybourne, Brian G. Rank dependency of group properties. 84a:20024

secondary classifications:

- Aroyo, M. I. See Kotzev, J. N., (See 84k:00008)
 Balasubramanian, K. Operator and algebraic methods for NMR spectroscopy. I. Generation of NMR spin species. (84i:81124)
 Baramik, L. F. Unitary projective representations of the Galilei group. (Russian. English summary) (84g:22042)
 Bender, Carl M. (with Williams, David A.) Lorentz transformation properties of nonconserved charges. (84m:81177)
 Bovier, Anton (with Lüling, M.; Wyler, D.) Erratum: "Finite subgroups of $SU(3)$ " [J. Math. Phys. 22 (1981), no. 8, 1543–1547; MR 83b:20009b]. (84a:20012)
 Boyle, L. L. Space group representations for crystal structure types. (See 84k:00008)
 Chen, Jin Quan (with Gao, Mei Juan) ★Reduction coefficients of the permutation groups and their applications. (Chinese) (84a:20021)
 (with Chen, Xuan Gen; Gao, Mei Juan) The Clebsch-Gordan coefficients and isoscalar factors of the graded unitary group $SU(m/n)$. (84i:81115)
 Chen, Xuan Gen See Chen, Jin Quan; et al., (84i:81115)
 Chukhovskii, F. N. See Vergasov, V. L.; et al., (84j:81121a) and (84j:81121b)
 Combe, Philippe (with Rodriguez, Roger; Sirugue, M.; Sirugue-Collin, Madeleine) Central extensions of some abelian finite gauge groups. (See 84b:82005)
 Cyvin, S. J. Group-theoretical treatment of Kekulé structures. (84k:92034)
 Desmier, P. E. (with Patera, J.; Sharp, R. T.) Finite subgroup bases for compact Lie groups. (84c:22014)
 Dirr, R. Automorphism symmetries of space group selection rules. (See 84k:00008)
 Dong, Fa Yun See Zhu, Shi Quan; et al., (84j:81045)
 Gao, Mei Juan See Chen, Jin Quan, (84a:20021) and (84i:81115)
 Golding, R. M. See Newmarch, J. D., (84j:81042)
 Hurley, A. C. Complete sets of orthogonal character projectors for simply subducible groups. (84d:81017)
 Joshi, A. W. ★Elements of group theory for physicists. (84f:20001)
 Klein, D. J. (with Seligman, T. H.) Wigner-Eckart theorem for induced symmetries. (84f:81035)
 Klimyk, A. U. Wigner-Eckart theorem and infinitesimal operators of group representations. (84k:22023)
 Kotzev, J. N. (with Aroyo, M. I.) Associated corepresentations and symmetry of Clebsch-Gordan coefficients. (See 84k:00008)
 Krizančič, France ★Linearna analiza na grupah. (Slovenian) [Linear analysis of groups] (84c:22001)
 Kunert, Herbert (with Suffczynski, M.) Induced representations of the full holosymmetric double space groups based on the body-centred cubic Bravais lattice. (84c:22035)
 Active representations of space groups based on the cubic lattice. (See 84k:00008)
 Litvin, D. B. Tensor fields on crystals. (84h:82057)
 Lüling, M. See Bovier, Anton; et al., (84a:20012)
 Michel, Louis (with Mozzyrmas, Jan) Représentation de vibration d'un cristal construite par induction de représentations. (English summary) [Vibration representation of a crystal constructed by induction from representations] (84d:82028)
 Mozzyrmas, Jan See Michel, Louis, (84d:82028)
 Newman, Douglas John Symmetry properties of direct sum systems. (84i:81044)
 Newmarch, J. D. (with Golding, R. M.) The Racah algebra for groups with time reversal symmetry. III. (84j:81042)
 Some character theory for groups of linear and antilinear operators. (84k:81045)
 On the $3j$ symmetries. (84k:81046)
 Patera, J. See Desmier, P. E.; et al., (84c:22014)
 Pinsker, Z. G. See Vergasov, V. L.; et al., (84j:81121a) and (84j:81121b)
 Pu, Fu Ke (with Tao, Rui Bao) Molien type function for antisymmetrized power representation of a finite group. (84d:20012)
 Pyykkö, Pekka (with Toivonen, H. T.) Tables of representation and rotation matrices for the relativistic irreducible representations of 38 point groups. (84g:82028)
 Rittenberg, V. Global symmetries of spin systems. (84f:82051)
 Rodriguez, Roger See Combe, Philippe; et al., (See 84b:82005)
 Seligman, T. H. See Klein, D. J., (84f:81035)
 Sharp, R. T. See Desmier, P. E.; et al., (84c:22014)
 Sirugue, M. See Combe, Philippe; et al., (See 84b:82005)
 Sirugue-Collin, Madeleine See Combe, Philippe; et al., (See 84b:82005)
 Somers, L. J. Analysis of the outer product for the symmetric group. (84j:81044)
 Suffczynski, M. See Kunert, Herbert, (84a:22035)
 Tao, Rui Bao See Pu, Fu Ke, (84d:20012)
 Toivonen, H. T. See Pyykkö, Pekka, (84g:82028)

- Verasov, V. L. (with Chukhovskii, F. N.; Pinski, Z. G.) Many-wave theory of diffraction scattering of fast electrons in crystals. I. Group-theoretic analysis. (84j:81121a)
 (with Chukhovskii, F. N.; Pinski, Z. G.) Many-wave theory of diffraction scattering of fast electrons in crystals. II. Resolvable systems. (84j:81121b)
 Wang, Shun Jin See Zhu, Shi Quan; et al., (84j:81045)
 Williams, David A. See Bender, Carl M., (84m:81177)
 Wyler, D. See Bovier, Anton; et al., (84c:20012)
 Zeng, Bao Sheng See Zhu, Shi Quan; et al., (84j:81045)
 Zhu, Shi Quan (with Dong, Fa Yun; Zeng, Bao Sheng; Wang, Shun Jin) Analytic formulae and graphic solutions for calculation of $SU(N)$ and $SO(N)$ group structure constants. (Chinese. English summary) (84j:81045)

20C99 None of the above, but in this section

- Renaud, J.-C. Recurrence relations in a modular representation algebra. 84d:20017
 Shaw, Ronald A new look at group orthogonality relations. (See 84k:00008)

secondary classifications:

- tom Dieck, Tammo ★Группы преобразований и теория представлений. (Russian) [Transformation groups and representation theory] (84f:57028)
 (Kirillov, A. A.) See tom Dieck, Tammo, (84f:57028)

20Dxx Abstract finite groups

- Paris ★Séminaire sur les groupes finis. Tome I. (French) [Seminar on finite groups. Vol. I] 84k:20008

Seminar:

- Finite groups ★Séminaire sur les groupes finis. Tome I. (French) [Seminar on finite groups. Vol. I] 84k:20008

secondary classifications:

- Blackburn, Norman See Huppert, Bertram, (84i:20001a) and (84i:20001b)
 Huppert, Bertram (with Blackburn, Norman) ★Finite groups. II. (84i:20001a)
 (with Blackburn, Norman) ★Finite groups. III. (84i:20001b)
 Symposium:
 Topics in Finite Group Theory ★Topics in finite group theory. (84d:20004)
 Topics in finite group theory ★Topics in finite group theory. (84d:20004)

20D05 Classification of simple and nonsolvable groups

- Alex, Leo J. Simple groups and a Diophantine equation. 84c:20024
 Aschbacher, Michael (with Guralnick, R.) Solvable generation of groups and Sylow subgroups of the lower central series. 84c:20025
 The Tits group as a standard subgroup. 84c:20025
 The uniqueness case for finite groups. I. 84g:20021a
 The uniqueness case for finite groups. II. 84g:20021b
 Finite groups of rank 3. II. 84c:20008
 Broué, Michel p -composants d'un groupe fini et B -conjecture de Thompson.
 [p -components of a finite group and Thompson's B -conjecture] (See 84k:20008)
 See also Puig, Lluís, 84m:20022
 Butler, Gregory The maximal subgroups of the Chevalley group $G_2(4)$. 84c:20014
 Chak'ryan, Kerope See Petrov, N. T., 84c:20026
 Egawa, Yoshimi (with Yoshida, Tomoyuki) Standard subgroups of type $2\Omega^+(8, 2)$. 84c:20014
 Finkelstein, Larry (with Solomon, Ronald) Finite groups with a standard 3-component isomorphic to $\Omega^+(2m, 2)$, $m \geq 5$, $F_4(2)$ or $E_6(2)$, $n = 6, 7, 8$. 84g:20022
 Foote, Richard Aschbacher blocks. 84c:20023a
 (with Wong, Sia K.) On certain blocks of orthogonal type. 84g:20023b
 Gilman, Robert H. (with Griess, Robert L., Jr.) Finite groups with standard components of Lie type over fields of characteristic two. 84g:20024
 Gomi, Kensaku Sylow 2-intersections, 2-fusion, and 2-factorizations in finite groups of characteristic 2 type. 84c:20009
 Gorenstein, Daniel (with Lyons, Richard) The local structure of finite groups of characteristic 2 type. 84g:20025
 Griess, Robert L., Jr. See Gilman, Robert H., 84g:20024
 Guralnick, R. See Aschbacher, Michael, 84c:20025
 Hall, Jonathan I. Certain 2-local blocks with alternating sections. 84h:20015
 Harris, Morton E. Finite groups having an involution centralizer with a $PSU(3, 3)$ component. 84d:20018
 Finite groups containing an intrinsic 2-component of Chevalley type over a field of odd order. 84d:20019
 Hayashi, Makoto A characteristic 2-subgroup of a finite special group. 84f:20019
 Hée, Jean-Yves Composants et p -composants d'un groupe fini. [Components and p -components of a finite group] (See 84k:20008)
 Kondrat'ev, A. S. 2-local subgroups of finite groups. (Russian) 84g:20026
 Laitinen, Erkki Finite simple groups. (Finnish. English summary) 84i:20016
 Loginov, V. I. (with Tsaranov, S. V.) Extreme pairs for finite groups. (Russian. English summary) 84j:20018
 Lyons, Richard See Gorenstein, Daniel, 84g:20025
 Makhnev, A. A. See Veretennikov, B. M., 84d:20020
 Petrov, N. T. (with Chak'ryan, Kerope) Simple subgroups of $G_2(p^n)$, $p = 2$ or 3. 84c:20026
 Podufalov, N. D. On the strongly 3-embedded subgroups of the characteristic 2 type groups. 84i:20017
 Puig, Lluís La classification des groupes finis simples: bref aperçu et quelques conséquences internes. [The classification of the finite simple groups: brief overview and some internal consequences] 84m:20022

Solomon, Ronald See Finkelstein, Larry, 84g:20022

- Stroth, Gernot Graphs with subconstituents containing $Sz(q)$ and $L_2(r)$. 84c:20015
 Suzuki, Michio Classification of finite simple groups. (Japanese) 84g:20027
 Syskin, S. A. Standard components of type F_3 . (Russian) 84a:20026
 Thomas, Richard M. On the centralizers of elements of order 3 in finite groups. III. 84b:20016
 Tsaranov, S. V. See Loginov, V. I., 84j:20018
 Veretennikov, B. M. (with Makhnev, A. A.) Finite groups with bounded involution centralizer. (Russian) 84d:20020
 Wong, Sia K. See Foote, Richard, 84g:20023b
 Yoshida, Tomoyuki See Egawa, Yoshimi, 84b:20014

secondary classifications:

- Arad, Zvi (with Ward, Michael B.) New criteria for the solvability of finite groups. (84c:20016)
 Broué, Michel Groupes finis, séries formelles et fonctions modulaires. [Finite groups, formal series and modular functions] (See 84k:20008)
 Cameron, Peter J. Some aspects of "post-classification" geometry. (84g:51017)
 Finite permutation groups and finite simple groups. (Russian) (84m:20004)
 Chernikov, N. S. Locally finite simple groups with minimal condition for 2-subgroups. (Russian) (84g:20058)
 Feit, Walter Some consequences of the classification of finite simple groups. (Russian) (84m:20021)
 Ferguson, Pamela A. Complex linear groups of odd degree. (84g:20014a)
 Complex linear groups of relatively small degree. (84g:20014b)
 Fisman, Elsa On the product of two finite solvable groups. (84c:20023)
 Gorenstein, Daniel ★Finite simple groups. (84j:20002)
 Guralnick, Robert M. Subgroups inducing the same permutation representation. (84j:20010)
 Subgroups of prime power index in a simple group. (84m:20007)
 Kazarin, L. S. On the product of finite groups. (Russian) (84c:20044)
 Robinson, Derek John Scott Groups with prescribed automorphism group. (84b:20033)
 Rodney, David Conjugacy in elementary abelian subgroups of finite groups. (84a:20015)
 Suzuki, Hiroshi Automorphism groups of multilinear maps. (84k:10016)
 (Syskin, S. A.) See Cameron, Peter J., (84m:20004) and Feit, Walter, (84m:20021)
 Ward, Michael B. See Arad, Zvi, (84c:20016)
 Weiss, Richard Mark The nonexistence of 8-transitive graphs. (84f:05050)

20D06 Simple groups: alternating and classical groups [See also 20Gxx, 22Exx.]

- Campbell, Colin M. (with Robertson, Edmund F.) The efficiency of simple groups of order $< 10^5$. 84g:20028
 Di Martino, Lino (with Tamburini Bellani, M. Chiara) Do finite simple groups always contain subgroups which are not intersection of maximal subgroups? (Italian summary) 84i:20018
 Hakari, Michitaka On simple groups which are homomorphic images of multiplicative subgroups of simple algebras of degree 2. 84j:20019
 Kreknin, V. A. A test for the simplicity of a finite group. (Russian) 84j:20020
 Robertson, Edmund F. See Campbell, Colin M., 84g:20028
 Tamburini Bellani, M. Chiara See Di Martino, Lino, 84i:20018

secondary classifications:

- Finkelstein, Larry (with Solomon, Ronald) Finite groups with a standard 3-component isomorphic to $\Omega^+(2m, 2)$, $m \geq 5$, $F_4(2)$ or $E_6(2)$, $n = 6, 7, 8$. (84g:20022)
 Humphreys, John F. Projective character tables for the finite simple groups of order less than one million. (84c:20012)
 Moori, Jamsid On the automorphism group of the group $D_4(2)$. (84i:20038)
 Prevato, Emma Some families of simple groups whose lattices are complemented. (Italian summary) (84a:20031)
 Romanovskii, A. V. Characterization of simple Zassenhaus groups. (Russian) (84c:20021)
 Solomon, Ronald See Finkelstein, Larry, (84g:20022)

20D08 Simple groups: sporadic groups

- Broué, Michel (with Enguehard, Michel) Géométrie de Graham Higman et groupe de Higman-Sims. [Geometry of Graham Higman and the Higman-Sims group] (See 84k:20008)
 Groupes finis, séries formelles et fonctions modulaires. [Finite groups, formal series and modular functions] (See 84k:20008)
 Enguehard, Michel See Broué, Michel, (See 84k:20008)
 Frohardt, Daniel A trilinear form for the third Janko group. 84m:20023
 Griess, Robert L., Jr. The friendly giant. 84m:20024
 Wilson, Robert A. The quaternionic lattice for $2G_2(4)$ and its maximal subgroups. 84f:20020

secondary classifications:

- Beth, Thomas (with Jungnickel, Dieter) Mathieu groups, Witt designs, and Golay codes. (84a:05009)
 Buekenhout, Francis Geometries for the Mathieu group M_{12} . (84h:51034)
 Campbell, Colin M. (with Robertson, Edmund F.) The efficiency of simple groups of order $< 10^5$. (84g:20028)
 Di Martino, Lino (with Tamburini Bellani, M. Chiara) Do finite simple groups always contain subgroups which are not intersection of maximal subgroups? (Italian summary) (84i:20018)
 Humphreys, John F. Projective character tables for the finite simple groups of order less than one million. (84c:20012)
 Jungnickel, Dieter See Beth, Thomas, (84a:05009)

- Lepowsky, James (with Meurman, Arne) An E_8 -approach to the Leech lattice and the Conway group. (84c:10033)
- Meurman, Arne See Lepowsky, James, (84c:10033)
- Reifart, A. (with Stroth, Gernot) On finite simple groups containing perspectivities. (84g:20005)
- Robertson, Edmund F. See Campbell, Colin M., (84g:20028)
- Schneider, Gerhard J. A. The vertices of the simple modules of M_{12} over a field of characteristic 2. (84c:20013)
- Stroth, Gernot See Reifart, A., (84g:20005)
- Tamburini Bellani, M. Chiara [Fitting functors on finite solvable groups. I] (84j:20018)
- Weiss, Richard Mark A geometric construction of Janko's group J_3 . (84i:05062)

20D10 Solvable groups, theory of formations, π -length, ranks, factorable groups, p -groups [See also 20F17.]

- Arad, Zvi (with Ward, Michael B.) New criteria for the solvability of finite groups. (84c:20016)
- Aviñó Diaz, Maria A. Decomposition in a semidirect product of the automorphism group of an abelian p -group G of type $[2^{m_1}, 2^{m_2}]$, $m_1 \geq m_2$. (Spanish) (84c:20027)
- Baginski, Czesław On the property W in finite p -groups. (84g:20029)
- Beidleman, James C. (with Brewster, Ben; Hauck, Peter) Fittingfunktionen in endlichen auflösbaren Gruppen. I. [Fitting functors on finite solvable groups. I] (84j:20021)
- Berger, Thomas R. The smallest normal Fitting class revealed. (84c:20017)
- Brandl, Rolf Formations of metanilpotent groups and generalized Engel conditions. (84f:20021)
- Groups sharing some varietal properties with supersoluble groups. (84f:20022)
- Brewster, Ben See Beidleman, James C.; et al., (84j:20021)
- Brisson, Owen J. Hall-closure and products of Fitting classes. (84b:20017)
- Bryce, R. A. (with Cossey, John) Subgroup closed Fitting classes are formations. (84b:20009)
- Chak'ryan, Keropé Finite groups with maximal subgroups of orders p^n and pq . (Russian) (84j:20022)
- Cigic, V. Zu den \mathfrak{S} -Projektoren in endlichen Gruppen. (English and Serbo-Croatian summaries) (On the \mathfrak{S} -projectors in finite groups) (84b:20018)
- Cossey, John See Bryce, R. A., (84b:20009)
- Erickson, Roger P. Products of saturated formations. (84c:20028)
- Projectors of finite groups. (84b:20019)
- Ferguson, Pamela A. Relative normal complements in finite groups. (84b:20020)
- Franciosi, Silvana See de Giovanni, Francesco, (84f:20023)
- Fukushima, Hiroshi Finite groups admitting an automorphism of prime order fixing a 3-group. (84b:20010)
- de Giovanni, Francesco (with Franciosi, Silvana) A particular class of saturated formations. (Italian. English summary) (84f:20023)
- Gross, Fletcher Elementary abelian operator groups and admissible formations. (84c:20025)
- Hauck, Peter See Beidleman, James C.; et al., (84j:20021)
- Huang, Jing Wei Results of Wielandt and Baer on the decomposition of a group into subgroups. (Chinese. English summary) (84j:20023)
- Isaacs, I. Martin Abelian normal subgroups of M -groups. (84c:20027)
- Kurzweil, Hans Auflösbare Gruppen auf denen nicht auflösbare Gruppen operieren. (English summary) [Solvable groups acted on by unsolvable groups] (84g:20030)
- Kuzennii, M. F. See Levishchenko, S. S., (84c:20029)
- Lauze, Reinhard Zur Konstruktion und Klassifikation endlicher auflösbaren Gruppen. [On the construction and classification of finite solvable groups] (84c:20018)
- Levishchenko, S. S. (with Kuzennii, M. F.) Finite nondispersive groups in which any subgroup of nonprimary index is nilpotent or a Schmidt group. (Russian) (84c:20029)
- Li, Shi Rong Finite groups whose nonnormal subgroups containing $Z(p)$ have Sylow towers. (Chinese) (84b:20011)
- Finite groups in which every nonmaximal proper subgroup of even order is 2'-closed. (Chinese. English summary) (84g:20031)
- Macdonald, I. D. Some p -groups of Frobenius and extra-special type. (84d:20021)
- Palfy, P. P. One-step and two-step nonabelian groups. (84m:20026)
- Schaller, Kay-Uwe Über n -stufig zyklische p -Untergruppen endlicher auflösbaren Gruppen. [On n -step cyclic p -subgroups of finite solvable groups] (84b:20021)
- Skiba, A. N. Critical formations. (Russian. English summary) (84c:20010)
- Torres Iglesias, Miguel Two notes on Lockett sections in Fitting classes of finite groups. (Spanish. English summary) (84b:20012)
- van der Waal, Robert W. On the structure of normal subgroups of monomial groups. (84g:20032)
- Ward, Michael B. See Arad, Zvi, (84c:20016)
- Xu, Ming Yao A complete classification of metacyclic p -groups of odd order. (Chinese) (84g:20033)
- Zappa, Guido On the normal classes of finite soluble groups. (84j:20024)
- Sur des classes de groupes finis résolubles. [Classes of solvable finite groups] (See 84c:05001)

secondary classifications:

- Aschbacher, Michael (with Guralnick, R.) Solvable generation of groups and Sylow subgroups of the lower central series. (84c:20025)
- Berger, Thomas R. See Gross, Fletcher, (84g:20057b)
- Bray, Henry G. (with Deskins, W. E.; Johnson, David; Humphreys, John F.; Puttaswamaiah, B. M.; Venzke, Paul; Walls, Gary L.) ★Between nilpotent and solvable. (84k:20002)
- Curran, M. J. Non-CLT groups of small order. (84d:20035)
- Deskins, W. E. See Bray, Henry G.; et al., (84k:20002)
- Förster, Peter Pre-Frattini groups. (84c:20020)
- Gross, Fletcher (with Berger, Thomas R.) A universal example of a core-free permutible subgroup. (84g:20057b)
- Guralnick, R. See Aschbacher, Michael, (84c:20025)

- Humphreys, John F. See Bray, Henry G.; et al., (84k:20002)
- Johnson, David See Bray, Henry G.; et al., (84k:20002)
- Kimmerle, Wolfgang Relation modules and maximal subgroups. II. (84c:20013)
- Koshitani, Shigeo A remark on the nilpotency index of the radical of a group algebra of a p -solvable group. (84f:16015)
- Martínez López, C. Product formations of \mathfrak{S} -groups. (Spanish. English summary) (84g:20065)
- Muldagalliev, V. S. On centralizing factorizable groups. (Russian) (84f:20033)
- Nakazato, Haruo On \mathfrak{Q} -pre-Frattini subgroups of a finite solvable group. (84c:20030)
- Puttaswamaiah, B. M. See Bray, Henry G.; et al., (84k:20002)
- Venzke, Paul See Bray, Henry G.; et al., (84k:20002)
- Walls, Gary L. See Bray, Henry G.; et al., (84k:20002)
- (Weinstein, Michael) See Bray, Henry G.; et al., (84k:20002)
- Zakrevskaya, L. N. Finite groups with a dense system of \mathfrak{F} -subnormal subgroups. (Russian. English summary) (84m:20028)
- Zhmud', E. M. Finite solvable groups that have an irreducible complex character with conjugate zeros. (Russian) (84b:20008)

20D15 Nilpotent groups, p -groups

- Bannascher, Wolfgang Eine Verallgemeinerung des Regularitätsbegriffes bei p -Gruppen. I. [A generalization of the regularity concept in p -groups. I] (84g:20034a)
- Eine Verallgemeinerung des Regularitätsbegriffes bei p -Gruppen. II. [A generalization of the regularity concept in p -groups. II] (84g:20034b)
- Caranti, Andrea (with Legovini, Pierantonio) On finite groups whose endomorphic images are characteristic subgroups. (84b:20022)
- Cheng, Ying On double centralizer subgroups of some finite p -groups. (84b:20013)
- Corsi Tani, Gabriella On a conjecture of J. R. Durbin and M. McDonald. (Italian. English summary) (84b:20023)
- James, Rodney Corrigendum: "2-groups of almost maximal class" [J. Austral. Math. Soc. 19 (1975), 343–357; MR 52 #3318]. (84i:20019)
- Kuzennii, M. F. See Levishchenko, S. S., (84b:20024 and 84b:20022)
- Legovini, Pierantonio See Caranti, Andrea, (84b:20022)
- Levishchenko, S. S. (with Kuzennii, M. F.) Finite biprimary dispersive groups in which any subgroup of nonprime index is nilpotent or a Schmidt group. (Russian) (84d:20022)
- (with Kuzennii, M. F.) Finite dispersive nonbiprimary groups in which every nonnilpotent subgroup of nonprimary index is a Schmidt group. (Russian) (84b:20024)
- Macdonald, I. D. Finite p -groups with unique maximal classes. (84g:20035)
- Miech, R. J. The metabelian p -groups of maximal class. II. (84g:20036)
- Peng, T. A. Hypercentral subgroups of finite groups. (84g:20037)
- Sahuk, M. I. Finite groups with nonabnormal pairs of subgroups. (Russian) (84g:20038)
- Webb, Ursula On the rank of a p -group of class 2. (84g:20039)
- Xu, Ming Yao A class of semi- p -abelian p -groups. (84g:20040)

secondary classifications:

- Bérda, Hailé Sur une classe de p -groupes. (English summary) [A class of p -groups] (84b:20026)
- Gilotti, Anna Luisa (with Serena, Luigi) On the existence of normal Sylow p -complements. (Italian summary) (84b:20025)
- Havas, George (with Richardson, J. S.) Groups of exponent five and class four. (84f:20035)
- Huang, Jing Wei Results of Wielandt and Baer on the decomposition of a group into subgroups. (Chinese. English summary) (84j:20023)
- Macdonald, I. D. Some p -groups of Frobenius and extra-special type. (84d:20021)
- Matsuyama, Hiroshi On complementary triples in finite group. (84b:20015)
- Ninomiya, Yasushi On p -nilpotent groups with extremal p -blocks. (84c:20019)
- Richardson, J. S. See Havas, George, (84f:20035)
- Serena, Luigi See Gilotti, Anna Luisa, (84b:20025)
- Webb, Ursula The occurrence of groups as automorphisms of nilpotent p -groups. (84g:20071)
- Xu, Ming Yao A complete classification of metacyclic p -groups of odd order. (Chinese) (84g:20033)
- Zakrevskaya, L. N. Finite groups with a dense system of \mathfrak{F} -subnormal subgroups. (Russian. English summary) (84m:20028)

20D20 Sylow subgroups, Sylow properties, π -groups, π -structure

- Asaad, Mohamed Normal p -complements for finite groups. (84g:20041a)
- Necessary and sufficient conditions for the existence of normal Sylow subgroup in finite group. (84g:20041b)
- A note on Sylow subgroups with special order of intersection. (Arabic summary) (84m:20027)
- Broué, Michel La $Z^*(p)$ -conjecture de Glauberman. [Glauberman's $Z^*(p)$ -conjecture] (See 84k:20008)
- Chen, Zhong Mu A condition for a finite group to have normal p -complements. (Chinese) (84b:20014)
- Gilotti, Anna Luisa (with Serena, Luigi) On the existence of normal Sylow p -complements. (Italian summary) (84b:20025)
- Glauberman, George (with Niles, Richard) A pair of characteristic subgroups for pushing-up in finite groups. (84c:20042)
- Gudivok, P. M. (with Kirilyuk, A. A.; Rud'ko, V. P.; Tsitkin, A. I.) Finite subgroups of the group $GL(n, \mathbb{Z})$. (84k:20011)
- Isaacs, I. Martin Fixed points and π -complements in π -separable groups. (84c:20020)
- Kirilyuk, A. A. See Gudivok, P. M.; et al., (84k:20011)
- Matsuyama, Hiroshi On complementary triples in finite group. (84b:20015)
- Mikaelyan, G. S. Sylow-regular classes of groups. (Russian) (84c:20019)
- Niles, Richard See Glauberman, George, (84c:20042)
- Rud'ko, V. P. See Gudivok, P. M.; et al., (84k:20011)
- Serena, Luigi See Gilotti, Anna Luisa, (84b:20025)

Tsitkin, A. I. See Guličev, P. M.; et al. 84c:20011

Wen, Zhi Xiong Finite semisimple groups and finite groups with a Sylow tower. (Chinese. English summary) 84j:20025

secondary classifications:

Aschbacher, Michael (with Guralnick, R.) Solvable generation of groups and Sylow subgroups of the lower central series. (84c:20025)

Chakraborty, K. Finite groups with maximal subgroups of orders p^n and pq . (Russian) (84j:20022)

Dmitruk, Yu. V. Sylow 2-subgroups of the countable alternating group. (Russian) (84c:20001)

Emaldi, Maurizio Characterization of groups via projections onto their subgroups. (Italian) (84c:20022)

Guralnick, R. See Aschbacher, Michael, (84c:20025)

McBride, Patrick Paschal Automorphisms of 2-groups. (84g:20045)

Michler, Gerhard O. Nonsolvable finite groups with cyclic Sylow p -subgroups have nonprincipal p -blocks. (84c:20011)

Preiser, Udo A characterization of $\text{PGL}(2, q)$, q odd. (84d:20024)

Zha, Jian Guo A class of complete groups obtained from the symmetric group. (Chinese. English summary) (84g:20007)

20D25 Special subgroups (Frattini, Fitting, etc.)

Bérda, Haïlé Sur une classe de p -groupes. (English summary) [A class of p -groups] 84c:20026

Cheng, Ying On finite p -groups with cyclic commutator subgroup. 84c:20028

Förster, Peter Pre-Frattini groups. 84c:20020

Nakazato, Haruo On \mathfrak{S} -pre-Frattini subgroups of a finite solvable group. 84a:20030

Petravchuk, A. P. Finite groups in which noncyclic nonprimary subgroups are complemented. (Russian) 84j:20021

Romanovskii, A. V. Characterization of simple Zassenhaus groups. (Russian) 84c:20021

Zappa, Guido A remark on normal Fitting classes. (See 84c:00019)

secondary classifications:

Aviñó Díaz, María A. Decomposition in a semidirect product of the automorphism group of an abelian p -group G of type $[2^{m_1}, 2^{m_2}]$, $m_1 \geq m_2$. (Spanish) (84a:20027)

Berkovich, Ya. G. Generalization of the theorem of P. Hall and J. Thompson on Hall subgroups of a symmetric group. I. (Russian) (84j:20008)

Brisson, Owen J. Hall-closure and products of Fitting classes. (84b:20017)

20D30 Series and lattices of subgroups

Damova, O. V. The lattice of maximal subgroups of a finite group. (Russian) 84g:20043

Pasini, Antonio On the finite groups which give rise to Dirichlet algebras. 84d:20023

Previano, Emma Some families of simple groups whose lattices are complemented. (Italian summary) 84c:20031

Schaller, Kay-Uwe Über den Verband der Subnormalteiler einer endlichen, p -auflösbaren Gruppe. [The lattice of subnormal subgroups of a finite, p -solvable group] 84c:20029

Schmidt, Roland Untergruppenverbände endlicher Gruppen mit elementarabelschen Hallischen Normalteilern. [Subgroup lattices of finite groups with elementary abelian Hall normal subgroups] 84c:20030

secondary classifications:

Ježek, Jaroslav The lattice of equational theories. I. Modular elements. (84c:08007a)

20D35 Subnormal subgroups

Emaldi, Maurizio Characterization of groups via projections onto their subgroups. (Italian) 84c:20022

Zakrevskaya, L. N. Finite groups with a dense system of \mathfrak{S} -subnormal subgroups. (Russian. English summary) 84m:20028

secondary classifications:

Pettet, Martin R. A note on the automorphism tower theorem for finite groups. (84m:20030)

Schaller, Kay-Uwe Über den Verband der Subnormalteiler einer endlichen, p -auflösbaren Gruppe. [The lattice of subnormal subgroups of a finite, p -solvable group] (84c:20029)

20D40 Products of subgroups

Adnan, Saad Über faktorisierbare nichtauflösbare Gruppen. [On factorizable nonsolvable groups] 84f:20024

Fisman, Elsa On the product of two finite solvable groups. 84c:20023

Jiang, Qing Kai On CEA-groups. (Chinese. English summary) 84m:20029

Kazarin, L. S. On the product of finite groups. (Russian) 84g:20044

Preiser, Udo A characterization of $\text{PGL}(2, q)$, q odd. 84d:20024

20D45 Automorphisms

Beletskii, P. M. (with Morgado Morales, Eberto R.) On the automorphism group of a finite abelian p -group. (Russian) 84c:20024

Chang, Jui Chi On groups admitting a fixed-point-free automorphism group. I. 84d:20025

McBride, Patrick Paschal Automorphisms of 2-groups. 84g:20045

Morgado Morales, Eberto R. See Beletskii, P. M., 84c:20024

Nagrebetskii, V. T. On the group of automorphisms of the finite group $K(p^m, n)$. (Russian) 84g:20046

Peng, T. A. Finite groups with automorphisms acting trivially on subgroups. 84c:20025

Pettet, Martin R. A note on the automorphism tower theorem for finite groups. 84m:20030

secondary classifications:

Aviñó Díaz, María A. Decomposition in a semidirect product of the automorphism group of an abelian p -group G of type $[2^{m_1}, 2^{m_2}]$, $m_1 \geq m_2$. (Spanish) (84a:20027)

Caranti, Andrea (with Legovini, Pierantonio) On finite groups whose endomorphic images are characteristic subgroups. (84b:20022)

Corsi Tani, Gabriella On a conjecture of J. R. Durbin and M. McDonald. (Italian. English summary) (84b:20023)

Fournelle, Thomas A. Finite groups of automorphisms of infinite groups. II. (84g:20070)

Hiroshima, Hiroshi Finite groups admitting an automorphism of prime order fixing a 3-group. (84b:20010)

Kurzweil, Hans Die Gruppe A_3 als fixpunktfreie Automorphismengruppe. [The group A_3 as fixed-point-free automorphism group] (84d:20029)

Auflösbare Gruppen auf denen nicht auflösbare Gruppen operieren. (English summary) [Solvable groups acted on by unsolvable groups] (84g:20030)

Legovini, Pierantonio See Caranti, Andrea, (84b:20022)

Pettet, Martin R. Near-fields and linear transformations of finite fields. (84i:20015)

Wilson, Robert A. The quaternionic lattice for $2G_2(4)$ and its maximal subgroups. (84f:20020)

20D50 Covering of subgroups

20D60 Arithmetic and combinatorial problems

Bertram, Edward A. Some applications of graph theory to finite groups. 84c:20026

Denes, J. (with Kim, Ki Hang) On a problem of P. Erdős and E. G. Straus. 84i:20022

Iwasaki, Shiro A note on the n th roots ratio of a subgroup of a finite group. 84a:20032

Keedwell, Anthony Donald On the sequenceability of nonabelian groups of order pq . 84b:20016

On R -sequenceability and R_s -sequenceability of groups. 84f:20025

Kim, Ki Hang See Denes, J., 84i:20022

Lausch, Hans Term functions on nonabelian groups of order pq . 84a:20033

Murai, Masafumi On the Frobenius conjecture. (Japanese) 84g:20047

secondary classifications:

Arrowsmith, D. K. (with Jaeger, François) On the enumeration of chains in regular chain-groups. (84d:05010)

Brailovskii, L. V. (with Freiman, G. A.) On two-element subsets in groups. (84c:20003)

Freiman, G. A. See Brailovskii, L. V., (84c:20003)

Jaeger, François See Arrowsmith, D. K., (84d:05010)

Narkiewicz, W. (with Śliwa, Jan) Finite abelian groups and factorization problems. II. (84a:20058)

O'Brien, G. L. A generalized notion of quotient for finite abelian groups. (84j:20053)

Plesken, Wilhelm Counting with groups and rings. (84a:20008)

Śliwa, Jan See Narkiewicz, W., (84a:20058)

20D99 None of the above, but in this section

Broué, Michel Contrôle, isométries, groupes de Frobenius. [Control, isometries, Frobenius groups] (See 84c:20008)

Kimmerle, Wolfgang Growth sequences relative to subgroups. 84g:20048

Korzyukov, Yu. A. Finite ssN-groups. I. (Russian) 84b:20017

Longobardi, Patrizia (with Maj, Mercedes) Determination of finite T_2 -groups. (Italian. English summary) 84c:20031

Maj, Mercedes See Longobardi, Patrizia, 84c:20031

McBride, Patrick Paschal Near solvable signalizer functors on finite groups. 84g:20049a

Nonsolvable signalizer functors on finite groups. 84g:20049b

secondary classifications:

Bannai, Eiichi Tannaka-Krein duality for association schemes. (84c:05028)

Gould, Matthew Rectangular bands in universal algebra: two applications. (84f:08004)

Nöbauer, Wilfried Polynomfunktionen auf primen Restklassen. [Polynomial functions on prime residue classes] (84b:12028)

20Exx Structure and classification of infinite or finite groups

20E05 Free nonabelian groups

Adyan, S. I. Normal subgroups of free periodic groups. (Russian) 84g:20050

Djoković, Dragomir Ž. The structure of the automorphism group of a free group on two generators. 84i:20023

Kuz'min, Yu. V. Finite-order elements in free groups of some manifolds. (Russian) 84b:20018

McCullough, Darryl A theorem on symmetry of primitives. 84g:20051

Scharlemann, Martin (with Squier, Craig) Automorphisms of the free group of rank two without finite orbits. 84c:20012

Solopko, I. O. The Andrews-Curtis conjecture. (Russian) 84j:20026

Squier, Craig See Scharlemann, Martin, 84c:20012

secondary classifications:

Aleshin, S. V. A free group of finite automata. (Russian. English summary) (84j:68035)

Baumslag, Gilbert Free subgroups of certain one-relator groups defined by positive words. (84i:20028)

Cohn, Harvey Remarks on the cyclotomic Fricke groups. (84b:10030)

- Dekking, F. M. Replicating superfigures and endomorphisms of free groups. (84i:51019)
 de la Harpe, Pierre Free groups in linear groups. (84i:20050)
 Macdonald-Nasalska, Olga On infinite Nielsen transformations. (84c:20041)
 Makanin, G. S. Equations in a free group. (Russian) (84m:20040)
 Pytlík, T. Radial functions on free groups and a decomposition of the regular representation into irreducible components. (84a:20117)

20E06 Free products, free products with amalgamation, Higman-Neumann-Neumann extensions, and generalizations

- Ambrosiewicz, Jan A decomposition of elements in a group and its applications. (84h:20019)
 Bezverkhnii, V. N. Solvability of the inclusion problem in a class of HNN-groups. (Russian) (84h:20020)
 Bezverkhnaya, I. S. Conjugacy of finite sets of subgroups in a free product of groups. (Russian) (84c:20032)
 Jajodia, Sushil Combinatorial equivalence between group presentations. (84e:20027)
 Piccard, Sophie Sur le caractère fondamental du produit libre. [On the fundamental character of the free product] (84b:20027)

secondary classifications:

- Avenhaus, J. (with Madlener, K.) An algorithm for the word problem in HNN extensions and the dependence of its complexity on the group representation. (French summary) (84g:20061)
 Dunwoody, M. J. Cutting up graphs. (84k:05050)
 Katz, Elyahu (with Morris, Sidney A.) On the Hausdorffness of free products of topological groups with normal amalgamation. (84k:22004)
 (with Morris, Sidney A.) Free products of k_ω -topological groups with normal amalgamation. (84f:22004)
 Khan, Mohd. Saeed (with Morris, Sidney A.) Free products of topological groups with central amalgamation. I. (84c:22002a)
 (with Morris, Sidney A.) Free products of topological groups with central amalgamation. II. (84c:22002b)
 Madlener, K. See Avenhaus, J., (84g:20061)
 Morris, Sidney A. See Khan, Mohd. Saeed, (84c:22002a); (84c:22002b); Katz, Elyahu, (84f:22004) and (84k:22004)
 Rosenberger, G. On one-relator groups that are free products of two free groups with cyclic amalgamation. (84i:20030)

20E07 Subgroup theorems

- Berger, Thomas R. See Gross, Fletcher, (84g:20057b)
 Chernikov, N. S. Locally finite subgroups of binary finite groups. (Russian) (84e:20028)
 Gross, Fletcher (with Berger, Thomas R.) A universal example of a core-free permutable subgroup. (84g:20057b)
 Ostylovskii, A. N. Minimality conditions for q -subgroups in F_q^* -groups. (Russian) (84m:20031)
 Rousseau, Ronny On certain subgroups of a wreath product. (84g:20052)
 Sysak, Ya. P. Products of infinite groups. (Russian) (84m:20032)
 Zaitsev, D. I. Weakly uniform products of polycyclic groups. (Russian) (84b:20028)

secondary classifications:

- Borevich, Z. I. (with Vavilov, N. A.) Subgroups of the general linear group over a commutative ring. (Russian) (84g:20081)
 Dutta, T. K. Relative ideals in groups. (84a:20065)
 Erratum to: "Relative ideals in groups" [Kyungpook Math. J. 22 (1982), no. 2, 239-243; MR 84a:20065]. (84i:20071)
 Gross, Fletcher Infinite permutable subgroups. (84g:20057a)
 Kulkarni, Ravi S. An extension of a theorem of Kurosh and applications to Fuchsian groups. (84k:10018)
 Kurdachenko, L. A. (with Pilačev, V. V.) Groups with noncyclic subgroups of finite index. (Russian) (84j:20029)
 Pilačev, V. V. See Kurdachenko, L. A., (84j:20029)
 Protasov, I. V. (with Tsybenko, Yu. V.) Connectedness in the space of subgroups. (Russian) (84i:22005)
 Rudolph, Ragnar Ein Untergruppenansatz für modulare Gruppen. (English summary) [A subgroup theorem for modular groups] (84b:20030)
 Subbotin, I. Ya. Groups with quasiceutralizer condition. (Russian) (84e:20047)
 Tsybenko, Yu. V. See Protasov, I. V., (84i:22005)
 Vavilov, N. A. See Borevich, Z. I., (84g:20081)
 Zheng, Yan Lü K -subgroups and their applications. (Chinese. English summary) (84g:20069)

20E10 Varieties of groups

- Budkin, A. I. Independent axiomatizability of quasivarieties of groups. (Russian) (84b:20029)
 Quasivarieties of groups closed with respect to direct wreath products. (Russian) (84m:20033)
 Fitzpatrick, Patrick (with Kovács, L. G.) Varieties of nilpotent groups of class four. I. (84g:20053a)
 Varieties of nilpotent groups of class four. II, III. (84g:20053b)
 Kleiman, Yu. G. Generation of varieties of groups by certain classes of groups. (Russian) (84d:20026)
 Some questions of the theory of varieties of groups. (Russian) (84i:20024)
 Kovács, L. G. See Fitzpatrick, Patrick, (84g:20053a)
 Krasil'nikov, A. N. (with Shmel'kin, A. L.) The Specht property and basis rank of some products of varieties of groups. (Russian) (84c:20033)

- McKenzie, Ralph N. Subdirect powers of nonabelian groups. (84d:20027)
 Shmel'kin, A. L. See Krasil'nikov, A. N., (84c:20033)

secondary classifications:

- Kleiman, Yu. G. On identities in groups. (Russian) (84e:20040)
 Kopytov, V. M. Nilpotent lattice-ordered groups. (Russian) (84b:06016)
 Kuz'min, Yu. V. Finite-order elements in free groups of some manifolds. (Russian) (84h:20018)
 Lysenko, F. F. Supervarieties of varieties consisting of 2-step nilpotent groups. (Russian) (84c:20043)
 Saracino, D. Amalgamation bases for nil-2 groups. (84i:20035)

20E15 Chains and lattices of subgroups, subnormal subgroups [See also 20F22.]

- Busetto, Giorgio Normal subgroups and projectivities. (Italian) (84f:20029)
 da Costa Reis, M. Raquel P. Partial residuals in groupoid-lattices of all the subgroups of a group. (Portuguese) (84a:20035)
 Franciosi, Silvana Some dual homomorphisms between lattices of subgroups and lattices of normal subgroups. (Italian) (84c:20034)
 See also de Giovanni, Francesco, (84c:20034) and (84i:20025)
 de Giovanni, Francesco (with Franciosi, Silvana) Weak complementation in group theory. (Italian) (84a:20034)
 (with Franciosi, Silvana) Correction: "Weak complementation in group theory" [Ricerche Mat. 30 (1981), no. 1, 35-56; MR 84a:20034]. (Italian) (84i:20025)
 Leone, Antonella Construction of non-UM minimal finite groups. (Italian) (84g:20054)
 Napolitani, Franco Lattice isomorphisms and perfect groups. (Italian) (84e:20030)
 Ovsyannikov, A. Ya. Determinability by the lattice of subsemigroups of nonperiodic groups decomposable into a direct product. (Russian) (84h:20021)
 Rudolph, Ragnar Ein Untergruppenansatz für modulare Gruppen. (English summary) [A subgroup theorem for modular groups] (84b:20030)
 Sakamoto, Takanori Weakly serial subgroups. (84g:20055)
 Schmidt, Roland [Semifinitäten von Gruppen.] [Semifiniteness of groups] (84c:20035)
 Schmitt, Peter Gruppen, die von ihren endlichen lokalen Subnormalteilern überdeckt sind. [Groups which are generated by their finite locally subnormal subgroups] (84f:20026)
 Williams, J. P. The join of several subnormal subgroups. (84b:20031a)
 Conditions for subnormality of a join of subnormal subgroups. (84b:20031b)
 Zacher, Giovanni A lattice characterization of the finiteness of the index of a subgroup in a group. (Italian. English summary) (84f:20027)
 A normality relation on the lattice of subgroups of a group. (84e:20029)
 The images of normal subgroups under projectivities. (Italian) (84f:20028)

secondary classifications:

- Brandl, Rolf Infinite soluble groups with Engel cycles; a finiteness condition. (84d:20038)
 Brookes, C. J. B. Groups with every subgroup subnormal. (84h:20026b)
 Damova, O. V. The lattice of maximal subgroups of a finite group. (Russian) (84g:20043)
 Hausen, Jutta Infinite general linear groups over rings. (84f:20054)
 Iwahori, Nagayoshi Some topics on Coxeter groups and Weyl groups. (84c:20040)
 Lennox, John C. On quasinormal subgroups of certain finitely generated groups. (84c:20042)
 Mahdavian, S. K. A special class of three-Engel groups. (84g:20067)
 Pasini, Antonio On the finite groups which give rise to Dirichlet algebras. (84d:20023)
 Previato, Emma Some families of simple groups whose lattices are complemented. (Italian summary) (84a:20031)
 Sariev, A. Periodic topological groups with a locally compact lattice of closed subgroups. (Russian) (84b:22007)
 Schmidt, Roland Untergruppenverbände endlicher Gruppen mit elementarabelschen Hallischen Normalteilern. [Subgroup lattices of finite groups with elementary abelian Hall normal subgroups] (84c:20030)
 Šik, František Schreier-Zassenhaus theorem for algebras. II. (84d:04003)
 Smith, Howard Hypercentral groups with all subgroups subnormal. (84h:20026a)

20E18 Limits, profinite groups

- Jarden, Moshe Torsion-free profinite groups with open free subgroups. (84e:20031)
 Lubotzky, Alexander Combinatorial group theory for pro- p -groups. (84e:20032)

secondary classifications:

- Arad, Zvi (with Herfort, Wolfgang) A classification of locally finite and profinite groups with a centralizer condition. (84j:20027)
 Engler, Antonio J. (with Viswanathan, T. M.) Digging holes in algebraic closures à la Artin. II. (84m:12022b)
 (with Viswanathan, T. M.) Digging holes in algebraic closures à la Artin. I. (84m:12022a)
 Herfort, Wolfgang See Arad, Zvi, (84j:20027)
 Hilton, Peter J. Group structure in homotopy theory and generalizations of a theorem of Blackburn. (See (84b:00011))
 Viswanathan, T. M. See Engler, Antonio J., (84m:12022a) and (84m:12022b)

20E22 Extensions, wreath products, and other compositions

- Allenby, R. B. J. T. The solutions to two problems on permutational products. (84c:20036)
 Combrink, C. R. (with Dean, E. E.) Z -group wreath products. (84g:20056)
 Dean, E. E. See Combrink, C. R., (84g:20056)
 Ganyushkin, A. G. Subdirect and stratified products of groups. (Russian) (84a:20036)
 Hirschon, R. The number of indecomposable terms in direct decompositions of groups with the maximal condition. (84e:20033)

Lemaire, Claude Localisation relative et actions. [Relative localization and actions] 84f:20030

Moghaddam, M. Reza R. The Schur-multiplier of nilpotent product. 84m:20034

Mohammadi Hassanabadi, Aliakbar Sections. (See 84m:00013)

Rips, Eliyahu Iteration of operations on classes of groups. 84f:20026

Yabuzhi, G. G. Generalized Magnus imbedding. (Russian) 84e:20034

secondary classifications:

Beyl, F. Rudolf (with Tappe, Jürgen) ★ Group extensions, representations, and the Schur multiplier. (84f:20002)

Brown, Ronald (with Higgins, Philip J.) Crossed complexes and nonabelian extensions. (84b:18009)

Budkin, A. I. Quasivarieties of groups closed with respect to direct wreath products. (Russian) (84m:20033)

Chronowski, Antoni On Schreier extension of loops. (84f:20003)

Higgins, Philip J. See **Brown, Ronald**, (84b:18009)

Igotti, Paul Constructing crystallographic groups starting with finite extensions of finitely generated abelian groups. (84e:20055)

Lyubich, M. Yu. On logarithmic property of a degree of finite group. (84b:20004)

Maier, Berthold J. Einbettung von nilpotenten Gruppen zur Erzeugung von Kommutatorrelationen. [Embedding of nilpotent groups for the generation of commutator relations] (84d:20037)

Nico, William R. Wreath products and extensions. (84f:18002)

Nishigori, Noboru On skew products of groups. II. (84f:20085)

Rousseau, Romy On certain subgroups of a wreath product. (84g:20052)

Tappe, Jürgen Local wreath product modules. (84b:20013)

See also **Beyl, F. Rudolf**, (84f:20002)

Ulbrich, Karl-Heinz Sur les extensions de groupes à noyau abélien. (English summary) [On extensions of groups with abelian kernel] (84a:18007)

Wen, Zhi Xiong Finite semisimple groups and finite groups with a Sylow tower. (Chinese. English summary) (84j:20025)

20E25 Local properties

Arad, Zvi (with Herfort, Wolfgang) A classification of locally finite and profinite groups with a centralizer condition. 84j:20027

Asar, A. O. The solution of a problem of Kegel and Wehrhitz. 84c:20013

Belyaev, V. V. Locally finite groups with Chernikov Sylow 2-subgroups. (Russian) 84c:20037

Gersten, S. M. Conservative groups, indicability, and a conjecture of Howie. 84m:20035

Gross, Fletcher Infinite permutible subgroups. 84g:20057a

Groves, J. R. J. A conjecture of Lennox and Wiegold concerning supersoluble groups. 84m:20036

Herfort, Wolfgang See **Arad, Zvi**, 84j:20027

Hickin, Kenneth K. (with Phillips, Richard E.) A construction of locally finite simple groups. 84c:20014

Phillips, Richard E. See **Hickin, Kenneth K.**, 84c:20014

Tsiban'ov, M. V. Locally solvable F -factorizable groups. (Russian) 84a:20037

secondary classifications:

Hartley, Brian Periodic locally soluble groups containing an element of prime order with Chernikov centralizer. (84j:20038)

Schewtke, Peter Gruppen, die von ihren endlichen lokalen Subnormalteilern überdeckt sind. [Groups which are generated by their finite locally subnormal subgroups] (84f:20026)

20E26 Residual properties and generalizations

Hartley, Brian (with Lennox, John C.; Rhemtulla, Akbar H.) Cyclically separated groups. 84d:20028

Lennox, John C. See **Hartley, Brian**; et al., 84d:20028

Rhemtulla, Akbar H. See **Hartley, Brian**; et al., 84d:20028

secondary classifications:

Allenby, R. B. J. T. (with Tang, C. Y.) Residually finite one-relator groups with torsion. (84e:20038b)

(with Tang, C. Y.) The residual finiteness of some one-relator groups with torsion. (84e:20038a)

Tang, C. Y. See **Allenby, R. B. J. T.**, (84e:20038a) and (84e:20038b)

20E28 Maximal subgroups, minimal subgroups

Curzio, Mario (with Rao, Salvatore) Chief factors of IM-groups. (Italian) 84b:20032a

(with Rao, Salvatore) Errata: "Chief factors of IM-groups" [Ricerche Mat. 30 (1981), no. 2, 279–295; MR 84b:20032a]. (Italian) 84i:20027

Giordano, Gabriele (with Rao, Salvatore; Tuccillo, F.) IM-groups, and completely meet-irreducible subgroups. (Italian. English summary) 84b:20032b

Rao, Salvatore See **Curzio, Mario**, 84b:20032a; **Giordano, Gabriele**; et al., 84b:20032b

and **Curzio, Mario**, 84i:20027

Tuccillo, F. See **Giordano, Gabriele**; et al., 84b:20032b

secondary classifications:

Kimmerle, Wolfgang Relation modules and maximal subgroups. II. (84c:20013)

20E32 Simple groups [See also 20D05.]

Chernikov, N. S. Infinite simple locally finite groups. (Russian) 84j:20028

Locally finite simple groups with minimal condition for 2-subgroups. (Russian) 84g:20058

20E34 General structure theorems

Artamonov, V. A. The structure of projective groups in products of varieties. (Russian. English summary) 84e:20035

Chernikov, N. S. Locally step groups factorizable by subgroups of finite rank. (Russian) 84f:20031

Factorization theorems for locally step groups. (Russian) 84f:20032

Goretskii, V. È. See **Kurdachenko, L. A.**, 84g:20059

Hoare, A. H. M. (with Wilkens, D. L.) On groups with unbounded non-Archimedean elements. 84a:20038

Kurdachenko, L. A. (with Goretskii, V. È.) Groups with a dense system of almost normal subgroups. (Russian) 84g:20059

(with Pilačev, V. V.) Groups with noncyclic subgroups of finite index. (Russian) 84j:20029

Lelechenko, T. G. (with Liman, F. M.) Groups with invariant maximal rank 1 abelian subgroups of nonprime orders. (Russian) 84a:20039

Liman, F. M. See **Lelechenko, T. G.**, 84a:20039

Muldagaliev, V. S. On centralizing factorizable groups. (Russian) 84f:20033

Niemenmaa, Markku A characterization of minimal nonnilpotent groups. 84a:20040

Pilačev, V. V. See **Kurdachenko, L. A.**, 84j:20029

Semko, N. N. Nonperiodic nonabelian groups with a given system of normal infinite nonabelian subgroups. (Russian) 84e:20036

Subbotin, I. Ya. Infinite KI-groups with a Chernikov periodic part of the commutator subgroup. (Russian) 84m:20037

Wilkens, D. L. See **Hoare, A. H. M.**, 84a:20038

secondary classifications:

Longobardi, Patrizia (with Maj, Mercedes) Determination of finite T_2 -groups. (Italian. English summary) (84c:20031)

Maj, Mercedes See **Longobardi, Patrizia**, (84c:20031)

Semko, N. N. Periodic nonabelian groups with a given system of invariant infinite nonabelian subgroups. (Russian) (84a:20048)

20E36 General theorems concerning automorphisms of groups

Curran, M. J. A nonabelian automorphism group with all automorphisms central. 84e:20037

Kurzweil, Hans Die Gruppe A_5 als fixpunktfreie Automorphismengruppe. [The group A_5 as fixed-point-free automorphism group] 84d:20029

Robinson, Derek John Scott Groups with prescribed automorphism group. 84b:20033

Webb, Ursula An independence result for group automorphisms. 84b:20034

secondary classifications:

Farkas, Daniel R. Endomorphisms of polycyclic groups. (84f:20039)

Fournelle, Thomas A. Finite groups of automorphisms of infinite groups. II. (84g:20070)

Ren, Hong Shuo (with Wan, Zhe Xian) Automorphisms of $\text{PGL}_2(K)$ over any skew field K . (84b:20052a)

(with Wan, Zhe Xian) Automorphisms of $\text{PSL}_2(K)$ over any skew field K . (84b:20052b)

Scharlemann, Martin (with Squier, Craig) Automorphisms of the free group of rank two without finite orbits. (84c:20012)

Squier, Craig See **Scharlemann, Martin**, (84c:20012)

Wan, Zhe Xian See **Ren, Hong Shuo**, (84b:20052a) and (84b:20052b)

Wang, Chun Sen Automorphisms of linear groups over a class of rings. (Chinese) (84c:20021)

Webb, Ursula The occurrence of groups as automorphisms of nilpotent p -groups. (84g:20071)

20E99 None of the above, but in this section

Subbotin, I. Ya. The hypercentral coradical of a KI-group. (Russian) 84d:20030

20Fxx Special aspects of infinite or finite groups

20F05 Generators, relations, and presentations

Allenby, R. B. J. T. (with Tang, C. Y.) Residually finite one-relator groups with torsion. 84e:20038b

(with Tang, C. Y.) The residual finiteness of some one-relator groups with torsion. 84e:20038a

Arrell, David G. (with Manrai, S.; Worboys, Michael) A procedure for obtaining simplified defining relations for a subgroup. 84a:20041

Baumslag, Gilbert Free subgroups of certain one-relator groups defined by positive words. 84i:20028

Bieri, Robert (with Strebel, Ralph) On the existence of finitely generated normal subgroups with infinite cyclic quotients. 84c:20038

Campbell, Colin M. (with Robertson, Edmund F.) Groups related to $F^{n,h,c}$ involving Fibonacci numbers. 84f:20034

(with Robertson, Edmund F.) Some problems in group presentations. 84j:20030

Chau, T. C. A note concerning Fox's paper on Fenchel's conjecture. 84m:20038

Collins, D. J. (with Huebschmann, Johannes) Spherical diagrams and identities among relations. 84b:20035

- Fluch, Wolfgang Ein Theorem der linearen Gruppen. [A theorem on linear groups] 84d:20031a
Eine verallgemeinerte Higman-Gruppe. [A generalized Higman group] 84d:20031b
- Gitman, Robert H. Enumeration of double cosets. 84c:20039
- Gruenberg, K. W. Studying groups by generators and relations. (See 84m:00013)
- Havas, George (with Richardson, J. S.) Groups of exponent five and class four. 84f:20035
(with Newman, Morris) Minimal presentations for finite groups of prime-power order. 84c:20015
- Hirshon, R. A group with constant growth rate. 84m:20039
- Howie, James On locally indicable groups. 84b:20036
- Howse, J. R. (with Johnson, David Lawrence) An algorithm for the second derived factor group. 84a:20042
- Huebschmann, Johannes See Collins, D. J., 84b:20035
- Iwahori, Nagayoshi Some topics on Coxeter groups and Weyl groups. 84c:20040
- Johnson, David Lawrence See Howse, J. R., 84a:20042
- van der Kallen, Wilberd $SL_n(\mathbb{C}[X])$ does not have bounded word length. 84b:20037
- Linnell, P. A. (with McIsaac, A. J.; Webb, P. J.) Bounding the number of generators of a metabelian group. 84a:20043
- Lyndon, Roger C. Equations in groups. (See 84b:00011)
- Macedonska-Nosalska, Olga On infinite Nielsen transformations. 84c:20041
- Makarin, G. S. Equations in a free group. (Russian) 84m:20040
- Manrai, S. See Arrell, David G.; et al., 84a:20041
- McIsaac, A. J. See Linnell, P. A.; et al., 84a:20043
- Muller, David E. (with Schupp, Paul E.) Groups, the theory of ends, and context-free languages. 84c:20016
- Newman, Morris See Havas, George, 84c:20015
- Pride, S. J. (with Vella, A. D.) On the Hopficity and related properties of some two-generator groups. 84c:20042
- Richardson, J. S. See Havas, George, 84f:20035
- Robertson, Edmund F. See Campbell, Colin M., 84f:20034 and 84j:20030
- Schupp, Paul E. See Muller, David E., 84c:20016
- Seal, D. J. The orders of the Fibonacci groups. 84b:20038
- Stöhr, Ralph Groups with one more generator than relators. 84c:20043
- Strebel, Ralph See Bieri, Robert, 84c:20038
- Tang, C. Y. See Allenby, R. B. J. T., 84c:20038
- Thomas, Richard M. Some infinite Fibonacci groups. 84g:20060
- Vella, A. D. See Pride, S. J., 84c:20042
- Webb, P. J. See Linnell, P. A.; et al., 84a:20043
- Worboys, Michael See Arrell, David G.; et al., 84a:20041

secondary classifications:

- Adyan, S. I. Normal subgroups of free periodic groups. (Russian) 84g:20050
- Ambrosiewicz, Jan A decomposition of elements in a group and its applications. (84h:20019)
- Book, Ronald V. When is a monoid a group? The Church-Rosser case is tractable. (84b:20067)
- Campbell, Colin M. (with Robertson, Edmund F.) The efficiency of simple groups of order $< 10^5$. (84g:20028)
- Deryabina, G. S. On the conjugacy problem for groups with one defining relation. (Russian. English summary) 84j:20031
- Djoković, Dragomir Ž. (with Malzan, Jerry G.) Products of reflections in $U(p, q)$. (84a:20051)
- Drozin, A. D. Infinite nilpotent groups containing a two-generated maximal abelian normal subgroup. (Russian) 84m:20043
- Fluch, Wolfgang Darstellungen und Relationen von Gruppen. [Representations and relations of groups] (84h:20003)
- Frougny, Christiane (with Sakarovitch, Jacques; Valkema, Erich) On the Hotz group of a context-free grammar. (84d:68079)
- Glass, A. M. W. Countable lattice-ordered groups. (84c:06019)
- Gupta, Chander Kanta On the conjugacy problem for F/R' . (84c:20044)
- Harary, Frank Achievement and avoidance games designed from theorems. (84h:90092)
- Huo, Yuan Ji See Zou, Li Guo, (84a:20024)
- Hurrelbrink, Jürgen On presentations of $SL_n(\mathbb{Z}_p)$. (84i:20044)
- Jajodia, Sushil Combinatorial equivalence between group presentations. (84e:20027)
- Johnson, David Lawrence ★Topics in the theory of group presentations. (84f:20003)
On a problem of Magnus. (84g:20074)
- Kaneto, Takeshi On genus 2 Heegaard diagrams for the 3-sphere. (84e:57013)
- Malzan, Jerry G. See Djoković, Dragomir Ž., (84a:20051)
- Monson, B. R. The Schläfli of a crystallographic Coxeter group. (84b:20059)
- Robertson, Edmund F. See Campbell, Colin M., (84g:20028)
- Robinson, Derek John Scott (with Strebel, Ralph) Some finitely presented soluble groups which are not nilpotent by abelian by finite. (84m:20041)
- Sakarovitch, Jacques See Frougny, Christiane; et al., (84d:68079)
- Schultz, Phillip Enumerations of rooted trees with an application to group presentations. (84b:05041)
- Sieradski, Allan J. Hereditary homotopy equivalences. (84j:57002)
- Silvester, J. R. On the GL_n of a semilocal ring. (84c:20057)
- Strebel, Ralph See Robinson, Derek John Scott, (84a:20041)
- Valkema, Erich See Frougny, Christiane; et al., (84d:68079)
- Weinberger, Shmuel There exist finitely presented groups with infinite coze. (84k:57020)
- Wisliceny, J. Zur Darstellung von Pro- p -Gruppen und Lieschen Algebren durch Erzeugende und Relationen. [On the presentation of pro- p -groups and Lie algebras by generators and relations] (84i:17016)
- Zou, Li Guo (with Huo, Yuan Ji) Generators of the groups defined by symmetric matrices over a field of characteristic 2. (Chinese. English summary) (84k:20024)

20F06 Cancellation theory

- Palasinski, Marek Unique presentation of groups with a small overlap of defining words. (Russian) 84i:20029
- Rosenberger, G. On one-relator groups that are free products of two free groups with cyclic amalgamation. 84i:20030
secondary classifications:
Appel, K. I. (with Schupp, Paul E.) Artin groups and infinite Coxeter groups. (84c:20028)
Collins, D. J. (with Huebschmann, Johannes) Spherical diagrams and identities among relations. (84b:20035)
Huebschmann, Johannes See Collins, D. J., (84b:20035)
Johnson, David Lawrence ★Topics in the theory of group presentations. (84f:20003)
Schupp, Paul E. See Appel, K. I., (84c:20028)

20F10 Word problems, other decision problems, connections with logic and automata [See also 03D05, 03D40, 06B25, 08A50, 68Dxx, 68F10.]

- Avenhaus, J. (with Madlener, K.) An algorithm for the word problem in HNN extensions and the dependence of its complexity on the group representation. (French summary) 84g:20061
- Cannonito, F. B. On algorithmic problems for solvable groups. 84b:20022
- Deryabina, G. S. On the conjugacy problem for groups with one defining relation. (Russian. English summary) 84j:20031
- Durner, V. G. Systems of equations on free nilpotent groups. (Russian) 84b:20023
- Ellers, Erich W. Relations in the projective general linear group and in the affine subgroup. 84c:20039
- Grunewald, Fritz J. (with Segal, Daniel) Résolution effective de quelques problèmes diophantiens sur les groupes algébriques linéaires. (English summary) [Effective solvability of certain Diophantine problems related to linear algebraic groups] 84a:20044
- Gupta, Chander Kanta On the conjugacy problem for F/R' . 84c:20044
- Horadam, K. J. The conjugacy problem for graph products with cyclic edge groups. 84i:20031
- Huber-Dyson, Verena Finiteness conditions and the word problem. 84i:20032
Symmetric groups and the open sentence problem. 84j:20032
Decision problems in group theory. 84d:20032
- Kalorkoti, K. A. Decision problems in group theory. 84f:20036
- Kleiman, Yu. G. On identities in groups. (Russian) 84c:20040
- Madlener, K. See Avenhaus, J., 84c:20041
- Mann, Avinoam A note on recursively presented and co-recursively presented groups. 84d:20033
- Ozbigov, Yu. I. Equations with two unknowns in a free group. (Russian) 84j:20033
- Segal, Daniel See Grunewald, Fritz J., 84a:20044
- Shatrova, N. P. Upper bound of the degree of complexity of an algorithm for solving the conjugacy problem for a class of groups. (Russian) 84b:20039
- Weston, K. W. The commutator equation problem for $SL(3, \mathbb{Z})$. 84d:20034

secondary classifications:

- Bezverkhniĭ, V. N. Solvability of the inclusion problem in a class of HNN-groups. (Russian) (84b:20020)
- Bezverkhniĭ, I. S. Conjugacy of finite sets of subgroups in a free product of groups. (Russian) (84c:20032)
- Book, Ronald V. When is a monoid a group? The Church-Rosser case is tractable. (84b:20067)
- Hurley, T. C. On commutators and powers in groups. (84g:20062)
- Kopytov, V. M. Nilpotent lattice-ordered groups. (Russian) (84b:06016)
- McKenzie, Ralph N. Subdirect powers of nonabelian groups. (84d:20027)
- Rosenberger, G. On one-relator groups that are free products of two free groups with cyclic amalgamation. (84i:20030)
- Silberger, Donald Morison Are primitive words universal for infinite symmetric groups? (84c:20011)
- Stillwell, John C. Efficient computation in groups and simplicial complexes. (84h:03099)
- Styshev, V. B. Reconstruction of braids. (Russian) (84j:20037)

20F12 Commutator calculus

- Cassidy, Charles Une propriété des commutateurs dans les groupes locaux. [A property of commutators in local groups] 84b:20040
- Guralnick, Robert M. Commutators and commutator subgroups. 84b:20041
- Hall, M., Jr. (with Sims, C. C.) The Burnside group of exponent 5 with two generators. 84c:20041
- Hurley, T. C. On commutators and powers in groups. 84g:20062
- Sims, C. C. See Hall, M., Jr., 84c:20041
secondary classifications:
Goldstein, Richard Z. (with Turner, Edward C.) Reduced forms for quadratic words and spines of 2-manifolds. (84b:57001)
Johnson, David Lawrence Towards a characterization of smooth braids. (84c:20048)
Kappe, Luise-Charlotte Engel margins in metabelian groups. (84i:20033)
Miech, R. J. The metabelian p -groups of maximal class. II. (84g:20036)
Monarkh, E. I. (with Skopin, A. I.) An interactive system of symbolic computations in groups of Burnside type. (Russian) (84f:68029)
Skopin, A. I. See Monarkh, E. I., (84f:68029)
Tobin, S. J. Groups with exponent four. (84c:20003)
Turner, Edward C. See Goldstein, Richard Z., (84b:57001)

20F14 Derived series, central series, and generalizations

- Avitá Díaz, María A. Upper central series of the kernel group of the automorphism group of a finite abelian p -group of type $[p^{m_1}, p^{m_2}, \dots, p^{m_r}]$, $m_i > m_{i+1}$, $i = 1, 2, \dots, r-1$. (Spanish. English summary) **84f:20037**
- Kappe, Luise-Charlotte. Engel margins in metabelian groups. **84i:20033**
- Khukhro, E. I. Nilpotent subdirect products. (Russian) **84f:20038**

secondary classifications:

- Cassidy, Charles. Une propriété des commutateurs dans les groupes locaux. [A property of commutators in local groups] (**84b:20040**)

20F16 Solvable groups, supersolvable groups

- Asasyan, A. R. Solvable R -groups of finite rank. (Russian. English summary) **84h:20024**
- Chernikov, S. N. Supersolvable primarily elementary groups. (Russian) **84g:20063**
- Curran, M. J. Non-CLT groups of small order. **84d:20035**
- Fan, Yun. See Zhang, Yuan Da, **84f:20040**
- Farkas, Daniel R. Endomorphisms of polycyclic groups. **84f:20039**
- Lennox, John C. On quasnormal subgroups of certain finitely generated groups. **84e:20042**
- Robinson, Derek John Scott (with Strebel, Ralph) Some finitely presented soluble groups which are not nilpotent by abelian by finite. **84m:20041**
- Roman'kov, V. A. The width of verbal subgroups of solvable groups. (Russian) **84g:20064**
- Strebel, Ralph. See (Robinson, Derek John Scott, **84m:20041**)
- Wehrfritz, B. A. F. Groups whose irreducible representations have finite degree. III. **84b:20042b**

Groups whose irreducible representations have finite degree. II. **84b:20042a**

- Wilson, John S. Polycyclic groups and topology. **84m:20042**
- Large nilpotent subgroups of polycyclic groups. **84a:20045**
- Zhang, Yuan Da (with Fan, Yun) A criterion for supersolvability of groups. (Chinese summary) **84f:20040**
- An outline of supersolvable groups. (Chinese) **84b:20043**

secondary classifications:

- Asar, A. O. The solution of a problem of Kegel and Wehrfritz. (**84k:20013**)
- Brandl, Rolf. Groups sharing some varietal properties with supersoluble groups. (**84f:20022**)
- Bray, Henry G. (with Deskins, W. E.; Johnson, David; Humphreys, John F.; Puttaswamaiah, B. M.; Venzke, Paul; Walls, Gary L.) ★Between nilpotent and solvable. (**84k:20002**)
- Cannonito, F. B. On algorithmic problems for solvable groups. (**84h:20022**)
- Deskins, W. E. See Bray, Henry G.; et al. (**84k:20002**)
- Gildenhuys, D. (with Strebel, Ralph) On the cohomology of soluble groups. II. (**84c:20059**)
- Groves, J. R. J. Metabelian groups with finitely generated integral homology. (**84c:20062**)
- A conjecture of Lennox and Wiegold concerning supersoluble groups. (**84m:20036**)
- Humphreys, John F. See Bray, Henry G.; et al. (**84k:20002**)
- Johnson, David. See Bray, Henry G.; et al. (**84k:20002**)
- Kazarin, L. S. The product of two nilpotent groups. (Russian) (**84h:20025**)
- Li, Shi Rong. Finite groups whose nonnormal subgroups containing $Z(P)$ have Sylow towers. (Chinese) (**84h:20011**)
- Lichtman, A. I. On linear groups over a field of fractions of a polycyclic group ring. (**84d:20050**)
- Puttaswamaiah, B. M. See Bray, Henry G.; et al. (**84k:20002**)
- Robinson, Derek John Scott. Applications of cohomology to the theory of groups. (**84d:20052**)
- Semko, N. N. Periodic nonabelian groups with a given system of invariant infinite nonabelian subgroups. (Russian) (**84a:20048**)
- Snider, Robert L. Solvable groups whose irreducible modules are finite dimensional. (**84a:20010**)
- Strebel, Ralph. See Gildenhuys, D. (**84c:20059**)
- Subbotin, I. Ya. Groups with quasicentralizer condition. (Russian) (**84e:20047**)
- Tsiban'ov, M. V. Locally solvable F -factorizable groups. (Russian) (**84a:20037**)
- Venzke, Paul. See Bray, Henry G.; et al. (**84k:20002**)
- Walls, Gary L. See Bray, Henry G.; et al. (**84k:20002**)
- (Weinstein, Michael) See Bray, Henry G.; et al. (**84k:20002**)
- Wolf, Thomas R. Solvable and nilpotent subgroups of $GL(n, q^m)$. (**84b:20057**)
- Zaitsev, D. I. Nilpotent approximations of metabelian groups. (Russian) (**84b:20045**)

20F17 Formations of groups [See also 20D10.]

- Martínez López, C. Product formations of S -groups. (Spanish. English summary) **84g:20065**

secondary classifications:

- Berger, Thomas R. The smallest normal Fitting class revealed. (**84c:20017**)
- Skiba, A. N. Critical formations. (Russian. English summary) (**84k:20010**)

20F18 Nilpotent groups

- Drozin, A. D. Infinite nilpotent groups containing a two-generated maximal abelian normal subgroup. (Russian) **84m:20043**
- Fournelle, Thomas A. An example of a pseudocomplete nilpotent group. **84i:20034**
- Pseudocomplete nilpotent groups. **84f:20041**

Hilton, Peter J. Relative groups and spaces. **84d:20036**

Nilpotent groups and abelianization. **84g:20066**

- Kazarin, L. S. The product of two nilpotent groups. (Russian) **84h:20025**
- Lelechenko, T. G. On a class of groups with separating subgroups. (Russian) **84j:20034**
- Lysenko, F. F. Supervarieties of varieties consisting of 2-step nilpotent groups. (Russian) **84e:20043**
- Mahdavianary, S. K. A special class of three-Engel groups. **84g:20067**
- Maier, Berthold J. Einbettung von nilpotenten Gruppen zur Erzeugung von Kommutatorrelationen. [Embedding of nilpotent groups for the generation of commutator relations] **84d:20037**
- Niemenmaa, Markku. A note on systems of ideals. **84h:20044**
- Saracino, D. Amalgamation bases for nil-2 groups. **84i:20035**
- Zaitsev, D. I. Nilpotent approximations of metabelian groups. (Russian) **84b:20045**

secondary classifications:

- Asasyan, A. R. Solvable R -groups of finite rank. (Russian. English summary) (**84h:20024**)
- Baudisch, Andreas. Decidability and stability of free nilpotent Lie algebras and free nilpotent p -groups of finite exponent. (**84c:3019**)
- Beckmann, Sabine. Automorphismengruppen von freien nilpotenten Gruppen. [Automorphism groups of free nilpotent groups] (**84c:20047**)
- Bray, Henry G. (with Deskins, W. E.; Johnson, David; Humphreys, John F.; Puttaswamaiah, B. M.; Venzke, Paul; Walls, Gary L.) ★Between nilpotent and solvable. (**84k:20002**)
- Deskins, W. E. See Bray, Henry G.; et al. (**84k:20002**)
- tom Dieck, Tammo. Homotopiedarstellungen endlicher Gruppen: Dimensionsfunktionen. [Homotopy representations of finite groups: dimension functions] (**84b:57029**)
- Durner, V. G. Systems of equations on free nilpotent groups. (Russian) (**84h:20023**)
- Fitzpatrick, Patrick (with Kovács, L. G.) Varieties of nilpotent groups of class four. I. (**84g:20053a**)
- Varieties of nilpotent groups of class four. II, III. (**84g:20053b**)
- Humphreys, John F. See Bray, Henry G.; et al. (**84k:20002**)
- Johnson, David. See Bray, Henry G.; et al. (**84k:20002**)
- Khukhro, E. I. Nilpotent subdirect products. (Russian) (**84f:20038**)
- Kopytov, V. M. Nilpotent lattice-ordered groups. (Russian) (**84b:06016**)
- Kovács, L. G. See Fitzpatrick, Patrick, (**84g:20053a**)
- Niemenmaa, Markku. A characterization of minimal nonnilpotent groups. (**84a:20040**)
- Passi, I. B. S. (with Vermani, L. R.) Dimension subgroups and Schur multiplier. (**84k:20025**)
- Pilipenko, Yu. N. (with Polets'kikh, V. M.) Topological torsion-free nilpotent groups with restrictions for abelian subgroups. (Russian. English summary) (**84a:22014**)
- Polets'kikh, V. M. See Pilipenko, Yu. N., (**84a:22014**)
- Puttaswamaiah, B. M. See Bray, Henry G.; et al. (**84k:20002**)
- Venzke, Paul. See Bray, Henry G.; et al. (**84k:20002**)
- Vermani, L. R. See Passi, I. B. S., (**84k:20025**)
- Walls, Gary L. See Bray, Henry G.; et al. (**84k:20002**)
- (Weinstein, Michael) See Bray, Henry G.; et al. (**84k:20002**)
- Wilson, John S. Large nilpotent subgroups of polycyclic groups. (**84a:20045**)
- Wolf, Thomas R. Solvable and nilpotent subgroups of $GL(n, q^m)$. (**84b:20057**)
- Zheng, Yan Lü. K -subgroups and their applications. (Chinese. English summary) (**84g:20069**)

20F19 Generalizations of solvable and nilpotent groups

- Brookes, C. J. B. Groups with every subgroup subnormal. **84h:20026b**
- Smith, Howard. Hypercentral groups with all subgroups subnormal. **84h:20026a**
- Tuzov, A. N. On an abelian normal subgroup of a group, all of whose serving subgroups are complemented in it. (Russian) **84h:20027**
- Zaitsev, D. I. On the splittability of extensions of abelian groups. (Russian) **84a:20046**

secondary classifications:

- Belyaev, V. V. Locally finite groups with Chernikov Sylow 2-subgroups. (Russian) (**84c:20037**)
- Brandl, Rolf. Infinite soluble groups with Engel cycles; a finiteness condition. (**84d:20038**)
- Chernikov, S. N. Supersolvable primarily elementary groups. (Russian) (**84g:20063**)
- Combrink, C. R. (with Dean, E. E.) Z -group wreath products. (**84g:20056**)
- Dean, E. E. See Combrink, C. R., (**84g:20056**)
- Robinson, Derek John Scott (with Strebel, Ralph) Some finitely presented soluble groups which are not nilpotent by abelian by finite. (**84m:20041**)
- Strebel, Ralph. See Robinson, Derek John Scott, (**84m:20041**)

20F22 Other classes of groups defined by subgroup chains

secondary classifications:

- Rips, Eliyahu. Iteration of operations on classes of groups. (**84i:20026**)

20F24 FC-groups and their generalizations

- Kurdachenko, L. A. FC-groups with a bounded periodic part. (Russian) **84m:20044**
- Marach, V. S. Some groups defined by properties of cyclic subgroups. (Russian) **84f:20042**
- Tkachenko, A. N. Locally normal groups with complemented normal subgroups. (Russian) **84g:20068**
- Verheyen, Paul. The finite conjugate subgroup of a Bieberbach group. **84c:20045**

secondary classifications:

- Goretskii, V. É. See Kurdachenko, L. A., (**84g:20059**)
- Kurdachenko, L. A. (with Goretskii, V. É.) Groups with a dense system of almost normal subgroups. (Russian) (**84g:20059**)

Martínez López, C. Product formations of \mathcal{S} -groups. (Spanish. English summary) (84g:20065)

Oger, Francis Équivalence élémentaire entre groupes finis-par-abeliens de type fini. [Elementary equivalence between finite-by-abelian groups of finite type] (84g:03042)

20F26 Special subgroups

Buckley, Joseph (with Wiegold, James) Characteristic subgroups of Cartesian powers. (84f:20043)

Chen, Bing Hui (with Qi, Zhi Nan) On the radicals of subsets and the e -subgroups of an abelian group. (Chinese. English summary) (84j:20035)

Heineken, Hermann (with Schmitt, Peter) Lokale Subnormalteiler und ihr nilpotentes Residuum. [Local subnormal subgroups and their nilpotent residuals] (84c:20046)

Qi, Zhi Nan See Chen, Bing Hui, 84j:20035

Schmitt, Peter See Heineken, Hermann, 84c:20046

Wiegold, James See Buckley, Joseph, 84f:20043

Zheng, Yan Lü K -subgroups and their applications. (Chinese. English summary) (84g:20069)

secondary classifications:

Gorzowski, Waldemar The subgroups of the finite double point groups. (84d:20048a) The new double space groups. (84d:20048b)

Roman'kov, V. A. The width of verbal subgroups of solvable groups. (Russian) (84g:20064)

Subbotin, I. Ya. The hypercentral coradical of a KI-group. (Russian) (84d:20030)

Tkachenko, A. N. Locally normal groups with complemented normal subgroups. (Russian) (84g:20068)

20F28 Automorphism groups of groups [See also 20E36.]

Beckmann, Sabine Automorphismengruppen von freien nilpotenten Gruppen. [Automorphism groups of free nilpotent groups] (84c:20047)

Fournelle, Thomas A. Finite groups of automorphisms of infinite groups. II. (84g:20070)

Webb, Ursula The occurrence of groups as automorphisms of nilpotent p -groups. (84g:20071)

secondary classifications:

Albert, Rudolf Automorphisms of nilpotent locally compact groups. (84k:22010)

Aviñó Díaz, María A. Upper central series of the kernel group of the automorphism group of a finite abelian p -group of type $[p^{m_1}, p^{m_2}, \dots, p^{m_r}]$, $m_i > m_{i+1}$, $i = 1, 2, \dots, r-1$. (Spanish. English summary) (84f:20037)

Byrd, Richard D. (with Lloyd, Justin T.; Stepp, James W.) The automorphism group of the semigroup of finite complexes of a rank one torsion free abelian group. (84c:20058)

Curran, M. J. A nonabelian automorphism group with all automorphisms central. (84c:20037)

Djoković, Dragomir Ž. The structure of the automorphism group of a free group on two generators. (84i:20023)

Dyer, Joan L. (with Formanek, Edward; Grossman, Edna K.) On the linearity of automorphism groups of free groups. (84c:20047)

Formanek, Edward See Dyer, Joan L.; et al., (84c:20047)

Fournelle, Thomas A. An example of a pseudocomplete nilpotent group. (84i:20034) Pseudocomplete nilpotent groups. (84f:20041)

Grossman, Edna K. See Dyer, Joan L.; et al., (84c:20047)

Lloyd, Justin T. See Byrd, Richard D.; et al., (84c:20058)

Malone, J. J. The group of automorphisms of a distributively generated near ring. (84c:16035)

Moore, Jamshid On the automorphism group of the group $D_4(2)$. (84i:20038)

Nagrebetskii, V. T. On the group of automorphisms of the finite group $K(p^m, n)$. (Russian) (84g:20046)

Robinson, Derek John Scott Applications of cohomology to the theory of groups. (84d:20052)

Groups with prescribed automorphism group. (84b:20033)

Stepp, James W. See Byrd, Richard D.; et al., (84c:20058)

Webb, Ursula An independence result for group automorphisms. (84b:20034)

Yu, Shu Xia Some notes on the order of the automorphism group of a finite abelian p -group. (Chinese. English summary) (84m:20056)

Zha, Jian Guo A class of complete groups obtained from the symmetric group. (Chinese. English summary) (84g:20007)

20F29 Representations of groups as automorphism groups of algebraic systems

Meurman, Arne An embedding of $\text{PSL}(2, 13)$ in $G_2(C)$. (84b:20046)

secondary classifications:

Magill, K. D., Jr. (with Misra, Prabudh; Tewari, U. B.) Automorphism groups of laminated near-rings determined by complex polynomials. (84h:16022)

Misra, Prabudh See Magill, K. D., Jr.; et al., (84h:16022)

Porubský, Stefan Factorial regular representation of groups in complete graphs. (84k:05051)

Tewari, U. B. See Magill, K. D., Jr.; et al., (84h:16022)

20F32 Geometric group theory [See also 05C25, 20Exx, 20Gxx.]

Klin, M. Kh. See Zaichenko, V. A., 84j:20036

Zaichenko, V. A. (with Klin, M. Kh.) Construction and investigation by computer of some block designs and strongly regular graphs that are invariant with respect to exponentiation of symmetric groups. (Russian) (84j:20036)

secondary classifications:

Babai, László (with Godsil, Christopher D.) On the automorphism groups of almost all Cayley graphs. (84d:05092)

Cohen, Arjeh M. On a theorem of Cooperstein. (84j:51011)

Conway, John Horton (with Sloane, N. J. A.) Twenty-three constructions for the Leech lattice. (84m:10020)

Gela, Jaroslav The group and the edge-groups of a multigraph. (84g:05074)

Godsil, Christopher D. On Cayley graph isomorphisms. (84m:20011)

See also Babai, László, (84d:05092)

Ignatenko, V. F. The general equation of an algebraic surface with the symmetry group of the polyhedron 2_{21} . (Russian) (84c:51030)

Maxwell, George Sphere packings and hyperbolic reflection groups. (84g:52023)

Mihalik, Michael L. Semistability at the end of a group extension. (84d:57001)

Proulx, Viera Krhanová On the genus of symmetric groups. (84c:05025)

Rowley, Peter Automorphisms of certain trees. (84g:05076)

Schnabel, Rudolf Der Satz von Frucht. [Frucht's theorem] (84g:05077)

Sibley, Thomas Q. Equidistance relations: a new bridge between geometric and algebraic structures. (84b:05032)

Sloane, N. J. A. See Conway, John Horton, (84m:10020)

Stroth, Gernot Graphs with subconstituents containing $\text{Sz}(q)$ and $L_2(r)$. (84c:20015)

Weiss, Richard Mark Edge-symmetric graphs. (84i:05061)

20F34 Fundamental groups and their automorphisms [See also 57M05, 57Sxx.]

Gersten, S. M. On fixed points of automorphisms of finitely generated free groups. (84g:20072)

Johnson, Francis E. A. Automorphisms of direct products of groups and their geometric realisations. (84g:20073)

secondary classifications:

Bass, Hyman (with Lubotzky, Alexander) Automorphisms of groups and of schemes of finite type. (84i:14031)

Bertin, José Sur la topologie des surfaces affines réglées. [On the topology of ruled affine surfaces] (84c:14018)

Harer, John The second homology group of the mapping class group of an orientable surface. (84g:57006)

Higgins, Philip J. (with Taylor, John) The fundamental groupoid and the homotopy crossed complex of an orbit space. (84c:55021)

Johnson, David Lawrence ★Topics in the theory of group presentations. (84i:20003)

Lubotzky, Alexander See Bass, Hyman, (84i:14031)

Taylor, John See Higgins, Philip J., (84c:55021)

20F36 Braid groups

Appel, K. I. (with Schupp, Paul E.) Artin groups and infinite Coxeter groups. (84b:20028)

Dyer, Joan L. (with Formanek, Edward; Grossman, Edna K.) On the linearity of automorphism groups of free groups. (84c:20047)

Formanek, Edward See Dyer, Joan L.; et al., (84c:20047)

Grimblat, V. A. Normalizers of Artin groups. (Russian) (84b:20047)

Grossman, Edna K. See Dyer, Joan L.; et al., (84c:20047)

Johnson, David Lawrence On a problem of Magnus. (84g:20074)

Towards a characterization of smooth braids. (84c:20048)

McCool, James Erratum: "On reducible braids" [Word problems, II (Oxford, 1976), 261-295, North-Holland, Amsterdam, 1980; MR 81m:20058]. (84b:20048)

Schupp, Paul E. See Appel, K. I., (84b:20028)

Shterenberg, M. I. An investigation using a computer of an equation that is connected with the representation of braid groups. (Russian) (84c:20044)

Styshev, V. B. Reconstruction of braids. (Russian) (84j:20037)

secondary classifications:

Ohkawa, Tetsusuke The pure braid groups and the Milnor $\bar{\mu}$ -invariants of links. (84c:57010)

20F38 Other groups related to topology or analysis

Mädler, Jürgen See Teschke, Lothar, (84b:20049)

Teschke, Lothar (with Mädler, Jürgen) Groups and join spaces. (84b:20049)

secondary classifications:

Cowie, E. R. An analytic characterization of groups with no finite conjugacy classes. (84d:46074)

Eckmann, Beno (with Linnell, P. A.) Poincaré duality groups of dimension two. II. (84i:57003)

Linnell, P. A. See Eckmann, Beno, (84i:57003)

MacLachlan, C. On the centres of mapping class groups of surfaces. (84a:30082)

Richardson, R. W. Conjugacy classes of involutions in Coxeter groups. (84c:20056)

Roth, Richard L. Color symmetry and group theory. (84c:20012)

Traczyk, Paweł Cancellation law for homotopy equivalent representations of groups of odd order. (84d:57022)

Zieschang, Heiner (with Zimmermann, Bruno) Über Erweiterungen von Z und $Z_2 * Z_2$ durch nichteuklidische kristallographische Gruppen. [On extensions of Z and $Z_2 * Z_2$ by non-Euclidean crystallographic groups] (84i:57001)

Zimmermann, Bruno See Zieschang, Heiner, (84i:57001)

20F40 Associated Lie structures

- Khukhro, E. I. On the adjoint Lie ring of the free 2-generator group of prime period and on Hughes's conjecture for 2-generator p -groups. (Russian) **84c:20045**

secondary classifications:

- Winter, David J. A combinatorial theory of symmetry and applications to Lie algebras. (84j:17008)

20F45 Engel conditions

- Brandl, Rolf Infinite soluble groups with Engel cycles; a finiteness condition. **84d:20038**

secondary classifications:

- Brandl, Rolf Formations of metanilpotent groups and generalized Engel conditions. (84f:20021)
 Kappe, Luise-Charlotte Engel margins in metabelian groups. (84i:20033)
 Mahdavianary, S. K. A special class of three-Engel groups. (84g:20067)

20F50 Periodic groups

- Busetto, Giorgio Embedding property for periodic quasinormal subgroups. (Italian. English summary) **84d:20039**
 Chernikov, N. S. On a problem of Sh. S. Kemkhadze. (Russian. English and Georgian summaries) **84b:20050**
 Chernikov, S. N. Groups with the minimality condition for subgroups. (Russian) **84h:20029**
 Gupta, Narain (with Sidki, Said) On the Burnside problem for periodic groups. **84g:20075**
 Hartley, Brian Periodic locally soluble groups containing an element of prime order with Chernikov centralizer. **84j:20038**
 Merzlyakov, Yu. I. Infinite finitely generated periodic groups. (Russian) **84g:20076**
 Muldagaliev, V. S. Periodic centralizer-factorable groups. (Russian) **84j:20039**
 Polovitskii, Ya. D. Periodic groups with Chernikov classes of conjugate primary abelian subgroups. (Russian) **84c:20046**
 Semko, N. N. Periodic nonabelian groups with a given system of invariant infinite nonabelian subgroups. (Russian) **84c:20048**
 Sidki, Said See Gupta, Narain, **84g:20075**
 Subbotin, I. Ya. Groups with quasicentralizer condition. (Russian) **84c:20047**

secondary classifications:

- Adyan, S. I. Random walks on free periodic groups. (Russian) (**84m:43001**)
 Chernikov, N. S. Locally step groups factorizable by subgroups of finite rank. (Russian) (**84f:20031**)
 Factorization theorems for locally step groups. (Russian) (**84f:20032**)
 Chernikov, S. N. Supersolvable primarily elementary groups. (Russian) (**84g:20063**)
 Tobin, S. J. Groups with exponent four. (**84c:20003**)
 Wilson, John S. The algebraic structure of N_0 -categorical groups. (**84c:20006**)

20F60 Ordered groups [See mainly 06F15.]

secondary classifications:

- Pedersen, Franklin D. (with Sizer, Walter S.) Relating certain semigroup homomorphisms with group retractions. (**84h:06018**)
 Rachimov, Jiri A characterization of ordered groups by means of segments. (Russian and Czech summaries) (**84g:06030**)
 Sizer, Walter S. See Pedersen, Franklin D., (**84h:06018**)

20F99 None of the above, but in this section

- Bianchi, Mariagrazia Permutability and distance in some classes of groups. (Italian. English summary) **84g:20077**
 Diaconis, Persi (with Graham, R. L.; Kantor, William M.) The mathematics of perfect shuffles. **84j:20040**
 Graham, R. L. See Diaconis, Persi; et al., **84j:20040**
 Kantor, William M. See Diaconis, Persi; et al., **84j:20040**
 Meier, David Non-Hopfian groups. **84a:20049**
 Veitsblit, A. I. (with Zhmud', E. M.) Generalized Zassenhaus groups. (Russian) **84c:20049**
 Zhmud', E. M. See Veitsblit, A. I., **84c:20049**

secondary classifications:

- Abel, Ulrich Sur les groupes d'itération monotones. (English summary) [On monotone iteration groups] (**84c:06001**)
 Both, N. See Purdea, Ioan, (**84c:08003**)
 Fedorovich, O. E. See Popov, Viktor Aleksandrovich; et al., (**84g:68004**)
 Fluch, Wolfgang Verallgemeinerung der Lemmata von G. Birkhoff und J. von Neumann. [Generalization of the lemmas of G. Birkhoff and J. von Neumann] (**84h:20030**)
 Guralnick, Robert M. (with Isaacs, I. Martin; Passman, D. S.) Nonexistence of partial traces for group actions. (**84k:16049**)
 Isaacs, I. Martin See Guralnick, Robert M.; et al., (**84k:16049**)
 Lemaire, Claude Localisation relative et actions. [Relative localization and actions] (**84f:20030**)
 Lichtman, A. I. On normal subgroups of multiplicative group of skew fields generated by a polycyclic-by-finite group. (**84f:16016**)
 Passman, D. S. See Guralnick, Robert M.; et al., (**84k:16049**)

- Popov, Viktor Aleksandrovich (with Skibenko, I. T.; Fedorovich, O. E.) Analysis of internal links in distributed computing system structures. (**84g:68004**)
 Purdea, Ioan (with Both, N.) Partial tolerances on groups. (**84c:08003**)
 Shelah, Saharon On the number of nonconjugate subgroups. (**84i:20005**)
 Skibenko, I. T. See Popov, Viktor Aleksandrovich; et al., (**84g:68004**)

20Gxx Linear algebraic groups (classical groups) {For arithmetic theory, see 10C30, 10E45; for geometric theory, see 14Lxx, 22Exx; for other methods in representation theory, see 22E45, 22E46, 22E47, 22E50, 22E55.}

secondary classifications:

- Springer, T. A. ★Linear algebraic groups. (**84i:20002**)
 Topics in the theory of algebraic groups ★Topics in the theory of algebraic groups. (**84c:20005**)

20G05 Representation theory

- Andersen, Henning Haahr (with Jørgensen, Jens; Landrock, Peter) The projective indecomposable modules of $SL(2, p^n)$. **84f:20044**
 Azad, H. Root groups. **84f:20045**
 Structure constants of algebraic groups. **84f:20046**
 Boyce, Richard A. Irreducible representations of finite groups of Lie type through block theory and special conjugacy classes. **84f:20047**
 Chastkofsky, Leonard Variations on Hulsurkar's matrix with applications to representations of algebraic Chevalley groups. **84m:20045**
 Curtis, Charles W. A duality operation in the character ring of a finite group of Lie type. **84c:20036**
 De Concini, Corrado Characteristic free "decomposition" of the coordinate ring of the symplectic group. (Italian summary) **84j:20041**
 Donkin, Stephen A filtration for rational modules. **84c:20048**
 On Ext¹ for semisimple groups and infinitesimal subgroups. **84i:20037**
 A note on the characters of the projective modules for the infinitesimal subgroups of a semisimple algebraic group. **84c:20050**
 A note on decomposition numbers of reductive algebraic groups. **84k:20017**
 Fluch, Wolfgang Verallgemeinerung der Lemmata von G. Birkhoff und J. von Neumann. [Generalization of the lemmas of G. Birkhoff and J. von Neumann] **84h:20030**
 Jørgensen, Jens See Andersen, Henning Haahr; et al., **84f:20044**
 Kimura, Tatsuo Remark on some combinatorial construction of relative invariants. **84g:20078**
 Koppinen, M. On the composition factors of Weyl modules. **84f:20048a**
 On the translation functors for a semisimple algebraic group. **84f:20048b**
 Landrock, Peter See Andersen, Henning Haahr; et al., **84f:20044**
 Mason, Geoffrey Irreducible translation planes and representations of Chevalley groups in characteristic 2. **84j:20042**
 McGovern, Kathy Multiplicities of principal series representations of finite groups with split (B, N) -pairs. **84d:20040**
 Moori, Jamshid On the automorphism group of the group $D_4(2)$. **84i:20038**
 Morris, A. O. Representations of Weyl groups over an arbitrary field. **84h:20031**
 Nakajima, Haruhisa Class groups of localities of rings of invariants of reductive algebraic groups. **84j:20043**
 Piatetski-Shapiro, Ilya Iosifovitch ★Complex representations of $GL(2, K)$ for finite fields K . **84m:20046**
 Proctor, Robert A. Classical Bruhat orders and lexicographic shellability. **84j:20044**
 Putcha, Mohan S. A semigroup approach to linear algebraic groups. **84j:20045**
 Spaltenstein, Nicolas Caractères unipotents de ${}^3D_4(\mathbb{F}_q)$. [Unipotent characters of ${}^3D_4(\mathbb{F}_q)$] **84k:20018**
 Suprunenko, I. D. Preservation of systems of weights of irreducible representations of an algebraic group and a Lie algebra of type A_1 with bounded higher weights in reduction modulo p . (Russian. English summary) **84k:20019**
 Surowski, David B. Reflection compound representations of groups of type A_n, B_n or C_n . **84d:20041**
 van der Waall, Robert W. On p -rational monomial matrix groups and Hadamard matrices. **84b:20051a**
 Erratum: "On p -rational monomial matrix groups and Hadamard matrices". **84b:20051b**
 Wang, Jian Pan Sheaf cohomology on G/B and tensor products of Weyl modules. **84h:20032**
- secondary classifications:
- Abesis, S. On the ring of semi-invariants of the representations of an equioriented quiver of type \tilde{A}_n . (Italian summary) (**84d:16036**)
 Almkvist, Gert Some formulas in invariant theory. (**84i:14030**)
 Ballard, John W. Clifford's theorem for algebraic groups and Lie algebras. (**84g:20013**)
 Ballico, Edoardo (with Dikranjan, Dikran) Invariant ideals and the variety of complexes. (Italian summary) (**84j:14055**)
 Blau, Harvey I. See Ferguson, Pamela A.; et al., (**84a:20014**)
 Brion, Michel Sur certaines représentations des groupes semi-simples. (English summary) [On some representations of semisimple groups] (**84b:14027**)
 Chaichian, Masud (with Demichev, A. P.; Nelipa, N. F.) The Casimir operators of inhomogeneous groups. (**84m:81069**)
 Collingwood, David H. Harish-Chandra modules with the unique embedding property. (**84m:22020**)
 Demichev, A. P. See Chaichian, Masud; et al., (**84m:81069**)
 Dikranjan, Dikran See Ballico, Edoardo, (**84j:14055**)
 El-Sharkawy, Nahid G. I. See King, Ronald Curtis, (**84b:22032**)
 Ferguson, Pamela A. (with Blau, Harvey I.; Lindsey, J. H., II) Finite complex linear groups of less than $(2q+1)/3$. (**84a:20014**)

- Foulser, David (with Mason, Geoffrey; Walker, Michael) On irreducible translation planes in odd characteristic. I. (84j:51009)
- Griffith, Walter Lawrence, Jr. The indecomposability of $H^*(G/B, L)$. (84c:14038)
- $H^*(G/B, L)$ for G of semisimple rank 2. (84c:14033)
- Hecht, Henryk (with Schmid, Wilfried) On the asymptotics of Harish-Chandra modules. (84g:22030)
- Howlett, R. B. (with Lehrer, G. I.) A comparison theorem and other formulae in the character ring of a finite group of Lie type. (84b:20055)
- Kato, Shin-ichi Irreducibility of principal series representations for Hecke algebras of affine type. (84b:22029)
- Spherical functions and a q -analogue of Kostant's weight multiplicity formula. (84b:22030)
- Kawanaka, N. Fourier transforms of nilpotently supported invariant functions on a simple Lie algebra over a finite field. (84c:20053)
- King, Ronald Curtis (with El-Sharkawy, Nahid G. I.) The character generators of $SO(2k)$ and $SO(2k+1)$. (84b:22032)
- Klyachko, A. A. Models for complex representations of groups $GL(n, q)$. (Russian) (84j:20014)
- Lehrer, G. I. See Howlett, R. B., (84b:20055)
- Lindsey, J. H., II See Ferguson, Pamela A.; et al., (84a:20014)
- Lusztig, George Some examples of square integrable representations of semisimple p -adic groups. (84j:22023)
- Magid, Andy R. ★Module categories of analytic groups. (84j:22008)
- Mason, Geoffrey See Foulser, David; et al., (84j:51009)
- Merris, Russell (with Watkins, William) Tensors and graphs. (84c:15023)
- Nelipa, N. F. See Chaichian, Masud; et al., (84m:81069)
- O'Halloran, Joyce A vanishing theorem for the cohomology of Borel subgroups. (84j:20047)
- Orlik, Peter (with Solomon, Louis) Arrangements defined by unitary reflection groups. (84b:14006)
- Parshall, Brian J. Modular representations of algebraic groups. (84f:20016)
- Schmid, Wilfried See Hecht, Henryk, (84g:22030)
- Sitaram, B. R. (with Tripathy, K. C.) Representations of graded Lie groups. (84c:22022)
- Solomon, Louis See Orlik, Peter, (84h:14006)
- Stekol'shchik, R. B. Transforming elements connecting the Coxeter transforms and conditions for the regularity of roots. (Russian) (84d:15013)
- Tanigaki, Toshiyuki Defining ideals of the closures of the conjugacy classes and representations of the Weyl groups. (84g:14049)
- Tripathy, K. C. See Sitaram, B. R., (84c:22022)
- Walker, Michael See Foulser, David; et al., (84j:51009)
- Watkins, William See Merris, Russell, (84c:15023)

20G10 Cohomology theory

- Cline, Edward T. (with Parshall, Brian J.; Scott, Leonard L.) Detecting rational cohomology of algebraic groups. (84j:20046)
- Huebschmann, Johannes Stem extensions of the infinite general linear group and large Steinberg groups. (84c:20049)
- O'Halloran, Joyce A vanishing theorem for the cohomology of Borel subgroups. (84j:20047)
- Parshall, Brian J. See Cline, Edward T.; et al., (84j:20046)
- Scott, Leonard L. See Cline, Edward T.; et al., (84j:20046)
- Tezuka, Michishige (with Yagita, Nobuaki) The mod p cohomology ring of $GL_3(F_p)$. (84g:20079)
- Yagita, Nobuaki See Tezuka, Michishige, (84g:20079)

secondary classifications:

- Ash, Avner On the top Betti number of subgroups of $SL(n, \mathbb{Z})$. (84c:10023)
- Cline, Edward T. (with Parshall, Brian J.; Scott, Leonard L.) A Mackey imprimitivity theory for algebraic groups. (84j:14046)
- Griffith, Walter Lawrence, Jr. The indecomposability of $H^*(G/B, L)$. (84c:14038)
- Kolster, Manfred On injective stability for K_2 . (84f:18019)
- Koppinen, M. On the composition factors of Weyl modules. (84f:20048a)
- On the translation functors for a semisimple algebraic group. (84f:20048b)
- Lusztig, George (with Vogan, David A., Jr.) Singularities of closures of K -orbits on flag manifolds. (84b:14060)
- Parshall, Brian J. See Cline, Edward T.; et al., (84j:14046)
- Scott, Leonard L. See Cline, Edward T.; et al., (84j:14046)
- Stuhler, Ulrich On the cohomology of SL_n over rings of algebraic functions. (84b:22021)
- Sullivan, John Brendan Lie algebra cohomology at irreducible modules. (84d:17014)
- Vogan, David A., Jr. See Lusztig, George, (84h:14060)
- Vogtmann, K. A Stiefel complex for the orthogonal group of a field. (84b:18007)
- Wang, Jian Pan Sheaf cohomology on G/B and tensor products of Weyl modules. (84h:20032)

20G15 Linear algebraic groups over arbitrary fields

- Bak, Anthony Subgroups of the general linear group normalized by relative elementary groups. (84f:20049)
- Bass, Hyman Theorems of Jordan and Burnside for algebraic groups. (84i:20039)
- Borovik, A. V. Periodic linear groups of odd characteristic. (Russian) (84d:20042)
- Chang, Bomshik Elements of order Coxeter number + 1 in Chevalley groups. (84i:20040)
- El'baradi, M. T. Decompositions of classical groups. (Russian) (84j:20048)
- Ferrer Santos, Walter Ricardo A note on reductive groups. (84g:20080)
- King, Oliver Imprimitive maximal subgroups of the general linear, special linear, symplectic and general symplectic groups. (84i:20041)
- Kolotilina, L. Yu. Application of net subgroups to the theory of sparse matrices. (Russian) (84i:20042)
- Kottwitz, Robert E. Rational conjugacy classes in reductive groups. (84c:20020)

- Kurtzke, John F., Jr. Centralizers of irregular elements in reductive algebraic groups. (84f:20050)
- Li, Fu An The automorphisms of the projective orthogonal groups $P\Omega_n(V)$ ($n \geq 5$) with $(n, p) = 8$. (84c:20051)
- Li, Shang Zhi (with Zha, Jian Guo) On certain classes of maximal subgroups in $PSp(2n, F)$. (84b:20033)
- Mez, Hans-Christian Existentially closed linear groups. (84a:20050)
- Onishchik, A. L. A class of subgroups of simple algebraic groups. (Russian) (84c:20043)
- Ren, Hong Shuo (with Wan, Zhe Xian) Automorphisms of $PGL_2(K)$ over any skew field K . (84b:20052a)
- (with Wan, Zhe Xian) Automorphisms of $PSL_2^-(K)$ over any skew field K . (84b:20052b)
- Salzberg, Betty Buildings and shadows. (84m:20047)
- Spaltenstein, Nicolas On unipotent and nilpotent elements of groups of type E_6 . (84b:20034)
- Tits, J. Moufang octagons and the Ree groups of type 2F_4 . (84m:20048)
- Vavilov, N. A. Bruhat decomposition for subgroups containing the group of diagonal matrices. II. (Russian) (84c:20050)
- Wagner, Ascher Correction to the paper: "Invariants of groups generated by reflections or transvections" [Arch. Math. (Basel) 36 (1981), no. 1, 10-12; MR 82j:20087]. (84m:20049)
- Wan, Zhe Xian See Ren, Hong Shuo, (84b:20052a) and (84b:20052b)
- Wang, Yang Xian On the minimal length problem in orthogonal groups. (Chinese) (84b:20035)
- Waterhouse, William C. Automorphisms of quotients of $IGL(n, \mathbb{Z})$. (84m:20050)
- Weisfeiler, Boris Abstract homomorphisms of big subgroups of algebraic groups. (84m:20051)
- Zha, Jian Guo See Li, Shang Zhi, (84b:20033)

secondary classifications:

- Akyildiz, Ersan On the G_m -decomposition of G/P . (Turkish summary) (84c:14039)
- Aschbacher, Michael Flag structures on Tits geometries. (84m:51010)
- Azad, H. Structure constants of algebraic groups. (84f:20046)
- Beklemishev, N. D. Classification of quaternary cubic forms in nongeneral position. (Russian) (84c:10028)
- Botta, Peter (with Pierce, Stephen; Watkins, William) Linear transformations that preserve the nilpotent matrices. (84c:15014)
- Ellers, Erich W. (with Nolte, Wolfgang) Bireflectionality of orthogonal and symplectic groups. (84a:51009)
- Grove, Larry C. Dickson's pseudodeterminant without matrices. (84b:20054)
- Kuznetsov, M. I. Witt algebra and linear groups. (84b:17011)
- Mäurer, Helmut Eine Charakterisierung der zwischen $PS-L(2, K)$ und $PGL(2, K)$ liegenden Permutationsgruppen. [A characterization of the permutation groups lying between $PS-L(2, K)$ and $PGL(2, K)$] (84m:20055)
- Newman, Morris Similarity over $SL(n, F)$. (84b:10080)
- Nolte, Wolfgang See Ellers, Erich W., (84a:51009)
- Onishchik, A. L. On inclusions between transitive algebraic groups. (Russian) (84j:14048)
- Pierce, Stephen See Botta, Peter; et al., (84c:15014)
- Platonov, V. P. Birational properties of spinor varieties. (Russian) (84b:14008)
- Spaltenstein, Nicolas ★Classes unipotentes et sous-groupes de Borel. (French) [Unipotent classes and Borel subgroups] (84a:14024)
- Sychev, A. N. Linear symmetry of Boolean functions. (84j:06019)
- Watkins, William See Botta, Peter; et al., (84c:15014)

20G20 Linear algebraic groups over the reals, the complexes, the quaternions

- Djoković, Dragomir Ž. (with Malzan, Jerry G.) Products of reflections in $U(p, q)$. (84a:20051)
- Igaroto, G. V. Invariants of a trivector of a nine-dimensional space. (Russian) (84b:20036)
- Evomov, Takashi Conjugacy classes in classical groups. (84m:20052)
- Malzan, Jerry G. See Djoković, Dragomir Ž., (84a:20051)

secondary classifications:

- Deheuvels, René ★Formes quadratiques et groupes classiques. (French) [Quadratic forms and classical groups] (84j:15026)
- Djoković, Dragomir Ž. Closures of equivalence classes of trivectors of an eight-dimensional complex vector space. (84b:14059)
- Esnault, Hélène Sur l'identification de singularités apparaissant dans des groupes algébriques complexes. [On the identification of singularities appearing in complex algebraic groups] (84b:14005)
- Fluch, Wolfgang Correction: "A subgroup of the Lorentz group" [Nederl. Akad. Wetensch. Indag. Math. 44 (1982), no. 2, 147-152; MR 83k:22034] (German) (84b:22019)
- Koornwinder, Tom H. A note on the multiplicity free reduction of certain orthogonal and unitary groups. (84b:22024)
- Midorikawa, Hisaichi On the number of regular elliptic conjugacy classes in the Siegel modular group of degree $2n$. (84i:10029)
- Popov, V. L. Homological dimension of algebras of invariants. (84i:14010)
- Ren, Hong Shuo See Wan, Zhe Xian, (84j:51023)
- Salzberg, Betty Buildings and shadows. (84m:20047)
- Wan, Zhe Xian (with Ren, Hong Shuo) A new proof of Scherk's theorem on the orthogonal group $O_n(V)$. (Chinese) (84j:51023)
- Zassenhaus, Hans J. ★Lie groups, Lie algebras and representation theory. (84b:17001)

20G25 Linear algebraic groups over local fields and their integers

20G30 Linear algebraic groups over global fields and their integers

- Grunewald, Fritz J. (with Segal, Daniel) Conjugacy of subgroups in arithmetic groups. **84c:20052**
- Hurrelbrink, Jürgen On presentations of $SL_n(\mathbb{Z}_p)$. **84i:20044**
- Lai, Jia Yong Some properties of the general linear group of degree 2 over the ring of integers. (Chinese. English summary) **84b:20037**
- Prasad, Gopal (with Raghunathan, M. S.) On the congruence subgroup problem: determination of the "metaplectic kernel". **84f:20051**
- Raghunathan, M. S. See Prasad, Gopal, **84f:20051**
- Segal, Daniel See Grunewald, Fritz J., **84c:20052**

secondary classifications:

- Bürgisser, Balz On the projective class group of arithmetic groups. (**84j:16015**)
- Elstrodt, J. (with Grunewald, Fritz J.; Mennicke, J.) On the group $PSL_2(\mathbb{Z}[i])$. (**84j:10024**)
- Grunewald, Fritz J. See Elstrodt, J.; et al., (**84j:10024**)
- Kunyarskii, B. É. Arithmetic properties of three-dimensional algebraic tori. (Russian) (**84m:14027**)
- Mennicke, J. See Elstrodt, J.; et al., (**84j:10024**)
- Platonov, V. P. Arithmetic theory of algebraic groups. (Russian) (**84h:12001**)

20G35 Linear algebraic groups over adèles and other rings and schemes

- Alperin, Roger C. (with Shalen, Peter B.) Linear groups of finite cohomological dimension. **84c:20052**
- Borevich, Z. I. (with Vavilov, N. A.) Subgroups of the general linear group over a commutative ring. (Russian) **84g:20081**
- (with Vavilov, N. A.) Determinants in net subgroups. (Russian) **84d:20043**
- Golubchik, I. Z. (with Mikhaev, A. V.) Isomorphisms of the general linear group over an associative ring. (Russian. English summary) **84c:20045**
- (with Mikhaev, A. V.) Isomorphisms of unitary groups over associative rings. (Russian) **84m:20053**
- Levchuk, V. M. Parabolic subgroups of some ABA -groups. (Russian) **84a:20053**
- Lü, Qing Zhi Automorphisms of SL_2 and PSL_2 over some Euclidean rings. (Chinese) **84g:20082**
- Mikhaev, A. V. See Golubchik, I. Z., **84c:20045** and **84m:20053**
- Petechuk, V. M. Automorphisms of the groups $SL_2(K)$, $GL_2(K)$. (Russian) **84h:20038**
- Petrov, E. E. The principal series of representations of the group $SL(2, A)$ over a finite local commutative principal ideal ring A . (Russian) **84j:20049**
- Shalen, Peter B. See Alperin, Roger C., **84a:20052**
- Vavilov, N. A. Subgroups of the general linear group over a ring that contains the group of block triangular matrices. II. (Russian. English summary) **84g:20083**
- Subgroups of the general linear group over a semilocal ring that contain the group of block-diagonal matrices. (Russian. English summary) **84c:20046**
- See also Borevich, Z. I., **84d:20043** and **84g:20081**
- Wan, Zhe Xian (with Yang, Jin Gen) Automorphisms of the projective quaternion unimodular group of dimension two. (Chinese. English summary) **84h:20039**
- Wang, Chun Sen Automorphisms of linear groups over a class of rings. (Chinese) **84c:20021**
- Wu, Xiao Long Two-dimensional linear groups over Gaussian domain. **84b:20053**
- Yang, Jin Gen See Wan, Zhe Xian, **84h:20039**

secondary classifications:

- Borevich, Z. I. (with Vavilov, N. A.) Definition of the net subgroup. (Russian) (**84k:16023**)
- Grunewald, Fritz J. (with Segal, Daniel) Résolution effective de quelques problèmes diophantiens sur les groupes algébriques linéaires. (English summary) [Effective solvability of certain Diophantine problems related to linear algebraic groups] (**84a:20044**)
- van der Kallen, Wilberd $SL_2(\mathbb{C}[X])$ does not have bounded word length. (**84b:20037**)
- Lubotzky, Alexander Free quotients and the congruence kernel of SL_2 . (**84i:10028**)
- Segal, Daniel See Grunewald, Fritz J., (**84a:20044**)
- Soulé, Christophe Présentation finie des groupes de Chevalley à coefficients dans un anneau. [Finite presentation of Chevalley groups with coefficients in a ring] (**84h:14025**)
- Vavilov, N. A. See Borevich, Z. I., (**84k:16023**)

20G40 Linear algebraic groups over finite fields

- Barry, M. J. J. (with Wong, W. J.) Abelian 2-subgroups of finite symplectic groups in characteristic 2. **84d:20044**
- Digne, François (with Michel, Jean) Foncteur de Lusztig et fonctions de Green généralisées. (English summary) [Lusztig functor and generalized Green functions] **84i:20047**
- Feit, Walter (with Zuckerman, Gregg J.) Reality properties of conjugacy classes in spin groups and symplectic groups. **84f:20052**
- Grove, Larry C. Dickson's pseudodeterminant without matrices. **84b:20054**
- Howlett, R. B. (with Lehrer, G. I.) A comparison theorem and other formulae in the character ring of a finite group of Lie type. **84b:20055**
- Jantzen, Jens Carsten Zur Reduktion modulo p unipotenter Charaktere endlicher Chevalley-Gruppen. [On the reduction modulo p of unipotent characters of finite Chevalley groups] **84f:20053**
- Kaneda, Masaharu (with Seitz, Gary M.) On the Lie algebra of a finite group of Lie type. **84g:20084**
- Kantor, William M. (with Liebler, Robert A.) The rank 3 permutation representations of the finite classical groups. **84h:20040**
- Kawanaka, N. Fourier transforms of nilpotently supported invariant functions on a simple Lie algebra over a finite field. **84c:20053**

Kleiner, Samuel N. The cohomology of Chevalley groups of exceptional Lie type. **84i:20048**Lehrer, G. I. See Howlett, R. B., **84b:20055**Li, Shang Zhi (with Zha, Jian Guo) On certain classes of maximal subgroups in projective special unitary groups over finite fields. **84b:20056**Liebler, Robert A. See Kantor, William M., **84h:20040**Michel, Jean See Digne, François, **84i:20047**Ren, Hong Shuo Automorphisms of $U_3(F_3)$ and $U_3(F_{23})$. (Chinese) **84d:20045**Seitz, Gary M. The root subgroups for maximal tori in finite groups of Lie type. **84g:20085**See also Kaneda, Masaharu, **84g:20084**Springer, T. A. The order of a finite group of Lie type. **84g:20086**Wolf, Thomas R. Solvable and nilpotent subgroups of $GL(n, q^m)$. **84b:20057**Wong, W. J. Abelian unipotent subgroups of finite orthogonal groups. **84h:20041**See also Barry, M. J. J., **84d:20044**Ye, Jia Chen The Cartan invariants of $SL(3, p^n)$. (Chinese. English summary) **84g:20087**Zha, Jian Guo See Li, Shang Zhi, **84b:20056**Zhdan-Pushkin, V. V. Lattices of supergroups of groups $PU_3(q)$ acting on isotropic lines. (Russian) **84j:20050**Zuckerman, Gregg J. See Feit, Walter, **84f:20052**

secondary classifications:

- Black, G. R. E. (with Wybourne, Brian G.) Branching rules and even-dimensional rotation groups SO_{2k} . (**84j:81040**)
- Cline, Edward T. (with Parshall, Brian J.; Scott, Leonard L.) Detecting rational cohomology of algebraic groups. (**84j:20046**)
- Egawa, Yoshimi (with Yoshida, Tomoyuki) Standard subgroups of type $2\Omega^-(8, 2)$. (**84b:20014**)
- Kimura, Tatsuo On the construction of some relative invariants for $GL(n)$ ($n=6, 7, 8$) by the decomposition of the Young diagrams. (**84j:14047**)
- Koderich, Matthias Auflösbare kompakte lineare Gruppen über den ganzen p -adischen Zahlen. [Solvable compact linear groups over the p -adic integers] (**84f:22007**)
- McBride, Patrick Paschal Automorphisms of 2-groups. (**84g:20045**)
- Parshall, Brian J. See Cline, Edward T.; et al., (**84j:20046**)
- Preiser, Udo A characterization of $PGL(2, q)$, q odd. (**84d:20024**)
- Salzberg, Betty Buildings and shadows. (**84m:20047**)
- Scott, Leonard L. See Cline, Edward T.; et al., (**84j:20046**)
- Tezuka, Michishige (with Yagita, Nobuaki) The mod p cohomology ring of $GL_3(F_p)$. (**84g:20079**)
- Wybourne, Brian G. See Black, G. R. E., (**84j:81040**)
- Yagita, Nobuaki See Tezuka, Michishige, (**84g:20079**)
- Yoshida, Tomoyuki See Egawa, Yoshimi, (**84b:20014**)

20G45 Applications to physics; explicit representations

secondary classifications:

- Dinesha, K. V. See Nikam, R. S.; et al., (**84d:22021**)
- Dijā, Petre Parametrisation of unitary matrices. (**84e:15029**)
- Nikam, R. S. (with Dinesha, K. V.; Sarma, C. R.) Reduction of inner-product representations of unitary groups. (**84d:22021**)
- Sarma, C. R. See Nikam, R. S.; et al., (**84d:22021**)

20G99 None of the above, but in this section

- Gu, Wen Xiang (with Li, Su Yun) Fuzzy linear groups. (Chinese. English summary) **84c:20054**
- Li, Su Yun See Gu, Wen Xiang, **84c:20054**
- Sullivan, John Brendan Quasi-affine homogeneous spaces. **84g:20088**

secondary classifications:

- Putcha, Mohan S. Connected algebraic monoids. (**84d:20066**)
- On the automorphism group of a linear algebraic monoid. (**84d:20067**)
- Rehmann, U. A survey of the congruence subgroup problem. (**84c:12018**)
- Winter, David J. The Fitting and Jordan structure of affine semigroups. (**84d:20073**)

20Hxx Other groups of matrices

- 20H05 Unimodular groups, congruence subgroups [See also 10D07, 22E40, 51F20.]

Hansen, Jutta Infinite general linear groups over rings. **84f:20054**

secondary classifications:

- Gudivok, P. M. (with Kirilyuk, A. A.; Rud'ko, V. P.; Tsitkin, A. I.) Finite subgroups of the group $GL(n, \mathbb{Z})$. (**84k:20011**)
- Kirilyuk, A. A. See Gudivok, P. M.; et al., (**84k:20011**)
- Rud'ko, V. P. See Gudivok, P. M.; et al., (**84k:20011**)
- Tsitkin, A. I. See Gudivok, P. M.; et al., (**84k:20011**)

- 20H10 Fuchsian groups and their generalizations [See also 10D07, 22E40, 30F35, 32Nxx.]

- Bujalance, Emilio Normal N.E.C. signatures. **84i:20049**
- Edmonds, Allan L. (with Ewing, John H.; Kalkarni, Ravi S.) Torsion free subgroups of Fuchsian groups and tessellations of surfaces. **84d:20046**
- Ewing, John H. See Edmonds, Allan L.; et al., **84d:20046**
- Kalkarni, Ravi S. See Edmonds, Allan L.; et al., **84d:20046**

secondary classifications:

- Ahlfors, Lars Valerian ★ Möbius transformations in several dimensions. (84m:30028)
 Apanasov, B. N. Geometrically finite groups of transformations of a space. (Russian) (84h:30075)
 See also Krushkal', S. L.; et al. (84m:30074)
 Baltag, I. A. (with Garit, V. P.) ★ Двумерные дискретные аффинные группы. (Russian) [Two-dimensional discrete affine groups] (84f:51037)
 Beardon, A. F. (with Nicholls, Peter J.) Ford and Dirichlet regions for Fuchsian groups. (84h:30072)
 Brenner, J. L. (with Lyndon, Roger C.) Maximal nonparabolic subgroups of the modular group. (84f:10030)
 Bujalance, Emilio NEC groups and Klein surfaces. (84g:30045)
 Chau, T. C. A note concerning Fox's paper on Fenchel's conjecture. (84m:20038)
 Gallo, Daniel M. (with Porter, R. Michael) Projective structures on open surfaces. (84f:30054)
 Garit, V. P. See Baltag, I. A., (84f:51037)
 Gusevskii, N. A. See Krushkal', S. L.; et al., (84m:30074)
 Halpern, Noemi Some remarks on Nielsen extensions of Riemann surfaces. (84j:30079)
 Krushkal', S. L. (with Apanasov, B. N.; Gusevskii, N. A.) ★ Униформизация и Клейновы группы. (Russian) [Uniformization and Kleinian groups] (84m:30074)
 Lyndon, Roger C. See Brenner, J. L., (84f:10030)
 MacLachlan, C. (with Rosenberger, G.) Two-generator arithmetic Fuchsian groups. (84m:10014)
 Matejski, J. Peter The classification of discrete 2-generator subgroups of $PSL(2, \mathbb{R})$. (84d:10029)
 Näätänen, Marjatta Regular n -gons and Fuchsian groups. (84i:51028)
 Nicholls, Peter J. See Beardon, A. F., (84h:30072)
 Porter, R. Michael See Gallo, Daniel M., (84f:30054)
 Rosenberger, G. See MacLachlan, C., (84m:10014)
 Series, Caroline Non-Euclidean geometry, continued fractions, and ergodic theory. (84h:58086)
 Takeuchi, Kisao Arithmetic Fuchsian groups with signature $(1; e)$. (84h:10031)
- 20H15 Other geometric groups, including crystallographic groups [See also 51-XX, especially 51F15, and 82A60.]
- Bujalance, Emilio Proper periods of normal N.E.C. subgroups with even index. 84d:20054
 Chuprunov, E. V. See Talis, A. L.; et al., 84e:20051
 Bokovic, Dragomir Ž. Products of positive reflections in real orthogonal groups. 84m:20054
 Fan, Yu Guo See Guo, Dong Yao, 84h:20043
 Fried, David (with Goldman, William M.) Three-dimensional affine crystallographic groups. 84d:20047
 Goldman, William M. See Fried, David, 84d:20047
 Gorzkowski, Waldemar The subgroups of the finite double point groups. 84d:20048a
 The new double space groups. 84d:20048b
 Gubler, Martin Normalizer groups and automorphism groups of symmetry groups. 84h:20042
 Guo, Dong Yao (with Fan, Yu Guo) Matrix tables of principal operations of structure factor algebras in 230 space groups. (Chinese) 84h:20043
 See also Liu, Yong Sheng; et al., 84h:20044
 Hall, S. R. Seminvariant vectors for centred space groups. 84b:20058
 Ignatenko, V. F. Invariants of finite groups generated by reflections. (Russian) 84k:20022
 Igodi, Paul Constructing crystallographic groups starting with finite extensions of finitely generated abelian groups. 84c:20055
 Jin, Zhong Sheng See Liu, Yong Sheng; et al., 84h:20044
 Klemm, Michael ★ Symmetrien von Ornamenten und Kristallen. (German) [Symmetries of ornaments and crystals] 84g:20089
 Kopský, Vojtěch ★ Group lattices subduction of bases and fine domain structures for magnetic crystal point groups. 84j:20051
 Integrity bases for corepresentations of magnetic crystal point groups. 84c:20055
 Liu, Yong Sheng (with Jin, Zhong Sheng; Guo, Dong Yao) Probability correlation of Σ_i relationships and their tables of 230 space groups. 84h:20044
 Molnar, Emil Konvexe Fundamentalpolyeder und einfache D-V-Zellen für 29 Raumgruppen, die Coxetersche Spiegelungsuntergruppen enthalten. [Convex fundamental polyhedra and simple DV cells for 29 space groups which contain Coxeter reflection subgroups] 84k:20023
 Monson, B. R. The Schläflian of a crystallographic Coxeter group. 84h:20059
 Richardson, R. W. Conjugacy classes of involutions in Coxeter groups. 84c:20056
 Talis, A. L. (with Chuprunov, E. V.; Tarkhova, T. N.) Classification and properties of orbits of crystallographic groups. (Russian) 84d:20051
 Tang, You Qi ★ Duichenxing yuanli. II. (Chinese) [Principles of symmetry. II] 84e:20052
 Tarkhova, T. N. See Talis, A. L.; et al., 84e:20051

secondary classifications:

- Bachmann, Friedrich Orthogonality in reflection geometry. (84m:51011)
 Bertaut, Erwin-Félix Vecteurs de propagation, opérateurs de similarité et structures displacives. (English summary) [Propagation vectors, similarity operators and displacive structures] (84f:51035a)
 Erratum: "Propagation vectors, similarity operators and displacive structures". (French) (84f:51035b)
 Birman, Joseph L. See Deonarine, S., (84j:82085)
 Birss, R. R. See Butzal, H.-D., (84f:82051)
 Bollmann, W. See Pond, R. C., (84d:82029)
 Bouligand, Yves Geometry of (nonsmectic) hexagonal mesophases. (French summary) (84j:82081a)
 Defects and textures of hexagonal discotics. (French summary) (84j:82081b)

- Burt, Michael The wandering vertex method. (84f:51046)
 Butzal, H.-D. (with Birss, R. R.) Time reversal and magnetic reversal in crystal physics. (84h:82051)
 Conway, John Horton (with Sloane, N. J. A.) Leech roots and Vinberg groups. (84h:10048)
 Deonarine, S. (with Birman, Joseph L.) Group-subgroup phase transitions, Hermann's space-group decomposition theorem, and chain subduction criterion in crystals. (84j:82085)
 Du Val, Patrick Crystallography and Cremona transformations. (84h:52013)
 Engel, Peter Über Wirkungsbereichsteilungen von kubischer Symmetrie. II. Die Typen von Wirkungsbereichspolyedern in den symmorphen kubischen Raumgruppen. (English summary) [On partitions of three-dimensional space by domains with cubic symmetry. II. The types of polyhedral fundamental domains in symmorphic cubic space groups] (84h:52022)
 Epstein, D. B. A. Geometric structures on manifolds. (84h:57013)
 Flodmark, Stig (with Jansson, Per-Olof) Irreducible representations of finite groups. (84c:20023)
 Guo, Dong Yao See Liu, Yong Sheng; et al., (84h:82083)
 Hoggar, S. G. Two quaternionic 4-polytopes. (84h:51033)
 Hosoya, Masahiko Crystal structures containing five atoms per primitive cell. (Japanese. English summary) (84g:82027)
 Jansson, Per-Olof See Flodmark, Stig, (84c:20023)
 Jaswon, Maurice A. (with Rose, Maitland A.) ★ Crystal symmetry. (84g:51022)
 Jin, Zhong Sheng See Liu, Yong Sheng; et al., (84h:82083)
 Kaneko, Jyoichi (with Tokunaga, Shoshi; Yoshida, Masaaki) Complex crystallographic groups. II. (84d:32018b)
 Klemm, M. The geometrical nature of disorder and its elementary excitations. (84c:82027)
 Kopský, Vojtěch Colour symmetry polemics. (84h:22035)
 Kramer, Peter Nonperiodic central space filling with icosahedral symmetry using copies of seven elementary cells. (84e:52026)
 Litvin, D. B. Tensor fields on crystals. (84h:82057)
 Liu, Yong Sheng (with Jin, Zhong Sheng; Guo, Dong Yao) Linear theory of Σ relationships. (84h:82083)
 McLarnan, T. J. The numbers of polytypes in close-packings and related structures. (84c:05010)
 Michel, Louis Symmetry in condensed matter physics. (See 84j:81006)
 Nolte, Wolfgang Darstellung spezieller projektiver Spiegelungsgruppen durch orthogonale Gruppen. (English summary) [Representation of special projective reflection groups via orthogonal groups] (84h:51026)
 Pond, R. C. (with Bollmann, W.) The symmetry and interfacial structure of bicrystals. (84d:82029)
 Prandl, W. The structure factor of orientationally disordered crystals: the case of arbitrary space, site, and molecular point group. (84f:82046)
 Rose, Maitland A. See Jaswon, Maurice A., (84g:51022)
 Rousseau, Ronny On certain subgroups of a wreath product. (84c:20052)
 Sadanaga, Ryoichi On the local condition of the regular point system. (84g:52012)
 Salzmann, Helmut R. Compact 16-dimensional projective planes with large collineation groups. (84c:51025)
 Sands, Donald E. ★ Vectors and tensors in crystallography. (84c:82085)
 Senechal, Marjorie Coloring symmetrical objects symmetrically. (84f:20008)
 Sivardiére, Jean Groupes commutateurs des groupes cristallographiques. (English summary) [Commutator groups of crystallographic groups] (84c:20023)
 (with Waintal, Alex) Remarques sur la symétrie ponctuelle des structures modulées. (English summary) [Remarks on the point symmetry of modulated structures] (84c:82024)
 Sloane, N. J. A. See Conway, John Horton, (84h:10048)
 Struve, Rolf Algebraisierung singularer Hjelmslevgruppen. [Algebraization of singular Hjelmslev groups] (84i:51012)
 Tokunaga, Shoshi (with Yoshida, Masaaki) Complex crystallographic groups. I. (84d:32018a)
 See also Kaneko, Jyoichi; et al., (84d:32018b)
 Völklein, Helmut Transitivitätsfragen bei linearen Gruppen. [Transitivity problems in linear groups] (84j:51046)
 Waintal, Alex See Sivardiére, Jean, (84c:82024)
 Walker, Michael On central root automorphisms of finite generalized octagons. (84h:51035)
 Witczyński, Krzysztof On generators of the group of projective transformations. (84b:51005)
 Yoshida, Masaaki See Tokunaga, Shoshi, (84d:32018a) and Kaneko, Jyoichi; et al., (84d:32018b)
 Zamorzaeva, E. A. Regular Dirichlet partitioning for two-dimensional similarity symmetry groups. (Russian) (84f:51036)
 Zhdan-Pushkin, V. V. Lattices of supergroups of groups $PU_n(q)$ acting on isotropic lines. (Russian) (84j:20050)

20H20 Other matrix groups over fields

- Gordeev, N. L. Subgroups of a finite group whose algebra of invariants is a complete intersection. (Russian) 84h:20045
 de la Harpe, Pierre Free groups in linear groups. 84e:20050
 Huo, Yuan Ji See Zou, Li Guo, 84k:20024
 Koibaev, V. A. Subgroups of the general linear group containing a group of elementary block-diagonal matrices. (Russian. English summary) 84c:20053
 Mäurer, Helmut Eine Charakterisierung der zwischen $PSL(2, K)$ und $PGL(2, K)$ liegenden Permutationsgruppen. [A characterization of the permutation groups lying between $PSL(2, K)$ and $PGL(2, K)$] 84m:20055
 Zou, Li Guo (with Huo, Yuan Ji) Generators of the groups defined by symmetric matrices over a field of characteristic 2. (Chinese. English summary) 84k:20024

secondary classifications:

- Dias da Silva, J. A. See de Oliveira, Graciano N., (84d:15007)
 de Oliveira, Graciano N. (with Dias da Silva, J. A.) Equality of decomposable symmetrized tensors and \ast -matrix groups. (84d:15007)

20H25 Other matrix groups over rings

- Arrell, David G. The subnormal subgroup structure of the infinite general linear group. 84f:20055
 The subnormal subgroup structure of the infinite symplectic group. 84f:20056
 Bachmuth, Seymour (with Mochizuki, Horace Y.) $E_2 \neq SL_2$ for most Laurent polynomial rings. 84a:20056
 Faltings, K. Zur Kennzeichnung von Elationen. [On the characterization of elations] 84d:20049
 Ion, Ion D. The structure of the groups $SL_n(\mathbb{Z})$ and $GL_n(\mathbb{Z})$. I. (Romanian) 84g:20090a
 Structure of the groups $SL_n(\mathbb{Z})$ and $GL_n(\mathbb{Z})$. II. (Romanian) 84g:20090b
 Krupetskii, S. L. Intermediate subgroups in the unitary group over the quaternion algebra. (Russian) 84c:20051
 Lichtman, A. I. On linear groups over a field of fractions of a polycyclic group ring. 84d:20050
 Mochizuki, Horace Y. See Bachmuth, Seymour, 84a:20056
 Roloff, Hartmut Zentralreihen von Untergruppen der symplektischen Gruppe. [Central series of net subgroups of the symplectic group] 84h:20046
 Silvester, J. R. On the GL_n of a semilocal ring. 84c:20057
 Taddei, Giovanni Invariance du sous-groupe symplectique élémentaire dans le groupe symplectique sur un anneau. (English summary) [Invariance of the elementary symplectic subgroup in the symplectic group over a ring] 84c:20058

secondary classifications:

- Tuler, Randy Detecting products of elementary matrices in $GL_2(\mathbb{Z}[\sqrt{d}])$. (84i:10027)

20H30 Other matrix groups over finite fields

secondary classifications:

- Kreknin, V. A. A test for the simplicity of a finite group. (Russian) (84j:20020)
 Li, Shang Zhi (with Zha, Jian Guo) On certain classes of maximal subgroups in projective special unitary groups over finite fields. (84b:20056)
 Zha, Jian Guo See Li, Shang Zhi, (84b:20056)

20H99 None of the above, but in this section

secondary classifications:

- Fluch, Wolfgang Ein Theorem der linearen Gruppen. [A theorem on linear groups] (84d:20031a)
 Eine verallgemeinerte Higman-Gruppe. [A generalized Higman group] (84d:20031b)

20Jxx Connections with homological algebra and category theory

20J05 Homological methods in group theory

- Bieri, Robert ★Homological dimension of discrete groups. 84h:20047
 Franco Fernández, L. See R-Grandjean L-Valcarcel, A., 84h:20049
 Furtado-Coelho, J. Homology and V -central series. I. 84h:20048
 Gildenhuys, D. (with Strebel, Ralph) On the cohomology of soluble groups. II. 84c:20059
 Passi, I. B. S. (with Verma, L. R.) Dimension subgroups and Schur multiplier. 84c:20025
 Pitiş, Gheorghe J -resolutions of a projective system. (Romanian. French summary) 84j:20052
 Ratcliffe, John G. Finiteness conditions for groups. 84d:20051
 R-Grandjean L-Valcarcel, A. (with Franco Fernández, L.) A five-term exact sequence. (Spanish) 84h:20049
 Robinson, Derek John Scott Applications of cohomology to the theory of groups. 84d:20052
 Strebel, Ralph See Gildenhuys, D., 84c:20059
 Verma, L. R. See Passi, I. B. S., 84c:20025

secondary classifications:

- Alperin, Roger C. (with Shalen, Peter B.) Linear groups of finite cohomological dimension. (84a:20052)
 Bekker, I. Kh. First cohomology groups over separable torsion-free abelian groups. (Russian) (84j:20055)
 Beyl, F. Rudolf (with Tappe, Jürgen) ★Group extensions, representations, and the Schur multiplier. (84f:20002)
 Howse, J. R. (with Johnson, David Lawrence) An algorithm for the second derived factor group. (84a:20042)
 Johnson, David Lawrence See Howse, J. R., (84a:20042)
 Kassel, Christian Calcul algébrique de l'homologie de certains groupes de matrices. [Algebraic calculation of the homology of certain groups of matrices] (84m:18015)
 Kuz'min, Yu. V. Finite-order elements in free groups of some manifolds. (Russian) (84h:20018)
 Shalen, Peter B. See Alperin, Roger C., (84a:20052)
 Tappe, Jürgen See Beyl, F. Rudolf, (84f:20002)

20J06 Cohomology of finite groups

- Alperin, J. L. (with Evens, L.) Varieties and elementary abelian groups. 84a:20057
 Betley, Stanislaw Restriction homomorphism, generators and periodicity in cohomology of p -groups. (Russian summary) 84i:20052
 Chapman, G. R. The cohomology ring of a finite abelian group. 84g:20091
 Evens, L. See Alperin, J. L., 84a:20057
 Mann, Benjamin M. (with Milgram, R. James) On the Chern classes of the regular representations of some finite groups. 84c:20060
 Milgram, R. James See Mann, Benjamin M., 84c:20060
 Miyamoto, Masahiko An affirmative answer to Glauberman's conjecture. 84b:20060
 Nguyễn Hữu Việt Hùng The mod 2 cohomology algebras of symmetric groups. 84c:20061
 Ogawa, Yoshito An application of Evens' norm mapping. 84b:20061

secondary classifications:

- Ellis, Robert Mortimer Cohomology of groups and almost periodic extensions of minimal sets. (84h:54079)
 Ferrer Santos, Walter Ricardo Cohomology of comodules. (84k:18009)
 See also (84k:18009)
 Steiner, Richard Multiplicative transfers in ordinary cohomology. (84c:55011)
 Tezuka, Michishige (with Yagita, Nobuaki) The mod p cohomology ring of $GL_3(F_p)$. (84g:20079)
 Yagita, Nobuaki See Tezuka, Michishige, (84g:20079)

20J10 Groups arising as cohomology groups

- Groves, J. R. J. Metabelian groups with finitely generated integral homology. 84c:20062
 Kerer, E. Sh. A property of cocycles of an abelian group. (Russian) 84h:20050
 Sasaki, Hiroki On the nontriviality of cohomology of finite groups. 84c:20054

secondary classifications:

- Julian, William (with Mines, Ray; Richman, Fred) Alexander duality. (84j:03115)
 Mines, Ray See Julian, William; et al., (84j:03115)
 Richman, Fred See Julian, William; et al., (84j:03115)

20J15 Category of groups

secondary classifications:

- Cheng, Charles Ching-an Exact limits. (84d:18001)
 Porter, Timothy Internal categories and crossed modules. (84c:18015)

20J99 None of the above, but in this section

secondary classifications:

- Katamadze, R. D. Exact sequences for the relative Hochschild cohomology. (Russian. English and Georgian summaries) (84g:18033)

20Kxx Abelian groups

Benabdallah, Khalid Abelian groups and algebra. 84f:20057

secondary classifications:

- (Göbel, Rüdiger) See Abelian group theory, (84j:20004)
 (Lady, E. L.) See Abelian group theory, (84j:20004)
 (Mader, Adolf) See Abelian group theory, (84j:20004)
 Abelian group theory ★Abelian group theory. (84j:20004)
 Conference:
 Abelian group theory ★Abelian group theory. (84j:20004)
 Honolulu, Hawaii ★Abelian group theory. (84j:20004)

20K01 Finite abelian groups

- Buzási, Károly Invariants of pairs of finite abelian groups. (Russian) 84h:20051
 Narkiewicz, W. (with Śliwa, Jan) Finite abelian groups and factorization problems. II. 84a:20058
 O'Brien, G. L. A generalized notion of quotient for finite abelian groups. 84j:20053
 Śliwa, Jan See Narkiewicz, W., 84a:20058
 Tannenbaum, Peter Partitions of abelian groups into sets with zero sums. 84d:20053
 Partitions of \mathbb{Z}_p^n . 84c:20055
 Yu, Shu Xia Some notes on the order of the automorphism group of a finite abelian p -group. (Chinese. English summary) 84m:20056

secondary classifications:

- Aviño Díaz, María A. Upper central series of the kernel group of the automorphism group of a finite abelian p -group of type $[p^{m_1}, p^{m_2}, \dots, p^{m_r}]$, $m_i > m_{i+1}$, $i = 1, 2, \dots, r-1$. (Spanish. English summary) (84f:20037)
 Chapman, G. R. The cohomology ring of a finite abelian group. (84g:20091)
 Lewittes, Joseph Characters and decomposition of a representation in a number field. (84h:12011)
 Macdonald, I. G. ★Symmetric functions and Hall polynomials. (84g:05003)
 Odono, R. W. K. Some remarks on the values taken by abelian group determinants. (84k:20005)
 Śliwa, Jan Remarks on factorizations in algebraic number fields. (84c:12004)
 Szabo, Sándor Rational tilings by n -dimensional crosses. (84c:05034)

20K05 Finitely generated groups

secondary classifications:

- Ivić, Aleksandar On the number of abelian groups of a given order and on certain related multiplicative functions. (84f:10061)

20K10 Torsion groups, primary groups and generalized primary groups

- Benabdallah, Khalid P -centres and P -kernels in primary abelian groups. 84m:20057
(with Honda, Kin-ya) Quasi- p -large subgroups of abelian groups. 84g:20092
Dugas, Manfred (with Herden, Gerhard) Arbitrary torsion classes of abelian groups. 84f:20058
Fuchs, László (with Irwin, John M.) On elongations of totally projective p -groups by p^{u+v} -projective p -groups. 84a:20059
Herden, Gerhard See Dugas, Manfred, 84f:20058
Hill, Paul The balance of Tor. 84f:20059
When $\text{Tor}(A, B)$ is a direct sum of cyclic groups. 84h:20052
The equivalence of high subgroups. 84g:20093
Honda, Kin-ya See Benabdallah, Khalid, 84g:20092
Irwin, John M. See Fuchs, László, 84a:20059
Megibben, Charles Crawley's problem on the unique ω -elongation of p -groups is undecidable. 84m:20058
Rogers, Laurel Functions defined on p -trees. 84c:20063

secondary classifications:

- Crvenković, Siniša See Čupona, Gorgi; et al., (84h:08002)
Čupona, Gorgi (with Vojvodić, Gradimir; Crvenković, Siniša) Subalgebras of abelian torsion groups. (84h:08002)
Dugas, Manfred (with Göbel, Rüdiger) On endomorphism rings of primary abelian groups. (84c:20059)
(with Herden, Gerhard) Arbitrary torsion classes and almost free abelian groups. (84c:16034)
Göbel, Rüdiger See Dugas, Manfred, (84c:20059)
Herden, Gerhard See Dugas, Manfred, (84c:16034)
Vojvodić, Gradimir See Čupona, Gorgi; et al., (84h:08002)

20K12 Ulm sequences

- Fay, Temple H. (with Oxford, Edwin P.; Walls, Gary L.) A characterization of tensor-induced preradicals in abelian groups. 84c:20053
Oxford, Edwin P. See Fay, Temple H.; et al., 84c:20053
Walls, Gary L. See Fay, Temple H.; et al., 84c:20053

secondary classifications:

- Ansari, Wafa A. See Singh, Surjeet, (84i:16024)
Benabdallah, Khalid (with Singh, Surjeet) A note on Ulm's theorem. (84i:16025b)
Singh, Surjeet (with Ansari, Wafa A.) On Ulm's theorem. (84i:16024)
See also Benabdallah, Khalid, (84i:16025b)
Upham, Mary H. Note on an extension of Ulm's theorem. (84i:16025a)

20K15 Torsion free groups, finite rank

- Arnold, David M. (with O'Brien, B.; Reid, J. D.) Quasipure injective and projective torsion-free abelian groups of finite rank. 84f:20060
Bekker, I. Kh. Definability of torsion free reduced abelian groups by their relative homomorphisms. (Russian) 84b:20053
Benabdallah, Khalid (with Mutzbauer, Otto) On direct decompositions of torsion free abelian groups of rank 4. 84c:20054
Botha, J. D. (with Gräbe, P. J.) On torsion-free abelian groups whose endomorphism rings are principal ideal domains. 84i:20054
Burkhardt, Rolf Elementary abelian extensions of finite rigid systems. 84j:20054
Eda, Katsuya On a Boolean power of a torsion free abelian group. 84c:20055
Feigelstock, Shalom Noncommutative rank two torsion free rings. 84i:20056
Gräbe, P. J. See Botha, J. D., 84i:20054
Keane, William J. On minimal imbedded subgroups of abelian p -groups. 84c:20057
Kozhukhov, S. F. Almost completely decomposable torsion free abelian groups. (Russian) 84c:20056
Lausch, Huberta Eine geometrische Beschreibung des Tensorproduktes zweier torsionsfreier abelscher Gruppen endlichen Ranges. [A geometric description of the tensor product of two torsion-free abelian groups of finite rank] 84g:20094
Mutzbauer, Otto See Benabdallah, Khalid, 84c:20054
O'Brien, B. See Arnold, David M.; et al., 84f:20060
Reid, J. D. See Arnold, David M.; et al., 84f:20060
Richman, Fred An extension of the theory of completely decomposable torsion-free abelian groups. 84c:20026
Sizer, Walter S. Convex polytopes and retractions of abelian groups. 84c:20027
Vinsonhaler, C. (with Wickless, W. J.) The cotyset of a torsion-free abelian group of finite rank. 84c:20028
Wickless, W. J. See Vinsonhaler, C., 84c:20028

secondary classifications:

- Arnold, David M. ★ Finite rank torsion free abelian groups and rings. (84d:20002)
Lady, E. L. Grothendieck rings for certain categories of quasihomomorphisms of torsion free modules over Dedekind domains. (84h:13019)
Pilipenko, Yu. N. (with Polets'kikh, V. M.) Topological torsion-free nilpotent groups with restrictions for abelian subgroups. (Russian, English summary) (84a:22014)
Polets'kikh, V. M. See Pilipenko, Yu. N., (84a:22014)

- Schmitt, Peter H. The elementary theory of torsion-free abelian groups with a predicate specifying a subgroup. (84b:03053)

20K20 Torsion free groups, infinite rank

- Dobrusin, Yu. B. Torsion free quasi-pure injective abelian groups. (Russian) 84c:20057
Flesher, T. M. A -identity subgroups of torsion-free abelian groups. (Russian) 84b:20062
Krylov, P. A. Strongly homogeneous torsion-free abelian groups. (Russian) 84b:20055
Sebel'din, A. M. Definability of a torsion-free unreduced abelian group by its group of endomorphisms. (Russian) 84b:20063

secondary classifications:

- Dugas, Manfred (with Göbel, Rüdiger) Every cotorsion-free ring is an endomorphism ring. (84b:20064)
Eda, Katsuya On a Boolean power of a torsion free abelian group. (84i:20055)
Eklof, Paul C. The structure of ω_1 -separable groups. (84c:03124)
Göbel, Rüdiger See Dugas, Manfred, (84b:20064)
Richman, Fred An extension of the theory of completely decomposable torsion-free abelian groups. (84c:20026)

20K21 Mixed groups

- Bečvář, Jindřich Intersections of T -isotype subgroups in abelian groups. 84d:20054
Bican, Ladislav The splitting of the tensor product of two mixed abelian groups of rank one. 84m:20059
Kiefer, Franz The duals of totally projective groups. 84i:20058
Moore, Judy H. A characterization of Warfield groups. 84d:20055

20K25 Direct sums, direct products, etc.

- Buzási, Károly Isomorphism of pairs of infinite abelian groups. (Russian) 84a:20060
Wald, Burkhard Martinaxiom und die Beschreibung gewisser Homomorphismen in der Theorie der \aleph_1 -freien abelschen Gruppen. (English summary) [Martin's axiom and the description of certain homomorphisms in the theory of \aleph_1 -free abelian groups] 84g:20095

secondary classifications:

- Bican, Ladislav The splitting of the tensor product of two mixed abelian groups of rank one. (84m:20059)
Botha, J. D. (with Gräbe, P. J.) On torsion-free abelian groups whose endomorphism rings are principal ideal domains. (84i:20054)
Fuchs, László (with Irwin, John M.) On elongations of totally projective p -groups by p^{u+v} -projective p -groups. (84a:20059)
Göbel, Rüdiger (with Rychkov, S. V.; Wald, Burkhard) A general theory of slender groups and Fuchs-44-groups. (84d:20057)
Gräbe, P. J. See Botha, J. D., (84i:20054)
Irwin, John M. See Fuchs, László, (84a:20059)
Richman, Fred An extension of the theory of completely decomposable torsion-free abelian groups. (84c:20026)
Rychkov, S. V. See Göbel, Rüdiger; et al., (84d:20057)
Wald, Burkhard See Göbel, Rüdiger; et al., (84d:20057)
Zimmermann-Huisgen, Birge Direct products of torsion modules. (84a:13011)
Zöschinger, Helmut Komplemente als direkte Summanden. II. [Complements as direct summands. II] (84a:16056)

20K26 Indecomposable groups

- Benabdallah, Khalid (with Birtz, A.) Hyperindecomposable groups. 84b:20056
Birtz, A. See Benabdallah, Khalid, 84b:20056

secondary classifications:

- Dugas, Manfred (with Göbel, Rüdiger) Every cotorsion-free ring is an endomorphism ring. (84b:20064)
Göbel, Rüdiger See Dugas, Manfred, (84b:20064)

20K27 Subgroups

secondary classifications:

- Chen, Bing Hui (with Qi, Zhi Nan) On the radicals of subsets and the e -subgroups of an abelian group. (Chinese, English summary) (84j:20035)
Fay, Temple H. (with Oxford, Edwin P.; Walls, Gary L.) A characterization of tensor-induced preradicals in abelian groups. (84i:20053)
Hill, Paul The equivalence of high subgroups. (84g:20093)
Keane, William J. On minimal imbedded subgroups of abelian p -groups. (84c:20057)
Oxford, Edwin P. See Fay, Temple H.; et al., (84i:20053)
Qi, Zhi Nan See Chen, Bing Hui, (84j:20035)
Walls, Gary L. See Fay, Temple H.; et al., (84i:20053)

20K30 Automorphisms, homomorphisms, endomorphisms, etc.

- Bekker, I. Kh. First cohomology groups over separable torsion-free abelian groups. (Russian) 84j:20055
Byrd, Richard D. (with Lloyd, Justin T.; Stepp, James W.) The automorphism group of the semigroup of finite complexes of a rank one torsion free abelian group. 84c:20058
Dugas, Manfred (with Göbel, Rüdiger) On endomorphism rings of primary abelian groups. 84c:20059
(with Göbel, Rüdiger) Every cotorsion-free ring is an endomorphism ring. 84b:20064

- Göbel, Rüdiger (with Wald, Burkhard; Westphal, Petra) Groups of integer-valuated functions. **84d:20056**
 (with Rychkov, S. V.; Wald, Burkhard) A general theory of slender groups and Fuchs-44-groups. **84d:20057**
 See also Dugas, Manfred, **84b:20064** and **84c:20059**
 Lloyd, Justin T. See Byrd, Richard D.; et al., **84c:20058**
 Rychkov, S. V. See Göbel, Rüdiger; et al., **84d:20057**
 Stepp, James W. See Byrd, Richard D.; et al., **84c:20058**
 Wald, Burkhard See Göbel, Rüdiger; et al., **84d:20056** and **84d:20057**
 Westphal, Petra See Göbel, Rüdiger; et al., **84d:20056**

secondary classifications:

- Arnold, David M. ★Finite rank torsion free abelian groups and rings. (**84d:20002**)
 Beletskii, P. M. (with Morgado Morales, Eberto R.) On the automorphism group of a finite abelian p -group. (Russian) (**84c:20024**)
 Botha, J. D. (with Gräbe, P. J.) On torsion-free abelian groups whose endomorphism rings are principal ideal domains. (**84c:20054**)
 Dugas, Manfred (with Göbel, Rüdiger) Every cotorsion-free algebra is an endomorphism algebra. (**84b:13008**)
 Fletcher, T. M. A -identity subgroups of torsion-free abelian groups. (Russian) (**84b:20062**)
 Göbel, Rüdiger See Dugas, Manfred, (**84b:13008**)
 Gräbe, P. J. See Botha, J. D., (**84c:20054**)
 Hausen, Jutta Endomorphism rings generated by idempotents. (**84c:16030**)
 Morgado Morales, Eberto R. See Beletskii, P. M., (**84c:20024**)
 Schulz, Wolfgang Ein gruppentheoretisches Kriterium für die Lösbarkeit der Funktionalgleichung $f(x+y)=F(f(x),f(y))$. [A group-theoretic criterion for the solvability of the functional equation $f(x+y)=F(f(x),f(y))$] (**84a:39006**)
 Sebel'din, A. M. Definability of a torsion-free unreduced abelian group by its group of endomorphisms. (Russian) (**84b:20063**)

20K35 Extensions

- al-Daffa', 'Ali A. See Yahya, S. M., **84c:20061**
 Eklof, Paul C. (with Huber, Martin) On the p -ranks of $\text{Ext}(A, G)$, assuming CH. **84c:20060**
 Huber, Martin See Eklof, Paul C., **84c:20060**
 Ivanov, A. V. ω -highly injective groups. (Russian) **84b:20057**
 Mashhood, Asif On group of neat extensions. **84m:20060**
 Yahya, S. M. (with al-Daffa', 'Ali A.) P -neat extensions. **84c:20061**

20K40 Homological and categorical methods

- Benabdallah, Khalid (with Honda, Kin-ya) A complete characterization of quasi- p -pure-injective groups. **84g:20096**
 Fay, Temple H. A homological algebra for valued groups. **84b:20058**
 Honda, Kin-ya See Benabdallah, Khalid, **84g:20096**

secondary classifications:

- Arnold, David M. ★Finite rank torsion free abelian groups and rings. (**84d:20002**)
 al-Daffa', 'Ali A. See Yahya, S. M., (**84c:20061**)
 Fay, Temple H. (with Oxford, Edwin P.; Walls, Gary L.) A characterization of tensor-induced preradicals in abelian groups. (**84c:20053**)
 Fedin, S. N. The concept of inductive closure of a proper class. (Russian) (**84g:18032**)
 Geanina, M. Quelques propriétés de l'exponentielle dans la catégorie abélienne des objets groupes abéliens dans un topos élémentaire. (Romanian summary) [Some properties of the exponentiation in the abelian category of abelian group objects in an elementary topos] (**84j:18007**)
 Harting, Roswitha Locally injective G -sheaves of abelian groups. (**84a:18022**)
 Locally injective abelian groups in a topos. (**84m:18005**)
 Hill, Paul (with White, Errin) The projective dimension of valued vector spaces. (**84d:18014**)
 The balance of Tor. (**84f:20059**)
 When $\text{Tor}(A, B)$ is a direct sum of cyclic groups. (**84b:20052**)
 Höpner, Michael On the freeness of Whitehead diagrams. (**84c:18025**)
 Ivanov, A. V. ω -highly injective groups. (Russian) (**84b:20057**)
 Kerer, E. Sh. A property of cocycles of an abelian group. (Russian) (**84b:20050**)
 Mashhood, Asif On group of neat extensions. (**84m:20060**)
 Oxford, Edwin P. See Fay, Temple H.; et al., (**84c:20053**)
 Pitts, Gheorghe J -resolutions of a projective system. (Romanian. French summary) (**84j:20052**)
 Richman, Fred An extension of the theory of completely decomposable torsion-free abelian groups. (**84k:20026**)
 Walls, Gary L. See Fay, Temple H.; et al., (**84c:20053**)
 White, Errin See Hill, Paul, (**84d:18014**)
 Yahya, S. M. (with al-Daffa', 'Ali A.) P -neat extensions. (**84c:20061**)

20K45 Topological methods

secondary classifications:

- Zanolin, Fabio A note on convergences in commutative groups. (Italian summary) (**84g:54005**)

20K99 None of the above, but in this section

- Čirić, Dušan On a class of abelian groups. (Serbo-Croatian. English summary) **84b:20065**
 Delorme, Charles Un théorème de coloration pour les groupes abéliens. [A coloring theorem for abelian groups] **84c:20062**

- Kaarli, K. Affine complete abelian groups. **84b:20059**
 Komarov, S. I. On Π_2 -purity in abelian groups. (Russian. English summary) **84b:20060**
 secondary classifications:

- Balog, Antal Statistical theorems about the embeddings of abelian groups into symmetrical ones. (**84c:10047**)
 Chiti, Emanuela Saturated models of particular theories of ordered abelian groups. (Italian. English summary) (**84c:03061**)
 Combese, Joël An introduction to naive set theory through the notion of normal filter. (See **84c:03006**)
 Duda, Jaromir A functional characterization of parallelogram spaces. (**84c:08006**)
 Meirembekov, K. A. Spectra of superstable abelian groups. (Russian) (**84c:03098**)

20Lxx Groupoids (small categories in which all morphisms are isomorphisms)

20L05 General theory

- Ježek, Jaroslav (with Kepka, Tomáš; Němec, Petr) Distributive groupoids. (Russian summary) **84b:20066**
 Kepka, Tomáš See Ježek, Jaroslav; et al., **84b:20066**
 Lyapin, E. S. Internal extension of partial actions to complete associative ones. (Russian) **84g:20097**
 Němec, Petr See Ježek, Jaroslav; et al., **84b:20066**
 Šipos, Jan Magnifying elements in groupoids. (Russian summary) **84c:20063**
 Vassiliou, George Chr. Chains in groupoids. (Greek. English summary) **84d:20058**

secondary classifications:

- Ježek, Jaroslav Free groupoids in varieties determined by a short equation. (Russian and Czech summaries) (**84d:08006**)
 Lender, V. B. Multiplication of prevarieties of lattices. (Russian) (**84d:06014**)
 Schultz, Barbara Über die Vollständigkeit der induktiven Gruppoide der partiellen Automorphismen von Algebren. [On the completeness of the inductive groupoids of the partial automorphisms of algebras] (**84b:08004**)

20L10 Connections with group theory

- Drápal, Aleš (with Kepka, Tomáš) Group modifications of some partial groupoids. **84g:20098**
 Kepka, Tomáš Distributive groupoids and preradicals. I. **84m:20061a**
 Distributive groupoids and preradicals. II. **84m:20061b**
 See also Drápal, Aleš, **84g:20098**
 Pierce, Richard S. Symmetric groupoids. II. **84a:20061**

secondary classifications:

- da Costa Reis, M. Raquel P. Partial residuals in groupoid-lattices of all the subgroups of a group. (Portuguese) (**84a:20035**)
 De Maria, Francesco Selection groups of hypergroups. (**84a:20072**)
 De Salvo, Mario (with Freni, Domenico) Cyclic semihypergroups and hypergroups. (Italian. English summary) (**84a:20073**)
 Freni, Domenico See De Salvo, Mario, (**84a:20073**)
 Horadam, K. J. The conjugacy problem for graph products with cyclic edge groups. (**84i:20031**)
 Lex, W. Simple acts. (**84m:08001**)
 Vassiliou, George Chr. Chains in groupoids. (Greek. English summary) (**84d:20058**)

20L13 Mappings of groupoids

- Czech, Jerzy Remarks on r -rings and r -groupoids. **84f:20061**

secondary classifications:

- Kettle, St. John G. A class of natural bijections between Catalan families. (**84g:05021**)

20L15 Connections with topology

secondary classifications:

- Higgins, Philip J. (with Taylor, John) The fundamental groupoid and the homotopy crossed complex of an orbit space. (**84b:55021**)
 Matveev, S. V. Distributive groupoids in knot theory. (Russian) (**84e:57008**)
 Series, Caroline An application of groupoid cohomology. (**84f:22014**)
 Taylor, John See Higgins, Philip J., (**84b:55021**)

20L17 Connections with category theory

secondary classifications:

- Drápal, Aleš (with Kepka, Tomáš) Group modifications of some partial groupoids. (**84g:20098**)
 Kennison, John F. Separable algebraic closure in a topos. (**84h:18007**)
 Kepka, Tomáš See Drápal, Aleš, (**84g:20098**)

20L99 None of the above, but in this section

secondary classifications:

- Kim, Ann Chi Laws in groupoids derived from semigroups. (**84c:08007**)
 Länger, Helmut A groupoid-theoretic approach to axiomatic quantum mechanics. (**84k:81018**)

Schultz, Barbara Über die Vollständigkeit induktiver Gruppoide, die zu einer speziellen Klasse endlicher Ringe gehören. [On the completeness of inductive groupoids which belong to a special class of finite rings] (84j:16017)

20Mxx Semigroups

secondary classifications:

- (Hofmann, Karl Heinrich) See Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 (Jürgensen, Helmut) See Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 (Lajos, Sándor) See Notes on semigroups. (84d:20003)
 (Weinert, Hanns Joachim) See Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 (Yoshida, Reikichi) See Proceedings: Symposium on Semigroups. (84a:20003)

Conference:

- Recent developments in the algebraic, analytical, and topological theory of semigroups
 ★ Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 Kyoto ★ Proceedings of the 6th Symposium on Semigroups. (84a:20003)
 Notes on semigroups ★ Notes on semigroups. VIII. (84d:20003)
 Oberwolfach ★ Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 Proceedings:
 Symposium on Semigroups ★ Proceedings of the 6th Symposium on Semigroups. (84a:20003)
 Recent developments in the algebraic, analytical, and topological theory of semigroups
 ★ Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 Symposium:
 Semigroups ★ Proceedings of the 6th Symposium on Semigroups. (84a:20003)

20M05 Free semigroups, generators and relations, word problem

- Book, Ronald V. When is a monoid a group? The Church-Rosser case is tractable. 84b:20067
 Chao, Chong Yun (with Zhang, Mou Cheng) On the semigroup of fully indecomposable relations. 84m:20062
 Gerhard, J. A. Free completely regular semigroups. I. Representation. 84m:20063a
 Free completely regular semigroups. II. Word problem. 84m:20063b
 (with Petrich, Mario) Word problems for free objects in certain varieties of completely regular semigroups. 84f:20062
 Kim, Ki Hang (with Makar-Limanov, L. G.; Roush, Fred W.) Graph monoids. 84c:20064
 Kostyrko, V. F. On elementary 3-theory of semigroups. 84i:20029
 Makar-Limanov, L. G. See Kim, Ki Hang; et al. 84c:20064
 Mayr, Ernst W. (with Meyer, Albert R.) The complexity of the word problems for commutative semigroups and polynomial ideals. 84g:20099
 Meyer, Albert R. See Mayr, Ernst W., 84g:20099
 Pansiot, Jean-Jacques Mots infinis de Fibonacci et morphismes itérés. (English summary) [Infinite Fibonacci words and iterated morphisms] 84i:20059
 Petrich, Mario See Gerhard, J. A., 84f:20062
 Piochi, R. On Szép's decompositions of idempotent-generated semigroups. 84f:20063
 Roush, Fred W. See Kim, Ki Hang; et al., 84c:20064
 Sakarovitch, Jacques Description des monoides de type fini. (English, German and Russian summaries) [Description of monoids of finite type] 84a:20062
 Silberger, Donald Morison The equation $z = x^a y^m$ in certain classes of monoids. (See 84b:00011)
 Tamari, Dov A graphic theory of associativity and wordchain patterns. 84g:20100
 Vazhenin, Yu. M. Semigroups with one defining relation whose elementary theories are decidable. (Russian) 84i:20060
 Zhang, Mou Cheng See Chao, Chong Yun, 84m:20062

secondary classifications:

- Albert, Jürgen (with Culik, Karel, II; Karhumäki, Juhani) Test sets for context free languages and algebraic systems of equations over a free monoid. (84j:68046)
 (Berstel, Jean) See Lothaire, M., (84g:05002)
 Borisov, A. A. Lattice determinacy of a class of commutative semigroups without idempotents. (Russian) (84b:20066)
 Carpi, Arturo On the size of a square-free morphism on a three-letter alphabet. (84m:68061)
 (Choffrut, Christian) See Lothaire, M., (84g:05002)
 (Cori, Robert) See Lothaire, M., (84g:05002)
 Culik, Karel, II (with Harju, Tero) Dominoes over a free monoid. (84c:20081)
 See also Albert, Jürgen; et al., (84j:68046)
 Dekking, F. M. Recurrent sets. (84c:52023)
 (Foata, Dominique) See Lothaire, M., (84g:05002)
 Harju, Tero See Culik, Karel, II, (84c:20081)
 Imaoka, Teruo See Yamada, Miyuki, (84f:20074)
 Karhumäki, Juhani On cube-free ω -words generated by binary morphisms. (84j:03081)
 See also Albert, Jürgen; et al., (84j:68046)
 Lothaire, M. ★ Combinatorics on words. (84g:05002)
 de Luca, Aldo A combinatorial property of the Fibonacci words. (84i:05023)
 On some combinatorial problems in free monoids. (84c:05017)
 (Lyndon, Roger C.) See Lothaire, M., (84g:05002)
 Makanin, G. S. Equations in a free group. (Russian) (84m:20040)
 O'Dúnlaing, Colm Infinite regular Thue systems. (84f:03035)
 (Perrin, Dominique) See Lothaire, M., (84g:05002)

- (Pin, Jean-Eric) See Lothaire, M., (84g:05002)
 (Pirillo, Giuseppe) See Lothaire, M., (84g:05002)
 (Reutenauer, Christophe) See Lothaire, M., (84g:05002)
 (Sakarovitch, Jacques) See Lothaire, M., (84g:05002)
 (Schützenberger, Marcel-Paul) See Lothaire, M., (84g:05002)
 (Simon, Imre) See Lothaire, M., (84g:05002)
 Šulka, Robert The minimal right A -ideal of the free semigroup on a countable set. (Russian summary) (84b:20075)
 Trotter, P. G. Projective inverse semigroups. (84i:20068)
 Yamada, Miyuki (with Imaoka, Teruo) Some remarks on the free regular \ast -semigroup generated by a single element. (84f:20074)

20M07 Varieties of semigroups

- Adair, Celia L. Bands with an involution. 84c:20064
 Aleksandrov, R. A. (with Grindlinger, E. I.; Greendlinger, Martin) A free product of monoids that is imbedded in groups without torsion. (Russian) 84c:20063
 Clarke, G. T. Semigroup varieties with the amalgamation property. 84f:20064
 Greendlinger, Martin See Aleksandrov, R. A.; et al., 84c:20063
 Grindlinger, E. I. See Aleksandrov, R. A.; et al., 84c:20063
 Higgins, P. M. The determination of all varieties consisting of absolutely closed semigroups. 84b:20068
 The varieties of commutative semigroups for which epis are onto. 84g:20101
 Khan, N. M. Epimorphisms, dominions and varieties of semigroups. 84c:20065
 Kleiman, E. I. A pseudovariety generated by a finite semigroup. (Russian) 84g:20102
 Knyazev, O. V. Attainable classes of monoids. (Russian) 84c:20030
 Kupchik, G. E. (with Martynov, L. M.) Finite attainability in the class of bands. (Russian) 84c:20065
 Martynov, L. M. See Kupchik, G. E., 84c:20065
 Martynova, T. A. Groupoid of varieties of semigroups with zero. (Russian) 84i:20031
 The groupoid of 0-reduced varieties of semigroups. II. 84b:20061
 Petrich, Mario (with Reilly, Norman R.) Near varieties of idempotent generated completely simple semigroups. 84c:20061
 Rasin, V. V. Varieties of orthodox Clifford semigroups. (Russian) 84c:20062
 Reilly, Norman R. The breadth of the lattice of those varieties of inverse semigroups which contain the variety of groups. 84b:20062
 See also Petrich, Mario, 84c:20061
 Rozenblat, B. V. Positive theories of some varieties of semigroups. (Russian) 84c:20032
 Sapir, M. V. Implicative characteristic of prevarieties of semigroups and rings. (Russian) 84i:20063
 Sukhanov, E. V. Almost-linear varieties of semigroups. (Russian) 84c:20066
 Thérien, D. Sur les monoides dont tous les groupes sont résolubles. (English summary) [Monoids all of whose groups are solvable] 84b:20069

secondary classifications:

- Crvenković, Siniša See Čupona, Gorgi; et al., (84b:08001)
 Čupona, Gorgi (with Crvenković, Siniša; Vojvodić, Gradimir) Subalgebras of commutative semigroups satisfying the law $x^2 = x^{n+m}$. (Serbo-Croatian summary) (84b:08001)
 Goralčik, P. (with Koubek, V.) There are too many subdirectly irreducible bands. (84b:08009)
 Koubek, V. See Goralčik, P., (84b:08009)
 Lysenko, F. F. Supervarieties of varieties consisting of 2-step nilpotent groups. (Russian) (84c:20043)
 McKenzie, Ralph N. The number of nonisomorphic models in quasivarieties of semigroups. (84f:08008)
 Petrich, Mario (with Reilly, Norman R.) Bands of groups with universal properties. (84i:20065)
 Reilly, Norman R. See Petrich, Mario, (84i:20065)
 Repnitskii, V. R. Varieties of l -semigroups. (Russian) (84d:06021)
 Cross and almost Cross varieties of commutative dld-semigroups. (Russian) (84c:06018)
 Vojvodić, Gradimir See Čupona, Gorgi; et al., (84b:08001)
 Zimin, A. I. Blocking sets of terms. (Russian) (84d:20072)

20M10 General structure theory

- Alimpić, Branka P. (with Krgović, Dragica N.) Idempotent pure congruences on Clifford semigroups. 84c:20066
 Belyaev, V. Ya. On algebraic closure and amalgamation of semigroups. 84d:20059
 Blagojević, Dragan More on anti-inverse semigroups. 84j:20056
 Blyth, T. S. (with McFadden, R.) Regular semigroups with a multiplicative inverse transversal. 84d:20060
 (with McFadden, R.) Unit orthodox semigroups. 84c:20067
 (with Gomes, Gracinda M. S.) On the compatibility of the natural order on a regular semigroup. 84b:20063
 Bogdanović, Stojan Sur les demi-groupes dans lesquels tous les sous-demi-groupes propres sont idempotents. II. [Semigroups in which all proper subsemigroups are idempotent. II] 84b:20070
 Semigroups in which some bi-ideal is a group. (Serbo-Croatian summary) 84c:20069
 Some characterizations of bands of power joined semigroups. 84c:20068
 Semigroups in which every proper left ideal is a left group. 84c:20033
 Bands of power joined semigroups. 84f:20065
 See also Protic, P., 84c:20073
 Boshach, Bruno Zur Theorie der vollständigen Teilbarkeitshalbgruppen. (English summary) [On the theory of complete divisibility semigroups] 84b:20064
 Teilbarkeitshalbgruppen mit vollständiger Erweiterung. (English summary) [Divisibility semigroups with complete extensions] 84m:20064

- Chase, Karen Maximal groups in sandwich semigroups of binary relations. **84a:20064**
- Cherubini, Alessandra (with Varisco, A.) Quasi-Hamiltonian semigroups. **84f:20066**
- Clement, A. (with Pastijn, Francis) Inverse semigroups with idempotents dually well-ordered. **84m:20065**
- Crvenković, Siniša See Milić, Svetozar Dj., **84b:20073**
- Dixit, V. N. (with Raza, S. H.) A note on Baer* regular semigroup. **84b:20071**
- Fleischer, Isidore Equivalence of x -systems and m -lattices. (See **84j:06001**)
- Gomes, Gracinda M. S. See Blyth, T. S., **84b:20063**
- Goralčik, P. (with Koubek, V.; Ryšlinková, J.) On syntacticity of finite regular semigroups. **84b:20065**
- See also Münzová-Demlová, Marie; et al., **84c:20070**
- Gould, Matthew (with Richardson, Raymond E.) Translational hulls of polynomially related semigroups. **84c:20067**
- Henriksen, Melvin Gauge functions and the divisor chain condition. **84c:20034**
- Imaoka, Teruo Some remarks on regular \ast -semigroups. IV. (See **84a:20003**)
- See also Yamada, Miyuki, **84f:20074**
- Johnson, C. S., Jr. (with Morris, F. R.) Semigroups that tree order sets on which they act. **84c:20068**
- Jones, Peter R. A graphical representation for the free product of E -unitary inverse semigroups. **84c:20069**
- The least inverse and orthodox congruences on a completely regular semigroup. **84m:20066**
- Jürgensen, Helmut (with Szép, J.) Zerlegungen von Halbgruppen in Unterhalbgruppen. [Decomposition of semigroups into subsemigroups] **84m:20067**
- Kehayopulu, Niovi Generalized ideal elements in po-semigroups. **84b:20072**
- Kil'p, Mati (with Knauer, Ulrich; Mikhalev, A. V.; Skornyakov, L. A.) \star Acts over monoids. **84f:20067**
- Knauer, Ulrich See Kil'p, Mati; et al., **84f:20067**
- Kobayashi, Yuji On the structures of exponent semigroups. **84d:20061**
- Koch, Robert J. Comparison of congruences on regular semigroups. **84f:20068**
- Koubek, V. See Münzová-Demlová, Marie; et al., **84c:20070** and Goralčik, P.; et al., **84c:20065**
- Krgović, Dragica N. On 0-minimal (0,2)-bi-ideals of semigroups. **84m:20068**
- See also Alimpc, Branka P., **84c:20066**
- Kunze, M. Zappa products. **84j:20057**
- Kuroki, Nobuaki T^* -pure Archimedean semigroups. **84f:20069**
- Madison, B. L. (with Mukherjee, T. K.; Sen, M. K.) Periodic properties of groupbound semigroups. II. **84f:20070**
- Marques, M. Paula O. A congruence-free semigroup associated with an infinite cardinal number. **84g:20103**
- McAlister, D. B. Regular Rees matrix semigroups and regular Dubreil-Jacotin semigroups. **84d:20062**
- McFadden, R. See Blyth, T. S., **84c:20067** and **84d:20060**
- McMorris, F. R. See Johnson, C. S., Jr., **84c:20068**
- Meakin, John The free local semilattice on a set. **84c:20070**
- Megyesi, L. (with Pollák, G.) On simple principal ideal semigroups. **84c:20035**
- Mikhalev, A. V. See Kil'p, Mati; et al., **84f:20067**
- Milić, Svetozar Dj. On some classes of semigroups. **84g:20104**
- (with Pavlović, V.) Semigroups in which some ideal is a completely simple semigroup. **84c:20071**
- (with Crvenković, Siniša) Proper subsemigroups of a semigroup. **84b:20073**
- (with Pavlović, V.) On a class of semigroups and its characterisation. **84b:20074**
- Miller, Donald W. Semigroups containing ubiquitous elements. **84c:20072**
- Mills, Janet E. Matrices of bisimple regular semigroups. **84d:20063**
- Mitsch, Heinz Congruences on N -simple inverse semigroups. **84c:20071**
- Semigroups and their lattice of congruences. **84d:20064**
- Muchnik, An. A. A theorem of Schützenberger concerning monoids without nontrivial subgroups. (Russian) (See **84d:03005**)
- Mukherjee, T. K. See Madison, B. L.; et al., **84f:20070**
- Münzová-Demlová, Marie (with Goralčik, P.; Koubek, V.) Inner injective transextensions of semigroups. **84c:20070**
- Nagy, Attila The least separative congruence on a weakly commutative semigroup. **84c:20073**
- Semigroups whose proper two-sided ideals are power joined. **84c:20074**
- Nambooripad, K. S. S. Pseudosemilattices and biordered sets. II. Pseudo-inverse semigroups. **84f:20071a**
- Pseudosemilattices and biordered sets. III. Regular locally testable semigroups. **84f:20071b**
- Nico, William R. On the regularity of semidirect products. **84i:20064**
- Pastijn, Francis The structure of pseudo-inverse semigroups. **84c:20072**
- See also Clement, A., **84m:20065**
- Pavlović, V. See Milić, Svetozar Dj., **84b:20074** and **84c:20071**
- Petrich, Mario (with Reilly, Norman R.) The kernel-trace approach to congruences on completely simple semigroups. **84g:20105**
- (with Reilly, Norman R.) Bands of groups with universal properties. **84i:20065**
- (with Reilly, Norman R.) The normal hull of a completely simple semigroup. **84g:20106**
- Pollák, G. See Megyesi, L., **84c:20035**
- Protić, P. (with Bogdanović, Stojan) On a class of semigroups. **84c:20073**
- Putcha, Mohan S. The group of units of a connected algebraic monoid. **84d:20065**
- Connected algebraic monoids. **84d:20066**
- On the automorphism group of a linear algebraic monoid. **84d:20067**
- Matrix semigroups. **84m:20069**
- Raza, S. H. See Dixit, V. N., **84b:20071**
- Reilly, Norman R. See Petrich, Mario, **84g:20105**; **84g:20106** and **84i:20065**
- Richardson, Raymond E. See Gould, Matthew, **84c:20067**
- Ryšlinková, J. See Goralčik, P.; et al., **84b:20065**
- Seitz, Károly On the ideals of partial semigroups. **84i:20066**
- Sen, M. K. See Madison, B. L.; et al., **84f:20070**
- Shimokawa, Shigeru Congruences on L -unipotent semigroups. (See **84a:20003**)
- Shoji, Kunitaka On right self-injective regular semigroups. II. **84f:20072**
- Skornyakov, L. A. Stochastic acts and comonoids. **84f:20073**
- See also Kil'p, Mati; et al., **84f:20067**
- Skula, Ladislav On δ -semigroups. **84c:20074**
- Szabó, László On bisimple monoids. **84j:20058**
- Szendrei, Mária B. Completely regular semigroups whose idempotent reducts form a chain. **84c:20067**
- Strong subband-parcelling extensions of orthodox semigroups. **84c:20075**
- Correction and supplement to: "On a pullback diagram for orthodox semigroups" [Semigroup Forum **20** (1980), no. 1, 1-10; MR **81m:20085**]. **84d:20068**
- Szép, J. See Jürgensen, Helmut, **84m:20067**
- Tamura, Takayuki On the semigroups of subsets of semigroups. (See **84a:20003**)
- Trotter, P. G. Projective inverse semigroups. **84i:20068**
- Trpenovski, B. Semigroups with n -properties. **84d:20069**
- Trueman, D. C. Direct products of finite monogenic inverse semigroups. **84c:20075**
- Varisco, A. See Cherubini, Alessandra, **84f:20066**
- Yamada, Miyuki On the structure of fundamental regular \ast -semigroups. **84m:20070**
- On finitely generated free \ast -bands. (See **84a:20003**)
- Note on \ast -regular semigroups. **84f:20075**
- (with Imaoka, Teruo) Some remarks on the free regular \ast -semigroup generated by a single element. **84f:20074**
- Yoshida, Reikichi On E -disjunctive inverse semigroups. (See **84a:20003**)
- Bibliography:**
- Acts over monoids See Kil'p, Mati; et al., **84f:20067**
- secondary classifications:
- Adair, Celia L. Bands with an involution. (**84c:20064**)
- Gould, Matthew Rectangular bands in universal algebra: two applications. (**84f:08004**)
- Grigoryan, A. G. Morita contexts and endomorphism monoids of acts over monoids. (Russian. English and Estonian summaries) (**84j:20061**)
- Kil'p, Mati Classification of monoids by the properties of their Rees factor-polygons. (Russian. English and Estonian summaries) (**84j:20062**)
- Krapež, A. Some nonaxiomatizable classes of semigroups. (**84j:03073**)
- Lex, W. Simple acts. (**84m:08001**)
- McAlister, D. B. Rees matrix covers for locally inverse semigroups. (**84m:20073**)
- Pastijn, Francis (with Romanowska, Anna) Idempotent distributive semirings. I. (**84f:16043a**)
- Idempotent distributive semirings. II. (**84f:16043b**)
- Pedersen, Franklin D. (with Sizer, Walter S.) Relating certain semigroup homomorphisms with group retractions. (**84b:06018**)
- Raman, Vinjamuri See Ramana Murty, P. V., (**84d:06008**)
- Ramana Murty, P. V. (with Raman, Vinjamuri) Triple construction of semilattices with 1 admitting neutral p -closure operators. (Russian summary) (**84d:06008**)
- Romanowska, Anna See Pastijn, Francis, (**84f:16043a**)
- Saitō, Tōru Correction of my paper: "The orderability of idempotent semigroups" [Semigroup Forum **7** (1974), no. 1-4, 264-285; MR **52** \neq 222]. (**84d:06022**)
- The orderability of regular semigroups. (**84g:06025**)
- Sizer, Walter S. See Pedersen, Franklin D., (**84b:06018**)
- Yen, Ching Tē On the commutativity of rings and cancellative semigroups. (**84i:16039**)
- Zhitomirskii, G. I. Extension of universal algebras. (Russian) (**84i:08003**)

20M11 Radical theory

- Kmet, František A note on equalities of radicals in a semigroup. (Russian summary) **84c:20069**
- Puczyłowski, Edmund R. On radicals of semigroup rings. **84i:20070**
- secondary classifications:
- Grigoryan, A. G. Morita contexts and endomorphism monoids of acts over monoids. (Russian. English and Estonian summaries) (**84j:20061**)
- Hung, C. Y. (with Shum, Kar Ping) Topological radicals in semigroups. (**84a:22006**)
- Shum, Kar Ping Topological semiprimary semigroups. (**84a:22007**)
- See also Hung, C. Y., (**84a:22006**)

20M12 Ideal theory

- Al-Lahham, Anwar T. On universally maximal and minimal ideals. (Arabic summary) **84d:20070**
- Chatterjea, S. K. Ideal-theoretic characterizations of regular duo semigroups and rings. **84c:20036**
- Dutta, T. K. Relative ideals in groups. **84a:20065**
- Erturk, T. "Relative ideals in groups" [Kyungpook Math. J. **22** (1982), no. 2, 239-243; MR **84a:20065**]. **84c:20071**
- Lajos, Sándor Notes on regular semigroups. VIII. **84j:20059**
- Characterizations of semigroups by principal (m, n) -ideals. **84g:20107**
- Munn, W. D. On the singular ideals of inverse semigroup algebras. **84g:20108**
- Murata, Kentaro A divisor theory and integrally closed orders. **84m:20071**
- Sülka, Robert The minimal right A -ideal of the free semigroup on a countable set. (Russian summary) **84b:20075**
- Tilidetzke, Robert Pseudo bi-ideals of degree p . **84f:20076**
- secondary classifications:
- Gluskin, I. M. Ideals of commutative semigroups. (Russian) (**84b:20067**)
- Krgović, Dragica N. On 0-minimal (0,2)-bi-ideals of semigroups. (**84m:20068**)
- Nagy, Attila Semigroups whose proper two-sided ideals are power joined. (**84c:20074**)
- Seitz, Károly On the ideals of partial semigroups. (**84i:20066**)

20M14 Commutative semigroups

- Bogdanović, Stojan** Weakly commutative semigroups. (Serbo-Croatian. English summary) **84a:20066**
- Borisov, A. A.** Lattice determinacy of a class of commutative semigroups without idempotents. (Russian) **84h:20066**
- Eberhart, Carl** On abelian semigroups whose congruences form a simple lattice. **84f:20077**
- Gluskin, L. M.** Correction: "Extensions of commutative semigroups" [Izv. Vyssh. Uchebn. Zaved. Matematika 1979, no. 11, 3–12; MR 81i:20081]. (Russian) **84b:20076**
- Ideals of commutative semigroups.** (Russian) **84b:20067**
- Hsieh, Chih Hsiung** A note on a saturated commutative semigroup. **84j:20060**
- Kmet, František** Quasicommutative weakly primary semigroups. (Russian summary) **84c:20076**
- Krause, Ulrich** Eindeutige Faktorisierung ohne ideale Elemente. [Unique factorization without ideal elements] **84f:20078**
- Sasaki, Morio** Supplement to the paper: "Commutative semigroups obtained by an abelian group and a generalized δ -function" [Annual Rep. Fac. Ed. Iwate Univ. 38 (1978), no. 3, 1–6; MR 80d:20056]. **84a:20067**
- Vinárek, Jiří** Representations of commutative semigroups by products of metric 0-dimensional spaces. **84m:20072**

secondary classifications:

- Brown, Dennis R.** (with Stepp, James W.) Inner points in certain holoidal semigroups. (84m:22002)
- Higgins, P. M.** The varieties of commutative semigroups for which epis are onto. (84g:20101)
- Khan, N. M.** Epimorphisms, dominions and varieties of semigroups. (84c:20065)
- Skula, Ladislav** On δ -semigroups. (84c:20074)
- Stepp, James W.** See Brown, Dennis R., (84m:22002)
- Trnková, Věra** Cardinal multiplication of relational structures. (84f:08001)

20M15 Mappings of semigroups

- McAlister, D. B.** Rees matrix covers for locally inverse semigroups. **84m:20073**

secondary classifications:

- Sullivan, R. P.** Automorphisms of injective transformation semigroups. (84c:20080)

20M20 Semigroups of transformations, etc. [See also 47D05, 47H20, 54H15.]

- Baird, Bridget B.** The group of units as a maximal inverse subsemigroup. **84a:20068**
- Maximal inverse subsemigroups of $S(X)$.** **84g:20109**
- Dawlings, R. J. H.** On idempotent affine mappings. **84d:20071**
- Grigoryan, A. G.** Morita contexts and endomorphism monoids of acts over monoids. (Russian. English and Estonian summaries) **84j:20061**
- Lipinska, Jolanta** A generalized inverse semigroup and its properties. (Polish. English and Russian summaries) **84c:20076a**
- Examples of generalized inverse semigroups.** (Polish. English and Russian summaries) **84c:20076b**
- The connection between a generalized inverse semigroup and other algebraic systems with a binary partial operation.** (Polish. English and Russian summaries) **84c:20076c**
- Algebraization of the pseudogroup of Schouten and Haantjes.** (Polish. English and Russian summaries) **84c:20076d**
- Lyapun, E. S.** Abstract characterization of a class of partial groupoids of transformations. (Russian) **84b:20077**
- Magill, K. D., Jr.** Semigroups with only finitely many regular \mathcal{Q} -classes. **84c:20077**
- Semigroups in which \mathcal{Q} and \mathcal{J} coincide for regular elements.** **84c:20078**
- Margolis, Stuart W.** (with Tilson, Bret) An upper bound for the complexity of transformation semigroups. **84b:20068**
- Nakajima, Sizuo** Transitive subsemigroups of wreath products of semigroups by transformation semigroups. (See 84a:20003)
- Pastijn, Francis** L'enveloppe conjuguée d'un demi-groupe inverse à métacentre idempotent. [The conjugate hull of an inverse semigroup with idempotent metacenter] **84b:20079**
- Essential normal and conjugate extensions of inverse semigroups.** **84b:20078**
- Shneperman, L. B.** The Schur theorem for periodic semigroups of linear relations. **84c:20079**
- Sullivan, R. P.** Automorphisms of injective transformation semigroups. **84c:20080**
- Tilson, Bret** See Margolis, Stuart W., **84b:20068**
- Trueman, D. C.** Fundamental preorders and partial orders on completely [0-] simple semigroups. **84b:20080**

secondary classifications:

- Bartlett, Warren K.** See Pattison, Philippa E., (84j:08005a)
- Gordecov, N. L.** Stanley's conjecture and classification of finite groups whose algebra of invariants is a complete intersection. (Russian) (84m:14058)
- Kim, Jin Bai** Fuzzy rational choice functions. (84g:90013)
- Margolis, Stuart W.** On the syntactic transformation semigroup of a language generated by a finite biprefix code. (84b:20082)
- Milić, Svetozar Dj.** (with Pavlović, V.) Semigroups in which some ideal is a completely simple semigroup. (84c:20071)
- Molchanov, V. A.** Semigroups of mappings on graphs. (84j:05100)
- Pattison, Philippa E.** (with Bartlett, Warren K.) A factorization procedure for finite algebras. (84j:08005a)
- The analysis of semigroups of multirelational systems.** (84j:08005b)

- Pavlović, V.** See Milić, Svetozar Dj., (84c:20071)
- Putcha, Mohan S.** A semigroup approach to linear algebraic groups. (84j:20045)
- Skryago, A. M.** A property of matrices. (Russian. English summary) (84d:15019)
- Woś, Janusz** Some remarks on \mathcal{S} -semigroups. (84g:20112)

20M25 Semigroup rings, multiplicative semigroups of rings

- Kozhukhov, I. B.** Semigroup rings of free left ideals. (Russian) **84a:20069**
- Munn, W. D.** Semiprimitivity of inverse semigroup algebras. **84c:20077a**
- The algebra of a combinatorial inverse semigroup.** **84c:20077b**
- On commutative semigroup algebras.** **84g:20110**
- Ponizovskii, I. S.** An example of a semiprimitive semigroup algebra. **84g:20111**
- Shoji, Kunitaka** Ring whose multiplicative semigroups are right self-injective. (See 84a:20003)

secondary classifications:

- Cheng, Charles Ching-an** (with Wong, Roman W.) Hereditary monoid rings. (84j:16013)
- Czech, Jerry** Remarks on r -rings and r -groupoids. (84f:20061)
- Gilmer, Robert** (with Spiegel, Eugene) The coefficient field of a semigroup algebra. (84m:16038)
- Guralnick, Robert M.** (with Lanski, Charles) Pseudosimilarity and cancellation of modules. (84a:16036)
- Kolotov, A. T.** Aperiodic sequences and functions of the growth of algebras. (Russian) (84a:16013)
- Lanski, Charles** See Guralnick, Robert M., (84a:16036)
- Matsuda, Ryūki** Notes on Noetherian semigroup rings. (84d:13012)
- Puczyłowski, Edmund R.** On radicals of semigroup rings. (84c:20070)
- Romanowska, Anna** Idempotent distributive semirings with a semilattice reduct. (84f:16045a)
- Free idempotent distributive semirings with a semilattice reduct.** (84f:16045b)
- Spiegel, Eugene** See Gilmer, Robert, (84m:16038)
- Sullivan, R. P.** Semigroup endomorphisms of rings. (84a:16039)
- Wong, Roman W.** See Cheng, Charles Ching-an, (84j:16013)

20M30 Representation of semigroups

- Kaljalaid, U.** The triangular product of linear representations of semigroups. (Russian. English and Estonian summaries) **84c:20072**
- Skornyakov, L. A.** A general view of representations of monoids. (Russian) **84c:20078**
- Woś, Janusz** Some remarks on \mathcal{S} -semigroups. **84g:20112**

secondary classifications:

- Nguyen Van Vinh** Representation of semigroups by products of topological spaces with prescribed cardinal functions. (84f:54041)
- Pastijn, Francis** L'enveloppe conjuguée d'un demi-groupe inverse à métacentre idempotent. [The conjugate hull of an inverse semigroup with idempotent metacenter] (84b:20079)
- Essential normal and conjugate extensions of inverse semigroups.** (84b:20078)
- Trnková, Věra** Representations of commutative semigroups by products of topological spaces. (84c:54009)
- Cardinal multiplication of relational structures.** (84f:08001)
- Yamada, Miyuki** On the structure of fundamental regular \ast -semigroups. (84m:20070)

20M35 Semigroups in automata theory, linguistics, etc. [See also 03D05, 68D30, 68Fxx.]

- Crochemore, Max** Sharp characterizations of squarefree morphisms. **84a:20070**
- Culik, Karel, II** (with Harju, Tero) Dominoes over a free monoid. **84c:20081**
- Đo Long Văn** Sous-monoides et codes avec des mots infinis. [Submonoids and codes with infinite words] **84c:20079**
- Harju, Tero** See Culik, Karel, II, **84c:20081**
- Head, Tom** Expanded subalphabets in the theories of languages and semigroups. **84c:20082**
- Hotz, Günter** k -dimensionale syntaktische Monoide. (English and Russian summaries) [k -dimensional syntactic monoids] **84b:20081**
- Margolis, Stuart W.** On the syntactic transformation semigroup of a language generated by a finite biprefix code. **84b:20082**
- Meinel, Christoph** On the structure of endomorphism monoids and automorphism groups of group labyrinths in the category code. (German and Russian summaries) **84g:20113**
- Séebold, Patrice** Sur les morphismes qui engendrent des mots infinis ayant des facteurs prescrits. (English summary) [Morphisms which generate infinite words with prescribed factors] (See 84b:68003)
- Spehner, J.-C.** Sur la classification syntaxique. (English summary) [Syntactic classification] **84f:20079**
- Zimin, A. I.** Blocking sets of terms. (Russian) **84d:20072**

secondary classifications:

- Albert, Jürgen** (with Culik, Karel, II; Karhumäki, Juhani) Test sets for context free languages and algebraic systems of equations over a free monoid. (84j:68046)
- Anisimov, A. V.** Finite-automaton semigroup mappings. (84f:68092)
- Breazu, Valeriu** (with Stănişă, Octavian) A generalization of Kleene's theorem and nondeterministic structured programming. (84c:68077)
- Căzănescu, Virgil Emil** Algebraic grammars over a monoid. (Romanian. French summary) (84b:68095a)
- Normal forms of algebraic grammars over a monoid.** (Romanian. French summary) (84b:68095b)
- ★Introducere în teoria limbajelor formale.** (Romanian) [Introduction to the theory of context-free languages] (84f:68002)

- Choffrut, Christian** (with Culik, Karel, II) Properties of finite and pushdown transducers. (84f:68042)
- Chottin, Laurent** (with Cori, Robert) Une preuve combinatoire de la rationalité d'une série génératrice associée aux arbres. (English summary) [A combinatorial proof of the rationality of a generating series associated with trees] (84c:05006)
- Chu, Ta Nien** (with Shih, Hui Jan) Some properties of quasidisjunctive languages on a free monoid. (84c:68082)
- Cori, Robert** See Chottin, Laurent, (84c:05006)
- Culik, Karel, II** See Choffrut, Christian, (84c:68042) and Albert, Jürgen; et al., (84j:68046)
- De Felice, Clelia** On the triangle conjecture. (84b:94025)
- Dezani-Ciancaglini, Mariangola** (with Ermine, Françoise) Maximal monoids of normal form. (84b:03028)
- Ecker, A.** Finite semigroups and the RSA-cryptosystem. (84c:94019)
- Ermine, Françoise** See Dezani-Ciancaglini, Mariangola, (84b:03028)
- Frougny, Christiane** (with Sakarovitch, Jacques; Valkema, Erich) On the Hotz group of a context-free grammar. (84d:68079)
- Goralčík, P.** (with Koubek, V.; Ryšlíková, J.) On syntacticity of finite regular semigroups. (84c:20065)
- Huwig, H.** Ein Modell des $P=NP$ -Problems mit einer positiven Lösung. (English summary) [A model of the $P=NP$ -problem with a positive solution] (84f:03037)
- Jürgensen, Helmut** Bemerkungen zu den Halbgruppen von Mealy-Automaten. [Remarks on the semigroups of Mealy automata] (84b:68063)
- Karhumäki, Juhani** See Albert, Jürgen; et al., (84j:68046)
- Koubek, V.** See Goralčík, P.; et al., (84c:20065)
- Kunze, M.** Zappa products. (84j:20057)
- Margolis, Stuart W.** (with Tilson, Bret) An upper bound for the complexity of transformation semigroups. (84b:20068)
- Nivat, Maurice** Infinitary relations. (84c:68027)
- Pallo, J. M.** Modèles associatif-relatif et commutatif cohérents appliqués aux langages réguliers. (English summary) [Coherent associative-relative and commutative models associated with regular languages] (84b:68062)
- Pansiot, Jean-Jacques** Mots infinis de Fibonacci et morphismes itérés. (English summary) [Infinite Fibonacci words and iterated morphisms] (84i:20059)
- Paradis, André D.** (with Shih, Hui Jan; Thierrin, Gabriel) Quasidisjunctive languages. (84f:68062)
- Peák, I.** The characteristic semigroups of Mealy-automata. (84c:68048)
- Peranić, I. N.** Identities of some biautomata. (Russian) (84b:68066)
- Plotkin, E. B.** Interlacing and decomposition of linear automata. (Russian) (84c:68052)
- Puskás, Cs.** On the semigroups of Mealy-automata. (84b:68067)
- Ryšlíková, J.** See Goralčík, P.; et al., (84c:20065)
- Sakarovitch, Jacques** Description des monoides de type fini. (English, German and Russian summaries) [Description of monoids of finite type] (84c:20062)
- See also Frougny, Christiane; et al., (84d:68079)
- Semeniuk-Polkowska, Maria** Syntactic pseudoconfigurations based on Trybulec domination. (84c:68093)
- Shih, Hui Jan** See Chu, Ta Nien, (84c:68082) and Paradis, André D.; et al., (84f:68062)
- Spanier, Edwin H.** Automata theory for algebraists. (84c:68044)
- Stănişă, Octavian** See Breazu, Valeriu, (84c:68077)
- Stolov, E. L.** Semigroups of automata with a two-letter output alphabet. (Russian) (84c:68045)
- Thérien, D.** Sur les monoides dont tous les groupes sont résolubles. (English summary) [Monoids all of whose groups are solvable] (84b:20069)
- Thierrin, Gabriel** See Paradis, André D.; et al., (84f:68062)
- Tilson, Bret** See Margolis, Stuart W., (84b:20068)
- Tran Viet Trung** On the relative quasi-Moore-semigroup and relative Moore-semigroups. (84g:68045)
- Valkema, Erich** See Frougny, Christiane; et al., (84d:68079)
- Margolis, Stuart W.** See Dinitz, Jeffrey H., (84j:05019)
- Ovsyannikov, A. Ya.** Determinability by the lattice of subsemigroups of nonperiodic groups decomposable into a direct product. (Russian) (84b:20021)
- Rodríguez, Gaetano** Decomposition of a semiring in a semilattice of semirings. (Italian. English summary) (84c:16069)
- (Rota, Gian-Carlo)** See Kim, Ki Hang, (84c:15001)
- Skordev, D. G.** Imbedding of iterative Post algebras in semigroups. (Russian) (84i:06012)
- Weinert, Hanns Joachim** Zur Theorie der Halbfastkörper. [On the theory of seminear-fields] (84b:16025)
- Ziemian, Krystyna** Natural definition of entropy of semigroups. (84c:28020)

20Nxx Other generalizations of groups

20N05 Loops, quasigroups [See also 05Bxx.]

- Basarab, A. S.** (with Kiriya, L. L.) A class of G-loops. (Russian) 84f:20081
- Belousor, V. D.** A theorem on balanced identities. (Russian) 84m:20075
- (Belyavskaya, G. B.)** See Quasigroups and Latin squares, 84c:20083
- Bénéteau, Lucien** Quasigroupes distributifs provenant de certaines algèbres. (English summary) [Distributive quasigroups arising from certain algebras] 84f:20082
- L'irréductibilité centrale dans les boucles de Moufang commutatives et dans les systèmes triples de Hall. (English summary) [Central irreducibility in commutative Moufang loops and Hall triple systems] 84i:20074
- Bennett, F. E.** Self-orthogonal semisymmetric quasigroups. 84b:20069
- Cardoso, Jayme Machado** ★ Sobre quasigrupos abelianos à direita. (Portuguese) [Right abelian quasigroups] 84m:20076
- Chronowski, Antoni** On Schreier extension of loops. 84f:20083
- Drápal, Aleš** On quasigroups rich in associative triples. 84f:20084
- Gallina, Giordano** On a class of Moufang loops. 84c:20081
- Kiriya, L. L.** See Basarab, A. S., 84f:20081
- Krapež, A.** Functional equation of generalized associativity. 84b:20083
- Kucharz, Adam** On the determination of Hall polynomials. 84b:20070
- Kuznetsov, A. V.** (with Kuznetsov, E. A.) Two-generator doubly homogeneous quasigroups. (Russian) 84i:20075
- Kuznetsov, E. A.** See Kuznetsov, A. V., 84i:20075
- Libicher, Jaroslav** Grätzer algebras and 2-homogeneous quasigroups. (Czech summary) 84d:20074a
- A note on Belousov's classification of Grätzer algebras. (Czech. English summary) 84d:20074b
- Nishigori, Noboru** On skew products of groups. II. 84f:20085
- Onof, V. I.** Some properties of derivative operations of an S-loop and their corollaries. (Russian) 84i:20076
- See also Sandu, N. I., 84g:20114
- Pomaskina, L. A.** Idempotent quasigroups, defined on a multidimensional three-web. (Russian) 84d:20075
- Robinson, Karl H.** Generalized Bol loops of even order. 84c:20082
- Rumov, B. T.** Perpendicularly separable quasigroups. (Russian) 84c:20085
- Sandu, N. I.** (with Onof, V. I.) Locally finite distributive quasigroups and CH-quasigroups. (Russian) 84g:20114
- Sokolov, E. I.** Principal isotrophies of loops. (Russian) 84i:20037
- (Valutse, I. I.)** See Quasigroups and Latin squares, 84c:20083
- Valenc, Vladimir** Quadratic quasigroups. (Serbo-Croatian. English summary) (See 84a:20002)
- Zotov, A. K.** Generalized isotopy of quasigroups and loops. (Russian) 84m:20077
- Quasigroups and Latin squares** ★ Квазигруппы и латинские квадраты. (Russian) [Quasigroups and Latin squares] 84c:20083
- secondary classifications:
- Akivis, M. A.** (with Gerasimenko, S. A.) Some closure figures on manifolds with symmetry. (Russian) (84b:53017)
- Alimpić, Branka P.** On a class of n -ary quasigroups. (84a:20071)
- Barlotti, Adriano** Projective planes and 3-webs. (Italian) (84i:51005)
- (with Strambach, Karl) The geometry of binary systems. (84i:51005)
- Bektenov, A. S.** Configurations in spatial nets. (Russian) (84i:51035)
- Belyavskaya, G. B.** The spectrum of partial admissibility of finite quasigroups (Latin squares). (Russian) (84j:05024)
- Das, Phulendu** Topological operator-quasigroups. (84b:22006)
- Dénes, J.** On a problem of A. Kotzig. (84f:05046)
- Drápal, Aleš** (with Kepka, Tomáš) Group modifications of some partial groupoids. (84g:20098)
- Fraginito, Nicola** (with Zirilli, Francesco) On certain medial semisymmetric n -quasigroups and a class of solutions of the congruence $(-n)^x \equiv 1 \pmod{x}$. (Italian. English summary) (84b:20071)
- Gerasimenko, S. A.** See Akivis, M. A., (84b:53017)
- Heinrich, Katherine** Disjoint subquasigroups. (84b:05029)
- Hsu, D. Frank** ★ Cyclic neofields and combinatorial designs. (84g:05001)
- Kepka, Tomáš** See Drápal, Aleš, (84g:20098)
- Krapež, A.** Functional equations of generalized associativity, bisymmetry, transitivity and distributivity. (84d:39007)
- Lex, W.** Simple acts. (84m:08001)
- Mikheev, P. O.** See Sabinin, L. V., (84c:22007) and (84c:53027)
- O'Brien, G. L.** A generalized notion of quotient for finite abelian groups. (84j:20053)
- Sabinin, L. V.** (with Mikheev, P. O.) Analytic Bol loops. (Russian) (84c:22007)
- (with Mikheev, P. O.) A symmetric connection in the space of an analytic Moufang loop. (Russian) (84c:53027)
- Sathyabama, V.** The RC-functional equation on quasigroups and GD-groupoids. (84f:39006)
- Šiftar, Juraj** On affine planes over A_n^* -quasigroups (summary). (Serbo-Croatian summary) (See 84a:20002)

20M50 Connections with homological algebra and category theory

- Batbedat, A.** (with Reilly, Norman R.) Categories and binary semigroups. 84c:20080
- Kilp, Mati** Classification of monoids by the properties of their Rees factor-polygons. (Russian. English and Estonian summaries) 84j:20062
- Lausch, Hans** Coinduced modules for inverse semigroups. 84i:20073
- Loganathan, M.** Cohomology and extensions of regular semigroups. 84m:20074
- Novikov, B. V.** 0-cohomology of completely 0-simple semigroups. (Russian) 84c:20083
- Reilly, Norman R.** See Batbedat, A., 84c:20080
- Thron, Reinhard** Über das Zutreffen einer Eigenschaft einer Menge auf die Elemente der Potenzmenge. [On the validity of a property of a set for the elements of its power set] 84j:20063

20M99 None of the above, but in this section

- Putcha, Mohan S.** Green's relations on a connected algebraic monoid. 84c:20084
- Idempotent cross-sections of \mathcal{J} -classes. 84f:20080
- Winter, David J.** The Fitting and Jordan structure of affine semigroups. 84d:20073

secondary classifications:

- Behrens, Ernst August** ★ A semigroup theoretical approach to the noncommutative arithmetic. (84f:16007)
- Burešová, Libuše** Über Mengen von Derivationen. II. [On sets of derivations. II] (84a:18003)
- Dinitz, Jeffrey H.** (with Margolis, Stuart W.) Continuous maps on block designs. (84j:05019)
- Gabovich, Eugen** On spectral theory in discrete programming. (84c:90060)
- Kim, Ki Hang** ★ Boolean matrix theory and applications. (84a:15001)
- Länger, Helmut** A groupoid-theoretic approach to axiomatic quantum mechanics. (84c:81018)

Strambach, Karl See Barlotti, Adriano, (84c:51005)
Zirilli, Francesco See Fragnito, Nicola, (84h:20071)

20N07 Mappings of loops

20N10 Ternary systems (heaps, semiheaps, heapoids, etc.)

secondary classifications:

Nagamuni Reddy, L. See Sitaram, K., (84c:51004)

Sitaram, K. (with Nagamuni Reddy, L.) Linearity in a Hall planar ternary ring. (84c:51004)

20N15 n -ary systems

Alimpić, Branka P. On a class of n -ary quasigroups. 84a:20071

Celakoski, N. Compatible subassociates. 84b:20064

Dudek, Wiesław Aleksander (with Dudek, Wiesław Aleksander) On skew elements in n -groups. 84d:20076

Dudek, Wiesław Aleksander (with Michalski, Jacek) On a generalization of Hosszu theorem. 84f:20086

Autodistributive n -groups. 84j:20064

See also Dudek, Wiesław Aleksander, 84d:20086

Fragnito, Nicola (with Zirilli, Francesco) On certain medial semisymmetric n -quasigroups and a class of solutions of the congruence $(-n)^x \equiv 1 \pmod{x}$. (Italian. English summary) 84h:20071

Krčovski, Pano The maximal semilattice decomposition of an n -semigroup. 84b:20085

Länger, Helmut The independence of certain associative laws. 84d:20077

Michalski, Jacek Covering k -groups of n -groups. 84b:20086

See also Dudek, Wiesław Aleksander, 84d:20086

Rusakov, S. A. r -skew elements of type k in n -ary groups. (Russian. English summary) 84c:20084

Ursu, L. A. Derivative operations and pseudoautomorphisms of n -ary quasigroups. (Russian) 84m:20078

Zirilli, Francesco See Fragnito, Nicola, 84h:20071

secondary classifications:

Balci, Dervis ★ Zur Theorie der topologischen n -Gruppen. (German) [On the theory of topological n -groups] (84a:22008)

Chaffer, Robert A. A construction of orthogonal arrays and applications to embedding theorems. (84f:05025)

Čupona, Gorgi Extensions of algebraic structures. (Macedonian. English summary) (84g:08019)

Lee, Sin Min A construction of simple one-element extension of n -groupoids. (84g:08008)

Quackenbush, Robert W. Algebraic speculations about Steiner systems. (See 84d:05039)

Stojmenovski, K. Homomorphisms of nets. (84j:51008)

Trpenovski, B. Semigroups with n -properties. (84d:20069)

Žižović, Malisa R. Associative systems of topological n -quasigroups. (84i:22003)

Topological medial n -quasigroups. (84i:22004)

20N99 None of the above, but in this section

Bonansinga, Pia Weakly quasicanonical hypergroups. (Italian. English summary) 84f:20087

Corsini, Piergiulio Recent results in the theory of hypergroups. (Italian. English summary) 84i:20077

Cotti Ferrero, Celestina (with Rinaldi, Maria Federica) On Ω -groups with nilpotent proper quotients. (Italian. English summary) 84f:20089

De Maria, Francesco Selection groups of hypergroups. 84a:20072

De Salvo, Mario (with Freni, Domenico) Complete cyclic hypergroups. (Italian. English summary) 84f:20088a

(with Freni, Domenico) Cyclic semihypergroups and hypergroups. (Italian. English summary) 84a:20073

Complete finite hypergroups. (Italian. English summary) 84i:20078

Dudek, Józef (with Glazek, K.) On commutative groupoids with semilattice operations. 84h:20072

Freni, Domenico Cyclic hypergroups and torsion in hypergroups. (Italian. English summary) 84f:20088b

See also De Salvo, Mario, 84a:20073 and 84f:20088a

Glazek, K. See Dudek, Józef, 84h:20072

Joyce, David Simple quandles. 84d:20078

Mushtaq, Qaiser (with Yusuf, S. M.) On LA-semigroups. 84c:20086

Qi, Zhen Kai See Wu, Cong Xin, 84a:20074

Rinaldi, Maria Federica See Cotti Ferrero, Celestina, 84f:20089

Romeo, Grazia Direct limit of associativity semihypergroups and hypergroups. (Italian) 84m:20079

Sureau, Yves Normalité et théorème de Jordan-Hölder en théorie des hypergroupes opérant transitivement sur un ensemble. [Normality and Jordan-Hölder theorem in the theory of hypergroups acting transitively on a set] 84m:20080

Wu, Cong Xin (with Qi, Zhen Kai) Transfer theorems for fuzzy groups. (Chinese. English summary) 84a:20074

Yusuf, S. M. See Mushtaq, Qaiser, 84c:20086

secondary classifications:

Burian, Kvetoslav Nets and binary systems. (Czech. English summary) (84d:51004)

Gardner, B. J. Radical properties defined by the absence of free subobjects. (84d:16047)

Hauptmann, Wolfgang Gruppenähnliche Strukturen. [Grouplike structures] (84b:20002)

Lipińska, Jolanta The connection between a generalized inverse semigroup and other algebraic systems with a binary partial operation. (Polish. English and Russian summaries) (84c:20076c)

Algebraization of the pseudogroup of Schouten and Haantjes. (Polish. English and Russian summaries) (84c:20076d)

Lypin, E. S. Abstract characterization of a class of partial groupoids of transformations. (Russian) (84b:20077)

20P05 Probability methods in group theory

Bhattarai, H. N. (with Fernandez, J. W.) Joins of double coset spaces. 84d:20079

Fernandez, J. W. See Bhattarai, H. N., 84d:20079

Pálly, P. P. (with Szalay, M.) The distribution of the character degrees of the symmetric p -groups. 84h:20073

Szalay, M. See Pálly, P. P., 84h:20073

secondary classifications:

Lifschitz, Vladimir (with Pittel, B. G.) The number of increasing subsequences of the random permutation. (84c:05012)

Pittel, B. G. See Lifschitz, Vladimir, (84c:05012)

22-XX TOPOLOGICAL GROUPS, LIE GROUPS (For transformation groups, see 54H15, 57Sxx, 58-XX. For abstract harmonic analysis, see 43-XX.)

22-01 Elementary exposition, textbooks

Bourbaki, Nicolas ★ Éléments de mathématique: groupes et algèbres de Lie. (French) [Elements of mathematics: Lie groups and Lie algebras] 84i:22001

Guichardet, Alain Introduction to Lie groups and their representations. 84g:22001

Kržižanič, France ★ Linearna analiza na grupah. (Slovenian) [Linear analysis of groups] 84c:22001

secondary classifications:

Breitenecker, Manfred (with Grüm, Hans-Richard) Intertwiners and their applications. (German summary) (84f:81033)

Cohen, Arjeh M. See Koornwinder, Tom H.; et al., (84h:22035)

Grüm, Hans-Richard See Breitenecker, Manfred, (84f:81033)

Helminck, A. G. See Koornwinder, Tom H.; et al., (84h:22035)

Hoogenboom, B. See Koornwinder, Tom H.; et al., (84h:22035)

Koornwinder, Tom H. (with Hoogenboom, B.; Cohen, Arjeh M.; de Vries, Jan; Helminck, A. G.) ★ The structure of real semisimple Lie groups. (84h:22035)

Robert, Alain Michel ★ Introduction to the representation theory of compact and locally compact groups. (84h:22012)

Sherishin, Anthony Connors ★ Introduction to topological semigroups. (84j:22003)

de Vries, Jan See Koornwinder, Tom H.; et al., (84h:22035)

Warner, Frank W. ★ Foundations of differentiable manifolds and Lie groups. (84c:58001)

Zassenhaus, Hans J. ★ Lie groups, Lie algebras and representation theory. (84h:17001)

22-02 Advanced exposition (research surveys, monographs, etc.)

Alekseevskii, D. V. Lie groups. (Russian) 84c:22002

Blattner, Robert J. General background. (See 84c:22001)

Boseck, Helmut (with Czichowski, Günter; Rudolph, Klaus-Peter) ★ Analysis on topological groups—general Lie theory. 84a:22001

Carruth, James Harvey (with Hildebrandt, John A.; Koch, Robert J.) ★ The theory of topological semigroups. 84g:22002

Czichowski, Günter See Boseck, Helmut; et al., 84a:22001

Hildebrandt, John A. See Carruth, James Harvey; et al., 84g:22002

Koch, Robert J. See Carruth, James Harvey; et al., 84g:22002

Mukhin, Yu. N. Topological groups. (Russian) 84c:22001

Rudolph, Klaus-Peter See Boseck, Helmut; et al., 84a:22001

secondary classifications:

Erven, Joachim (with Falkowski, Bernd-Jürgen) ★ Low order cohomology and applications. (84h:22023)

Falkowski, Bernd-Jürgen See Erven, Joachim, (84h:22023)

French, W. P. (with Luukkainen, Jouni; Price, John F.) The Tannaka-Krein duality principle. (84f:22011)

Humphreys, James E. Arithmetic groups. (84m:22018)

Hurt, Norman E. ★ Geometric quantization in action. (84f:58053)

Luukkainen, Jouni See French, W. P.; et al., (84f:22011)

Price, John F. See French, W. P.; et al., (84f:22011)

22-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Dirac, Paul Adrien Maurice Pretty mathematics. (84j:81005)

22-04 Explicit machine computation and programs (not the theory of computation or programming)

Baclawski, Kenneth Recursive algorithms for unitary and symplectic group representations. 84g:22003

secondary classifications:

- Eichten, Estia (with Kang, Kyungsik; Koh, In Gyu) Anomaly-free complex representations in $SU(N)$. (84m:22032)
 Kang, Kyungsik See Eichten, Estia; et al., (84m:22032)
 Koh, In Gyu See Eichten, Estia; et al., (84m:22032)

22-06 Proceedings, conferences, etc.

- (Cahen, Michel) See Harmonic analysis and representations of semisimple Lie groups. 84k:22001
 (De Wilde, Marc) See Harmonic analysis and representations of semisimple Lie groups. 84k:22001
 (Gamkrelidze, R. V.) See Algebra. Topology. Geometry. 84a:22002
 (Herb, Rebecca A.) See Lie group representations. 84k:22002
 (Lipsman, Ronald L.) See Lie group representations. 84k:22002
 (Rosenberg, Jonathan) See Lie group representations. 84k:22002
 (Wolf, Joseph A.) See Harmonic analysis and representations of semisimple Lie groups. 84k:22001
 Algebra. Topology. Geometry ★Алгебра. Топология. Геометрия. Том 20. (Russian) [Algebra. Topology. Geometry. Vol. 20] 84a:22002
 College Park, Md. ★Lie group representations. I. 84k:22002
 Conference:
 Automorphic theory ★Journées automorphes. (French) [Conference on automorphic theory] 84j:22001
 Lie group representations ★Lie group representations. I. 84k:22002
 Dijon ★Journées automorphes. (French) [Conference on automorphic theory] 84j:22001
 Group representations and noncommutative harmonic analysis ★Group representations and noncommutative harmonic analysis. (Japanese) 84k:22001
 Harmonic analysis and representations of semisimple Lie groups ★Harmonic analysis and representations of semisimple Lie groups. 84k:22001
 Itogi Nauki i Tekhniki ★Алгебра. Топология. Геометрия. Том 20. (Russian) [Algebra. Topology. Geometry. Vol. 20] 84a:22002
 Lie group representations ★Lie group representations. I. 84k:22002
 Lie groups ★Harmonic analysis and representations of semisimple Lie groups. 84k:22001
 Liège ★Harmonic analysis and representations of semisimple Lie groups. 84k:22001
 NATO Advanced Study Institute:
 Representations of Lie Groups and Harmonic Analysis ★Harmonic analysis and representations of semisimple Lie groups. 84k:22001
 Representation theory ★Representation theory. 84a:22003
 Symposium:
 Group Representations and Noncommutative Harmonic Analysis ★Group representations and noncommutative harmonic analysis. (Japanese) 84k:22001

secondary classifications:

- (Hofmann, Karl Heinrich) See Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 (Inöni, Erdal) See Group theoretical methods in physics. (84k:00008)
 (Jürgensen, Helmut) See Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 (Serdaroglu, Meral) See Group theoretical methods in physics. (84k:00008)
 (Weinert, Hanns Joachim) See Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 Colloquium:
 Group theoretical methods in physics ★Group theoretical methods in physics. (84k:00008)
 Conference:
 Recent developments in the algebraic, analytical, and topological theory of semigroups ★Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 Group theoretical methods in physics ★Group theoretical methods in physics. (84k:00008)
 Istanbul ★Group theoretical methods in physics. (84k:00008)
 Oberwolfach ★Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)
 Recent developments in the algebraic, analytical, and topological theory of semigroups ★Recent developments in the algebraic, analytical, and topological theory of semigroups. (84j:20005)

22Axx Topological algebraic systems {For topological rings and fields, see 12Jxx, 13Jxx, 16A80; for dual spaces of operator algebras and topological groups, see 47D35.}

22A05 Structure of general topological groups

- Antonovskii, M. Ya. (with Choban, M. M.) Radial metrics and their applications to topological groups. (Russian) 84c:22003
 Aoki, Nobuo Zero-dimensional automorphisms having a dense orbit. 84g:22004
 Brand, Nikolaus Another note on the continuity of the inverse. 84b:22001
 Castellini, Gabriele Epireflections in the category of abelian topological groups. (Italian summary) 84b:22002
 Choban, M. M. See Antonovskii, M. Ya., 84c:22003
 Dikranjan, Dikran (with Prodanov, Ivan) A class of compact abelian groups. (Bulgarian summary) 84f:22001
 Eberhardt, V. (with Schwanengel, U.) $(Q/Z)^N$ est un groupe topologique minimal. $[(Q/Z)^N$ is a minimal topological group] 84f:22002
 Fay, Temple H. (with Rajagopalan, M.; Thomas, Barbara V. Smith) Free groups, free products and 0-dimensionality. 84f:22003

- Janakiraman, S. (with Soundararajan, T.) Totally bounded group topologies and closed subgroups. 84b:22003
 Katz, Elyahu (with Morris, Sidney A.; Nickolas, Peter) A free subgroup of the free abelian topological group on the unit interval. 84c:22004
 (with Morris, Sidney A.; Nickolas, Peter) Characterization of bases of subgroups of free topological groups. 84k:22003
 (with Morris, Sidney A.) On the Hausdorffness of free products of topological groups with normal amalgamation. 84k:22004
 (with Morris, Sidney A.) Free products of k_ω -topological groups with normal amalgamation. 84f:22004
 Khan, Mohd. Saeed (with Morris, Sidney A.) Amalgamated direct products of topological groups. 84a:22004
 (with Morris, Sidney A.) Free products of topological groups with central amalgamation. I. 84c:22002a
 (with Morris, Sidney A.) Free products of topological groups with central amalgamation. II. 84c:22002b
 Koebe, Manfred Nilpotenz und Auflösbarkeit topologischer Gruppen. [Nilpotency and solvability of topological groups] 84j:22002
 Komarov, Yu. A. Local structure of the lattice of subgroups of a topological group. (Russian. English summary) 84f:22005
 Ludwig, Klaus Untergruppen und Faktorgruppe nach einem Normalteiler der topologischen Gruppe $\mathfrak{B}_{H(G)}$ von Lie-Reihen. [Subgroups and the quotient group with respect to a normal subgroup of the topological group $\mathfrak{B}_{H(G)}$ of Lie series] 84m:22001
 Ma, Ji Liang See Yu, Chun Hai, 84c:22004
 Magneron, Bernard Fibrations équivariantes et cohomologie des groupes. (English summary) [Equivariant fibrations and cohomology of groups] 84b:22004
 Marin, E. L. Completions of topological groups. (Russian) 84b:22005
 Morris, Sidney A. Varieties of topological groups: a survey. 84c:22005
 See also Khan, Mohd. Saeed, 84a:22004; 84c:22002a; 84c:22002b; Katz, Elyahu; et al., 84c:22004; 84f:22004; 84k:22003 and 84k:22004
 Nickolas, Peter See Katz, Elyahu; et al., 84c:22004 and 84k:22003
 Panasyuk, S. P. (with Polets'kikh, V. M.) A criterion for compactness of topological groups. (Russian. English summary) 84c:22003
 Pestov, V. G. Some properties of free topological groups. (Russian. English summary) 84b:22006
 Polets'kikh, V. M. See Panasyuk, S. P., 84c:22003
 Prodanov, Ivan See Dikranjan, Dikran, 84f:22001
 Rajagopalan, M. See Fay, Temple H.; et al., 84f:22003
 Sariev, A. Periodic topological groups with a locally compact lattice of closed subgroups. (Russian) 84b:22007
 Schwanengel, U. See Eberhardt, V., 84f:22002
 Šmarda, Bohumil Uniform normality of topological groups and I -groups. 84d:22001
 Soundararajan, T. See Janakiraman, S., 84b:22003
 Thomas, Barbara V. Smith See Fay, Temple H.; et al., 84f:22003
 Uspenskii, V. V. A topological group generated by a Lindelöf Σ -space has the Suslin property. (Russian) 84c:22005
 Yu, Chun Hai (with Ma, Ji Liang) Fuzzy topological groups. I. (Chinese. English summary) 84c:22004
 Zhmud', É. M. The notion of "connectedness" of a finite group. (Russian) 84c:22005

secondary classifications:

- Comfort, W. Wistar (with Grant, Douglass L.) Cardinal invariants, pseudocompactness and minimality: some recent advances in the topological theory of topological groups. (84b:54009)
 Frič, Roman On sequential envelopes of convergence groups. (German, Russian and Slovak summaries) (84d:54002)
 Grant, Douglass L. See Comfort, W. Wistar, (84b:54009)
 Khomenko, S. P. Connected groups with an abelian splitting. (Russian) (84c:22013)
 Le Gac, Barthélemy Some properties of Borel subgroups of real numbers. (84m:28022)
 Lewin, Jonathan W. Automatic continuity of measurable group homomorphisms. (84j:22004)
 Ohlhoff, H. J. K. (with Schoeman, M. J.) Radical and semisimple classes in TopGrp. (84f:18009)
 Pilipenko, Yu. N. Topological groups with a finiteness condition for isolated subgroups. (Ukrainian. Russian summary) (84m:22006)
 Pons, Montserrat T -topologies on a lattice ordered group. (84k:06023)
 Schoeman, M. J. See Ohlhoff, H. J. K., (84f:18009)
 Stevens, T. Christine Weakening the topology of a Lie group. (84c:22010)
 Wilson, John S. Polycyclic groups and topology. (84m:20042)

22A10 Analysis on general topological groups

- Boseck, Helmut Analytic mappings of topological groups—sheaf theoretic approach. 84c:22002
 Soundararajan, T. Cohomology of groups with a topology. 84d:22002

secondary classifications:

- Szekelyhidi, László Note on exponential polynomials. (84k:43003)
 Zanolin, Fabio A note on convergences in commutative groups. (Italian summary) (84g:54005)

22A15 Structure of topological semigroups

- Ahne, Kadir On the closure of the bicyclic semigroup. 84h:22002
 Arnaudov, V. I. (with Mikhalev, A. V.) An example of a commutative completely regular topological semigroup without embeddings in multiplicative semigroups of topological rings. (Russian. English summary) 84d:22003
 Brown, Dennison R. (with Stepp, James W.) Inner points in certain holoidal semigroups. 84m:22002

- Castellano, B. Michael Compact automorphic actions on an n -dimensional monoid with an $n-1$ -dimensional group of units. **84h:22003**
- Cohen, Haskell (with Koch, Robert J.) Idempotent semigroups generated by threads. I. **84h:22004a**
(with Koch, Robert J.) Idempotent semigroups generated by threads. II. **84h:22004b**
- Demenchuk, V. V. Weakly uniform nil-semigroups of rank 1. (Russian. English summary) **84h:22008**
- Hildebrandt, John A. (with Koch, Robert J.) A note on idempotents. **84d:22004**
Ideal extensions of compact reductive semigroups. **84h:22005**
- Hung, C. Y. (with Shum, Kar Ping) Topological radicals in semigroups. **84a:22006**
- Koch, Robert J. See Hildebrandt, John A., **84d:22004**; Cohen, Haskell, **84h:22004a** and **84h:22004b**
- Kopperman, Ralph Lengths on semigroups and groups. **84d:22005**
- Mikhalev, A. V. See Arnaudov, V. I., **84d:22003**
- Milnes, Paul Semigroup compactifications of direct and semidirect products. **84m:22003**
- Numakura, Katsumi On the existence of compact-open prime ideals in compact totally disconnected semigroups. **84g:22005**
- Ruppert, Wolfgang On structural methods and results in the theory of compact semitopological semigroups. **84m:22004**
- Shershin, Anthony Connors ★ Introduction to topological semigroups. **84j:22003**
- Shum, Kar Ping Topological semiprimary semigroups. **84a:22007**
See also Hung, C. Y., **84a:22006**
- Stepp, James W. See Brown, Dennison R., **84m:22002**
- Tokizawa, Masamichi On topological semigroups. **84m:22005**

secondary classifications:

- Carruth, James Harvey (with Hildebrandt, John A.; Koch, Robert J.) ★ The theory of topological semigroups. **(84g:22002)**
- Hildebrandt, John A. See Carruth, James Harvey; et al., **(84g:22002)**
- Hofmann, Karl Heinrich (with Lawson, Jimmie D.) Divisible subsemigroups of Lie groups. **(84m:22013)**
- Koch, Robert J. See Carruth, James Harvey; et al., **(84g:22002)**
- Lawson, Jimmie D. See Hofmann, Karl Heinrich, **(84m:22013)**
- Magill, K. D., Jr. Semigroups with only finitely many regular \mathcal{Q} -classes. **(84c:20077)**
Semigroups in which \mathcal{Q} and \mathcal{S} coincide for regular elements. **(84c:20078)**
- Scheerer, Hans (with Strambach, Karl) Idempotente Multiplikationen. [Idempotent multiplications] **(84g:55011)**
- Strambach, Karl See Scheerer, Hans, **(84g:55011)**

22A20 Analysis on topological semigroups

- Wang, Ti Xiang The structure of two-parameter semitopological semigroups and its applications in the semitopological semigroups of operators. (Chinese. English summary) **84e:22006**

secondary classifications:

- Berruyer, Jacques (with Carmona, René) Convergence vague et décomposition de Riesz dans des groupes non localement compacts. [Vague convergence and Riesz decompositions in groups that are not locally compact] **(84d:60005)**
- Carmona, René See Berruyer, Jacques, **(84d:60005)**
- Dangello, F. (with Lindahl, R.) Semidirect product compactifications. **(84j:43009)**
- Dzinotiyevy, Heneri A. M. Nonseparability of quotient spaces of function algebras on topological semigroups. **(84h:43016)**
Almost convergent and weakly almost periodic functions on a semigroup. **(84g:43012)**
- Green, William L. (with Lau, Anthony To Ming) Equicontinuity, fixed-point properties, and automorphisms of von Neumann algebras. **(84c:46071)**
- Lau, Anthony To Ming See Green, William L., **(84c:46071)**
- Lindahl, R. See Dangello, F., **(84j:43009)**
- Mukhin, V. V. Topologization of semigroups with invariant measure. (Russian) **(84d:43001)**

22A25 Representations of general topological groups and semigroups

- van Dijk, G. See van Soest, A. H. O., **84g:22008**
- Karpushev, S. I. Canonical states on the group G^* . (Russian. English summary) **84g:22006**
- Koebe, Manfred Über Darstellungen nilpotenter und auflösbarer LP-Gruppen. [On representations of nilpotent and solvable LP-groups] **84g:22007**
- van Soest, A. H. O. (with van Dijk, G.) On a theorem of Clifford. **84g:22008**

secondary classifications:

- Gudder, Stanley P. Representations of Baer $*$ -semigroups and quantum logics in Hilbert space. **(84k:81017)**
- Junghenn, H. D. Distal compactifications of semigroups. **(84h:43017)**
- Kiefer, Franz The duals of totally projective groups. **(84c:20058)**

22A26 Topological semilattices, lattices and applications [See also 06B30, 06F30.]

22A30 Other topological algebraic systems and their representations

- Antonovskii, M. Ya. (with Choban, M. M.) Invariant generalized metrics on topological algebras. (Russian) **84c:22006**
- Balci, Dervis ★ Zur Theorie der topologischen n -Gruppen. (German) [On the theory of topological n -groups] **84a:22008**

- Bulgakov, D. N. Imbedding of a topological loop into a group of homeomorphisms of its support. (Russian) **84c:22009**
- Castellano, B. Michael Monoids on a Möbius band. **84f:22006**
- Choban, M. M. See Antonovskii, M. Ya., **84c:22006**
- Das, Phulendu Topological operator-quasigroups. **84h:22006**
- Mikheev, P. O. See Sabinin, L. V., **84c:22007**
- Sabinin, L. V. (with Mikheev, P. O.) Analytic Bol loops. (Russian) **84c:22007**
- Seda, Anthony Karel Banach bundles and a theorem of J. M. G. Fell. **84d:22006**
- Žitović, Miliša R. Associative systems of topological n -quasigroups. **84i:22003**
Topological medial n -quasigroups. **84i:22004**

secondary classifications:

- Choban, M. M. See Dumitrashtu, S. S., **(84c:54066)**
- Dumitrashtu, S. S. (with Choban, M. M.) Free topological algebras with a continuous signature. (Russian) **(84c:54066)**
Topological properties of homomorphisms of universal algebras. (Russian) **(84j:08013)**
- Milnes, Paul Almost periodic compactifications of direct and semidirect products. **(84h:43018)**

22A99 None of the above, but in this section

- Zou, Kai Qi Some properties of fuzzy topological groups. (Chinese. English summary) **84d:22007**

secondary classifications:

- Ohlhoff, H. J. K. Another characterization of bireflective subcategories. **(84g:18012)**
- Stephenson, Kenneth Analytic functions and hypergroups of function pairs. **(84j:30051)**

22Bxx Locally compact abelian (LCA) groups

22B05 General properties and structure of LCA groups

- Khan, M. Ahmad A theorem on power-open LCA groups and its consequences. **84b:22009**
- Pilipenko, Yu. N. Topological groups with a finiteness condition for isolated subgroups. (Ukrainian. Russian summary) **84m:22006**
- Prodanov, Ivan Minimal topologies on countable abelian groups. (Bulgarian summary) **84h:22007**
- Stoyanov, Luchesar A property of precompact minimal abelian groups. (Bulgarian summary) **84h:22008**
- Surmanidze, O. E. On some properties of compact and weakly locally compact topological abelian groups. (Russian. English summary) **84h:22009**

22B10 Structure of group algebras of LCA groups

- Johnson, David Lee A new proof of the L^p -conjecture for locally compact abelian groups. **84d:22008**

secondary classifications:

- Chen, Chang Pao Constructions of the maximal strongly character invariant Segal algebras and their applications. **(84j:43004)**
- Ruzsa, Imre Z. (with Székely, Gábor J.) Convolution quotients of nonnegative functions. **(84j:43003)**
- Székely, Gábor J. See Ruzsa, Imre Z., **(84j:43003)**

22B99 None of the above, but in this section

- Dikranjan, Dikran (with Rodinó, N.) On a property of the one-dimensional torus. (Italian summary) **84c:22005**
- Rodinó, N. See Dikranjan, Dikran, **84c:22005**

secondary classifications:

- Greiner, Günther (with Groh, Ulrich) A Perron Frobenius theory for representations of locally compact abelian groups. **(84f:47046)**
- Groh, Ulrich See Greiner, Günther, **(84f:47046)**
- Jørgensen, Palle E. T. A generalization to locally compact abelian groups of a spectral problem for commuting partial differential operators. **(84h:43019)**
- Ouyang, Guang Zhong (with Yu, Shu Mo) The approximate identity of Segal algebras $S_p(G)$. (Chinese. English summary) **(84h:43005)**
- Rindler, H. Fast konstante Folgen. II. (English summary) [Almost constant sequences. II] **(84m:10052)**
- Wolff, Manfred Group actions on Banach lattices and applications to dynamical systems. **(84f:47048)**
- Yu, Shu Mo See Ouyang, Guang Zhong, **(84h:43005)**

22C05 Compact groups

- Berry, R. Stephen See Strand, Michael P., **84a:22011**
- Cartwright, Donald I. (with McMullen, John R.) A generalized universal complexification for compact groups. **84d:22009**
- McMullen, John R. See Cartwright, Donald I., **84d:22009**
- Rindler, H. Fast konstante Folgen. [Almost constant sequences] **84a:22010**
- Strand, Michael P. (with Berry, R. Stephen) Group representations in the Liouville representation and the algebraic approach. **84a:22011**
- Wu, Ta Sun A note on compact groups. **84h:22010**

secondary classifications:

- Aoki, Nobuo Zero-dimensional automorphisms having a dense orbit. (84g:22004)
Zero-dimensional automorphisms with specification. (84f:58094)
- Bourbaki, Nicolas ★Éléments de mathématique: groupes et algèbres de Lie. (French) [Elements of mathematics: Lie groups and Lie algebras] (84d:22001)
- Castellano, B. Michael Monoids on a Möbius band. (84f:22006)
- Dikranjan, Dikran (with Prodanov, Ivan) A class of compact abelian groups. (Bulgarian summary) (84f:22001)
(with Rodin, N.) On a property of the one-dimensional torus. (Italian summary) (84k:22005)
- Fedorovskii, A. M. Composition of parameters for orthogonal and unitary groups. (Russian. English summary) (84f:22018)
- French, W. P. (with Luukkainen, Jouni; Price, John F.) The Tannaka-Krein duality principle. (84f:22011)
- Heckman, G. J. Projections of orbits and asymptotic behavior of multiplicities for compact connected Lie groups. (84d:22019)
- Hirschman, I. I., Jr. (with Liang, D. S.; Wilson, Edward N.) Szegő limit theorems for Toeplitz operators on compact homogeneous spaces. (84d:47033)
- Janakiraman, S. (with Soundararajan, T.) Totally bounded group topologies and closed subgroups. (84b:22003)
- Kemperman, J. H. B. (with Skibinsky, M.) On the characterization of an interesting property of the arcsin distribution. (84g:62014)
- Koornwinder, Tom H. Krawtchouk polynomials, a unification of two different group theoretic interpretations. (84f:33022)
- Liang, D. S. See Hirschman, I. I., Jr.; et al., (84d:47033)
- Luukkainen, Jouni See French, W. P.; et al., (84f:22011)
- Markl, M. On the G -spaces having an S - G -CW-approximation by a G -CW-complex of finite G -type. (84m:57028)
- Nguyễn Xuân Viên Invariant integration on a non-Archimedean compact group. (Vietnamese. Russian summary) (84i:12012)
- Price, John F. See French, W. P.; et al., (84f:22011)
- Prodanov, Ivan See Dikranjan, Dikran, (84f:22001)
- Rodin, N. See Dikranjan, Dikran, (84f:22005)
- Shaw, Ronald A new look at group orthogonality relations. (See 84k:00008)
- Skibinsky, M. See Kemperman, J. H. B., (84g:62014)
- Soundararajan, T. See Janakiraman, S., (84b:22003)
- Surmanidze, O. E. On some properties of compact and weakly locally compact topological abelian groups. (Russian. English summary) (84b:22009)
- Travaglini, Giancarlo The translation invariant uniform approximation property for compact groups. (84e:43006)
- Wilson, Edward N. See Hirschman, I. I., Jr.; et al., (84d:47033)
- Yakovenko, E. N. Topological groups of finite width. (Russian) (84g:22013)
- Zăgărescu, M. On some discrete groups of automorphisms of $SO(3)$. (84m:22011)

22Dxx Locally compact groups and their algebras

22D05 General properties and structure of locally compact groups

- Bagley, R. W. (with Yang, J. S.) Semidirect products of central groups and groups with equal uniformities. (84b:22010)
- Grosser, S. K. (with Herfort, Wolfgang) On groups with profinite arithmetic. (84a:22012)
- Henrichs, R. W. (with Skudlarek, H.-L.) Onesided harmonic analysis and uniform continuity. (84g:22009)
- Herfort, Wolfgang See Grosser, S. K., (84a:22012)
- Hofmann, Karl Heinrich (with Liukkonen, John R.; Mislove, Michael W.) Compact extensions of compactly generated nilpotent groups are pro-Lie. (84e:22007)
- Khomenko, S. P. Connected groups with an abelian splitting. (Russian) (84a:22013)
- Koderisch, Matthias Auflösbare kompakte lineare Gruppen über den ganzen p -adischen Zahlen. [Solvable compact linear groups over the p -adic integers] (84f:22007)
- Lewin, Jonathan W. Automatic continuity of measurable group homomorphisms. (84j:22004)
- Liukkonen, John R. See Hofmann, Karl Heinrich; et al., (84e:22007)
- Milnes, Paul Minimal and distal functions on some nonabelian groups. (84j:22005)
- Mislove, Michael W. See Hofmann, Karl Heinrich; et al., (84e:22007)
- Mukhin, Yu. N. Compact elements in topological groups. (Russian) (84g:22010)
- Panasjuk, S. P. (with Polets'kikh, V. M.) Some examples of topological groups. (Russian) (84g:22011)
- Pilipenko, Yu. N. (with Polets'kikh, V. M.) Topological torsion-free nilpotent groups with restrictions for abelian subgroups. (Russian. English summary) (84a:22014)
- (with Polets'kikh, V. M.) Topological locally nilpotent groups with abelian subgroups of finite rank. (Russian) (84b:22011)
- (with Polets'kikh, V. M.) Some examples of nilpotent topological groups. (Russian. English summary) (84g:22012)
- Polets'kikh, V. M. See Pilipenko, Yu. N., (84a:22014); (84b:22011); Panasjuk, S. P., (84g:22011) and Pilipenko, Yu. N., (84g:22012)
- Protasov, I. V. (with Tsybenko, Yu. V.) Connectedness in the space of subgroups. (Russian) (84i:22005)
- Skudlarek, H.-L. See Henrichs, R. W., (84g:22009)
- Tsybenko, Yu. V. See Protasov, I. V., (84i:22005)
- Yakovenko, E. N. Topological groups of finite width. (Russian) (84g:22013)
- Yang, J. S. See Bagley, R. W., (84b:22010)

secondary classifications:

- Kaniuth, Eberhard (with Schlichting, Günter) The type structure of multiplier representations which vanish at infinity. (84g:22015)
- Kazhdan, David On ϵ -representations. (84b:22011)
- Patera, J. (with Sharp, R. T.) Signatures of all finite representations of $SU(p, q)$, $p + q \leq 4$. (84e:22009)

Ruppert, Wolfgang On semitopological compactifications of nonabelian groups. (84e:43009)

Schlichting, Günter See Kaniuth, Eberhard, (84g:22015)

Sharp, R. T. See Patera, J., (84e:22009)

22D10 Unitary representations of locally compact groups

- Barnes, Bruce A. A note on separating families of representations. (84k:22006)
- Daletskii, A. Yu. Representation of the group of shifts of a nuclear space. (Russian. English summary) (84g:22014)
- Kaniuth, Eberhard Characterizing Moore groups by tensor products of irreducible representations. (84e:22006)
- Karpushev, S. I. See Vershik, A. M., (84d:22010)
- Kawakami, Satoshi Irreducible representations of nonregular semidirect product groups. (84a:22015)
- Kazhdan, David On ϵ -representations. (84b:22011)
- Kerov, S. V. See Vershik, A. M., (84a:22016)
- Kleppner, Adam Multiplier representations of discrete groups. (84k:22007)
- Magnin, L. Some remarks about C^∞ vectors in representations of connected locally compact groups. (84f:22008)
- Remarks about C^∞ -vectors in representations of connected locally compact groups. (See 84m:46004)
- Picardello, Massimo A. Unimodular Lie groups without discrete series. (Italian summary) (84f:22009)
- Robert, Alain Michel ★Introduction to the representation theory of compact and locally compact groups. (84b:22012)
- Samoilenko, Yu. S. Spectral theory of operator-valued functions and of inductive limits of locally compact groups and their unitary representations. (Russian) (84b:22012)
- Vershik, A. M. (with Kerov, S. V.) Asymptotic theory of the characters of a symmetric group. (Russian) (84a:22016)
- (with Karpushev, S. I.) Cohomology of groups in unitary representations, neighborhood of the identity and conditionally positive definite functions. (Russian) (84d:22010)

secondary classifications:

- Carey, A. L. (with Moran, William) Nonmonomial unitary representations of nilpotent groups. I. The abelian case. (84j:22012)
- van Dijk, G. See van Soest, A. H. O., (84g:22008)
- (Kirillov, A. A.) See Lion, Gérard; et al., (84m:58145)
- Klimyk, A. U. Infinitesimal operators for representations of complex Lie groups and Clebsch-Gordan coefficients for compact groups. (84e:22015)
- Lion, Gérard (with Vergne, Michèle) ★Представление Вейля, индекс Маслова и θ -ряды. (Russian) [The Weil representation, Maslov index and theta series] (84m:58145)
- Moran, William See Carey, A. L., (84j:22012)
- Ol'shanskii, G. I. Unitary representations of infinite-dimensional pairs (G, K) and the formalism of R. Howe. (Russian) (84b:22043)
- Sliman, Mohamed Hachmi Opérateurs semi-invariants dans l'espace d'une représentation unitaire d'un groupe de Lie résoluble. [Semi-invariant operators in the space of a unitary representation of a solvable Lie group] (84g:22023)
- van Soest, A. H. O. (with van Dijk, G.) On a theorem of Clifford. (84g:22008)
- Székelyhidi, László Note on exponential polynomials. (84k:43003)
- Tsuchikawa, Masao The Plancherel transform on $SL_2(k)$ and its application to the decomposition of tensor products of irreducible representations. (84e:22020)
- Vergne, Michèle See Lion, Gérard, (84m:58145)
- Walter, Martin E. Differentiation on the dual of a group: an introduction. (84g:22018)

22D12 Other representations of locally compact groups

- Kajiwara, Tsuyoshi Group extension and Plancherel formulas. (84d:22011)
- Kaniuth, Eberhard (with Schlichting, Günter) The type structure of multiplier representations which vanish at infinity. (84g:22015)
- Schlichting, Günter See Kaniuth, Eberhard, (84g:22015)
- Shin'ya, Hitoshi On a decomposability of homogeneous linear system representations of locally compact groups. (84e:22008)

secondary classifications:

- Berry, R. Stephen See Strand, Michael P., (84a:22011)
- D'Antoni, Claudio (with Longo, Roberto; Zsidó, László) A spectral mapping theorem for locally compact groups of operators. (84e:47058)
- Longo, Roberto See D'Antoni, Claudio; et al., (84e:47058)
- Magneron, Bernard Fibrations équivariantes et cohomologie des groupes. (English summary) [Equivariant fibrations and cohomology of groups] (84b:22004)
- Robert, Alain Michel ★Introduction to the representation theory of compact and locally compact groups. (84b:22012)
- Rodier, François Théorèmes de Mackey pour les représentations lisses. [Mackey theorems for smooth representations] (84g:22017)
- Strand, Michael P. (with Berry, R. Stephen) Group representations in the Liouville representation and the algebraic approach. (84a:22011)
- Zsidó, László See D'Antoni, Claudio; et al., (84e:47058)

22D15 Group algebras of locally compact groups

- Boidol, J. *-regularity of some classes of solvable groups. (84g:22016)
- Bomash, E. M. Non-Hermitian group algebras. (Russian) (84i:22007)
- Cohen, Joel M. (with De-Michele, Leonede) The radial Fourier-Stieltjes algebra of free groups. (84j:22006)
- De-Michele, Leonede See Cohen, Joel M., (84j:22006)

Petz, Dénes Locally compact groups: the group von Neumann algebra and duality. (Hungarian) **84c:22008**

Poguntke, Detlev Einfache Moduln über gewissen Banachschen Algebren: ein Imprimitivitätssatz. [Simple modules over certain Banach algebras: an imprimitivity theorem] **84c:22008**

Pytlík, T. Radial functions on free groups and a decomposition of the regular representation into irreducible components. **84a:22017**

secondary classifications:

Antonyan, S. A. Banach G -algebras. (Russian) **(84j:46080)**

Arveson, William The harmonic analysis of automorphism groups. **(84m:46085)**

Hauenschild, Wilfried (with Kaniuth, Eberhard; Kumar, Ajay) Ideal structure of Beurling algebras on $[FC]^-$ groups. **(84m:22007)**

Kaniuth, Eberhard On primary ideals in group algebras. **(84i:43003)**

See also Hauenschild, Wilfried; et al., **(84m:22007)**

Kumar, Ajay See Hauenschild, Wilfried; et al., **(84m:22007)**

Willis, George A. Approximate units in finite codimensional ideals of group algebras. **(84f:43006)**

22D20 Representations of group algebras

Hauenschild, Wilfried (with Kaniuth, Eberhard; Kumar, Ajay) Ideal structure of Beurling algebras on $[FC]^-$ groups. **84m:22007**

Kaniuth, Eberhard See Hauenschild, Wilfried; et al., **84m:22007**

Kumar, Ajay See Hauenschild, Wilfried; et al., **84m:22007**

secondary classifications:

Barnes, Bruce A. Ideal and representation theory of the L^1 -algebra of a group with polynomial growth. **(84h:43008)**

Kerov, S. V. See Vershik, A. M., **(84a:22016)**

Vershik, A. M. (with Kerov, S. V.) Asymptotic theory of the characters of a symmetric group. (Russian) **(84a:22016)**

Yamazaki, Tadashi A Poisson formula for a quasihomogeneous polynomial. **(84h:12023)**

22D25 C^* -algebras and W^* -algebras arising from group representations [See also 46Lxx.]

Anantharaman-Delaroche, C. Action moyennable d'un groupe localement compact sur une algèbre de von Neumann. II. (English summary) [Amenable action of a locally compact group on a von Neumann algebra. II] **84d:22012**

Granirer, Edmond E. On group representations whose C^* -algebra is an ideal in its von Neumann algebra. II. **84b:22013**

Herman, Richard H. Norm close group actions. (See **84m:46003**)

Kajiwara, Tsuyoshi See Kawakami, Satoshi, **84d:22013**

Kawakami, Satoshi (with Kajiwara, Tsuyoshi) Representations of certain non-type I C^* -crossed products. **84d:22013**

Kholevo, A. S. Generalized imprimitivity systems for abelian groups. (Russian) **84m:22008**

Rieffel, Marc A. von Neumann algebras associated with pairs of lattices in Lie groups. **84f:22010**

Schochet, Claude Covariant representations on the Calkin algebra. II. **84d:22014**

Shtern, A. I. Factorization and irreducible representations of a direct product of groups. (Russian. English summary) **84c:22008**

secondary classifications:

Araki, Huzihiro (with Choda, Marie) Property T and actions on the hyperfinite II $_1$ -factor. **(84m:46084)**

Arveson, William The harmonic analysis of automorphism groups. **(84m:46085)**

Berdikulov, M. A. Spaces L_1 and L_2 for semifinite JBW-algebras. (Russian) **(84f:46086)**

Choda, Marie Effect of inner amenability on strong ergodicity. **(84c:46073)**

See also Araki, Huzihiro, **(84m:46084)**

Cohen, Joel M. (with De-Michele, Leonede) The radial Fourier-Stieltjes algebra of free groups. **(84j:22006)**

Connes, Alain Classification des facteurs. [Classification of factors] **(84c:46068)**

De-Michele, Leonede See Cohen, Joel M., **(84j:22006)**

Gurarie, David Burnside type theorems for Banach representations of motion groups and algebras. **(84m:46059)**

Handelman, David E. Free rank $n+1$ dense subgroups of \mathbb{R}^* and their endomorphisms. **(84h:06019)**

de la Harpe, Pierre (with Jhabvala, K.) Quelques propriétés des algèbres d'un groupe discontinu d'isométries hyperboliques. [Some properties of algebras of a discontinuous group of hyperbolic isometries] **(84j:46085)**

Henrichs, R. W. Decomposition of group representations and nonseparable C^* -algebras. (See **84m:46003**)

Herman, Richard H. (with Rosenberg, Jonathan) Norm-close group actions on C^* -algebras. **(84b:46085)**

Ibni-Oumar Représentation intégrale des mesures de type positif. (English summary) [Integral representation of positive type measures] **(84c:43003)**

Iório, Valéria B. de Magalhães The crossed product of von Neumann algebras for group actions. (Portuguese) **(84j:46068)**

Jhabvala, K. See de la Harpe, Pierre, **(84j:46085)**

Jones, Vaughan F. R. Actions of discrete groups on factors. **(84a:46139)**

Kastler, Daniel (with Takesaki, Masamichi) Group duality and the Kubo-Martin-Schwinger condition. II. **(84g:82008)**

Kleppner, Adam Multiplier representations of discrete groups. **(84c:22007)**

O'uchi, Moto Action of semigroups on Borel spaces and von Neumann algebras of groupoids of type II $_1$. **(84h:46092)**

On a certain automorphism of a factor associated with an action of the free group on two generators. **(84c:46074)**

Petz, Dénes Locally compact groups: the group von Neumann algebra and duality. (Hungarian) **(84c:22008)**

Plymen, R. J. The Weyl bundle. **(84h:58058)**

Quigg, John C. On the irreducibility of an induced representation. **(84j:22007)**

Renault, Jean N. C^* -algebras of groupoids and foliations. **(84c:46068)**

Rieffel, Marc A. Applications of strong Morita equivalence to transformation group C^* -algebras. **(84c:46046)**

Rosenberg, Jonathan See Herman, Richard H., **(84b:46085)**

Schochetman, I. E. Generalized group algebras and their bundles. **(84f:46094)**

Sliman, Mohamed Hachmi Opérateurs semi-invariants dans l'espace d'une représentation unitaire d'un groupe de Lie résoluble. [Semi-invariant operators in the space of a unitary representation of a solvable Lie group] **(84g:22023)**

Tadić, M. The C^* -algebra of $SL(2, k)$. (Serbo-Croatian summary) **(84g:22038)**

Takesaki, Masamichi See Kastler, Daniel, **(84g:82008)**

Taylor, Keith F. Geometry of the Fourier algebras and locally compact groups with atomic unitary representations. **(84h:43020)**

Varfolomeev, V. V. The structure of some group C^* -algebras. (Russian) **(84j:46102)**

22D30 Induced representations

Ali, S. Twareque A generalized imprimitivity theorem for a class of POV-measures. (See **84c:00008**)

Cattaneo, U. Densities of covariant observables. **84c:22018**

Gootman, Elliot C. Subrepresentations of direct integrals and finite volume homogeneous spaces. **84m:22009**

Kawakami, Satoshi Representations of the discrete Heisenberg group. **84d:22015**

Quigg, John C. On the irreducibility of an induced representation. II. **84m:22010**

Rodier, François Théorèmes de Mackey pour les représentations lisses. [Mackey theorems for smooth representations] **84g:22017**

Schochetman, I. E. Integral operators in the theory of induced Banach representations. II. The bundle approach. **84c:22009**

secondary classifications:

Kerov, S. V. See Vershik, A. M., **(84g:22032)**

Vershik, A. M. (with Kerov, S. V.) Characters and factor-representations of the infinite unitary group. (Russian) **(84g:22032)**

22D35 Duality theorems

French, W. P. (with Luukkainen, Jouni; Price, John F.) The Tannaka-Krein duality principle. **84f:22011**

Luukkainen, Jouni See French, W. P.; et al., **84f:22011**

Price, John F. See French, W. P.; et al., **84f:22011**

Tatsuuma, Nobuhiko A duality theorem for factor spaces. **84f:22012**

secondary classifications:

Bannai, Eiichi Tannaka-Krein duality for association schemes. **(84c:05028)**

22D40 Ergodic theory on groups [See also 28Dxx and 43A6.]

Dani, S. G. Dense orbits of affine automorphisms and compactness of groups. **84b:22013**

Liardet, Pierre Propriétés génériques de processus croisés. (English summary) [Generic properties of crossed processes] **84c:22009**

Moore, Calvin C. Ergodic theory and von Neumann algebras. **84f:22013**

Series, Caroline An application of groupoid cohomology. **84f:22014**

Zimmer, Robert J. Orbit equivalence and rigidity of ergodic actions of Lie groups. **84a:22019**

secondary classifications:

Connes, Alain (with Feldman, Jacob; Weiss, Benjamin) An amenable equivalence relation is generated by a single transformation. **(84h:46090)**

Eschmeier, Jörg Operator decomposability and weakly continuous representations of locally compact abelian groups. **(84c:47045)**

Fedorov, A. I. Polymorphisms and partitionings of Lebesgue spaces. (Russian) **(84g:28020)**

Feldman, Jacob See Connes, Alain; et al., **(84h:46090)**

Golodets, V. Ya. Cocycles of dynamical systems with a dense range. (Russian. English summary) **(84g:28014)**

Herrmann, Horst Asymptotische Gleichverteilung von Summen Markowsch abhängiger Zufallsgrößen. [Asymptotic uniform distribution of sums of Markov-dependent random variables] **(84h:60022)**

Kharazishvili, A. B. Some properties of G -measures in Euclidean spaces. (Russian. English and Georgian summaries) **(84c:28002)**

Margulis, G. A. On the decomposition of discrete subgroups into amalgams. **(84j:22016)**

Oren, Ishai Admissible functions with multiple discontinuities. **(84g:54052)**

Schmidt, Klaus D. (with Walters, Peter) Mildly mixing actions of locally compact groups. **(84g:28021)**

Walters, Peter See Schmidt, Klaus D., **(84g:28021)**

Weiss, Benjamin See Connes, Alain; et al., **(84h:46090)**

Yoneda, Kaoru Positive definite generalized measures on the dyadic field. **(84h:43022)**

Zimmer, Robert J. Ergodic theory, semisimple Lie groups, and foliations by manifolds of negative curvature. **(84h:22022)**

22D45 Automorphism groups of locally compact groups

Albert, Rudolf Automorphisms of nilpotent locally compact groups. **84c:22010**

Wang, S. P. On automorphisms of bounded displacement. **84h:22014**

Zaganeşcu, M. On some discrete groups of automorphisms of $SO(3)$. **84m:22011**

secondary classifications:

- Bagley, R. W. (with Yang, J. S.) Semidirect products of central groups and groups with equal uniformities. (84b:22010)
 Beon, M. H. Topology of countable subgroups of the Heisenberg-Weyl group. (84b:81109)
 Moody, R. V. (with Patera, J.; Sharp, R. T.) Character generators for elements of finite order in simple Lie groups A_1, A_2, A_3, B_2 , and G_2 . (84b:22018)
 Patera, J. See Moody, R. V.; et al., (84b:22018)
 Sharp, R. T. See Moody, R. V.; et al., (84b:22018)
 Yang, J. S. See Bagley, R. W., (84b:22010)

22D99 None of the above, but in this section

- Walter, Martin E. Differentiation on the dual of a group: an introduction. 84g:22018

secondary classifications:

- Karube, Takashi Homeomorphism groups of homogeneous spaces. (84j:57028)

22Exx Lie groups {For the topology of Lie groups and homogeneous spaces, see 57Sxx, 57Txx; for analysis thereon, see 43A80, 43A85, 43A90.}

secondary classifications:

- Alekseevskii, D. V. Lie groups. (Russian) (84c:22002)

22E05 Local Lie groups [See also 34-XX, 35-XX, 58H05.]

- Förg, W. (with Netzer, N.) Eine Methode zur Berechnung von einparametrischen Untergruppen ohne Verwendung des Logarithmus. [A method for computing one-parameter subgroups without using the logarithm] 84a:22020
 Liedl, Roman Noncommutative calculus and Pölgerschnitt transformation. 84a:22021
 Mikhalchenko, G. G. Three-dimensional Lie algebras of the transformations plane. (Russian) 84m:22012
 Netzer, N. (with Reitberger, H.) On the convergence of iterated Pölgerschnitt transformation in nilpotent Lie groups. 84b:22014
 On the convergence of the iterated Pölgerschnitt transformation. 84a:22022
 See also Förg, W., 84a:22020
 Reitberger, H. See Netzer, N., 84b:22014

secondary classifications:

- Batyrov, S. Group classification of potentials for a second-order linear differential equation. (Russian. English summary) (84b:35007)
 Baudisch, Andreas Decidability and stability of free nilpotent Lie algebras and free nilpotent p -groups of finite exponent. (84c:03019)
 Bhutani, O. P. (with Mital, Poonima) On the solution of hydrodynamical equations via Lie groups. (84c:76066)
 Hill, James M. ★Solution of differential equations by means of one-parameter groups. (84a:34002)
 Kotelnikov, G. A. On the symmetry of equations of the free electromagnetic field. (Italian and Russian summaries) (84b:78005)
 Lankovich, M. Ya. Third-order ordinary differential equations that admit a group of tangent transformations of maximum dimension. (Russian) (84j:58110)
 Mital, Poonima See Bhutani, O. P., (84c:76066)
 Newman, Thomas G. (with Zlobec, Leopold) Adaptive pattern matching using control theory on Lie groups. (See 84g:93005d)
 Ruh, Ernst A. Almost symmetric spaces. (See 84d:53003)
 Winternitz, P. Nonlinear action of Lie groups and superposition principles for nonlinear differential equations. (84f:22028)
 Zlobec, Leopold See Newman, Thomas G., (See 84g:93005d)

22E10 General properties and structure of complex Lie groups [See also 32M05.]

- Magid, Andy R. ★Module categories of analytic groups. 84j:22008

- Syed, Ansaruddin Euler angle parametrization of the complex rotation group and its subgroups. I, II. 84f:22015

secondary classifications:

- Desmier, P. E. (with Patera, J.; Sharp, R. T.) Finite subgroup bases for compact Lie groups. (84c:22014)
 Hussin, V. On Wigner's little groups and scale transformations. (84f:81034)
 Jurdjevic, V. (with Kupka, Ivan A. K.) Control systems on semisimple Lie groups and their homogeneous spaces. (French summary) (84a:93014)
 Kupka, Ivan A. K. See Jurdjevic, V., (84a:93014)
 Nazaryan, R. O. More on decompositions of simple real Lie groups. (Russian) (84c:22011)
 Patera, J. (with Winternitz, P.; Zassenhaus, Hans J.) Maximal abelian subalgebras of real and complex symplectic Lie algebras. (84i:17006)
 See also Desmier, P. E.; et al., (84c:22014)
 Scott, Peter The geometries of 3-manifolds. (84m:57009)
 Sharp, R. T. See Desmier, P. E.; et al., (84c:22014)
 Winternitz, P. See Patera, J.; et al., (84i:17006)
 Zassenhaus, Hans J. See Patera, J.; et al., (84i:17006)

22E15 General properties and structure of real Lie groups

- Djoković, Dragomir Ž. Closures of conjugacy classes in classical real linear Lie groups. II. 84f:22016
 Gómez Martín, José Ramón (with Jiménez Alcón, Francisco) Similarity in $GL(n, \mathbb{C})$. (Spanish) 84a:22023
 Gordon, Carolyn Semisimple normal subgroups of transitive Riemannian isometry groups. 84b:22015
 Hofmann, Karl Heinrich (with Lawson, Jimmie D.) Divisible subsemigroups of Lie groups. 84m:22013
 Imai, Takao (with Yokota, Ichiro) Noncompact simple Lie group E_{7-25} of type E_7 . 84f:22017a
 (with Yokota, Ichiro) Noncompact simple Lie group E_{6-24} of type E_6 . 84f:22017b
 Jiménez Alcón, Francisco See Gómez Martín, José Ramón, 84a:22023
 Koch, Richard M. (with Lowenthal, Franklin) On Lie groups with minimal generating sets of order equal to their dimension. 84g:22019
 Lai, Heng Lung Exponential map on a simple Lie group of classical type. 84j:22009
 Lawson, Jimmie D. See Hofmann, Karl Heinrich, 84m:22013
 Lowenthal, Franklin See Koch, Richard M., 84g:22019
 Nazaryan, R. O. More on decompositions of simple real Lie groups. (Russian) 84c:22011
 Nishikawa, Mitsuru On the exponential map of the group $O(p, q)_0$. 84m:22014
 Patera, J. (with Sharp, R. T.) Signatures of all finite representations of $SU(p, q)$, $p+q \leq 4$. 84c:22009
 Sharp, R. T. See Patera, J., 84c:22009
 Stevens, T. Christine Decisive subgroups of analytic groups. 84c:22010
 Yokota, Ichiro See Imai, Takao, 84f:22017a and 84f:22017b

secondary classifications:

- Bourbaki, Nicolas ★Éléments de mathématique: groupes et algèbres de Lie. (French) [Elements of mathematics: Lie groups and Lie algebras] (84c:22001)
 Chuprunov, E. V. See Talis, A. L.; et al., (84c:20051)
 Diţă, Petre Parametrisation of unitary matrices. (84c:15029)
 Maniscalco, Ignazia (with Portolano, Aida) Measurable four-parameter families of varieties of the affine plane. (Italian) (84h:53096)
 Picardello, Massimo A. Unimodular Lie groups without discrete series. (Italian summary) (84f:22009)
 Portolano, Aida See Maniscalco, Ignazia, (84h:53096)
 Sasaki, Takeshi Classification of left invariant complex structures on $GL(2, \mathbb{R})$ and $U(2)$. (84b:53050)
 Stekol'shchik, R. B. See Subbotin, V. F., (84c:17007)
 Stevens, T. Christine Weakening the topology of a Lie group. (84c:22010)
 Subbotin, V. F. (with Stekol'shchik, R. B.) Letter to the editors: "The Jordan form of the Coxeter transformation, and applications to representations of finite graphs" [Funktional. Anal. i Prilozhen. 12 (1978), no. 1, 84-85; MR 58 #16800] (Russian) (84c:17007)
 Sugita, Mitsuo The conjugacy of maximal compact subgroups for orthogonal, unitary and unitary symplectic groups. (84g:22020)
 Talis, A. L. (with Chuprunov, E. V.; Tarkhova, T. N.) Classification and properties of orbits of crystallographic groups. (Russian) (84c:20051)
 Tarkhova, T. N. See Talis, A. L.; et al., (84c:20051)
 Uesu, Kagumi Left invariant metrics on Lie groups. (84c:53057)

22E20 General properties and structure of other Lie groups

- Stevens, T. Christine Weakening the topology of a Lie group. 84c:22010
 Sugita, Mitsuo The conjugacy of maximal compact subgroups for orthogonal, unitary and unitary symplectic groups. 84g:22020

secondary classifications:

- Azad, H. Root groups. (84f:20045)
 Kaplan, Arnold On the geometry of groups of Heisenberg type. (84h:53063)
 McGibbon, C. A. Multiplicative properties of power maps. II. (84d:55008)
 N'Guérékata, Gaston Mandata Quelques remarques sur les fonctions asymptotiquement presque automorphes. [Some remarks on asymptotically almost automorphic functions] (84k:43009)
 Weisfeiler, Boris Abstract homomorphisms of big subgroups of algebraic groups. (84m:20051)

22E25 Nilpotent and solvable Lie groups

- Astaneh, Ali Ansari On two lemmas of Kirillov. 84m:22015
 Boyom, Michel Nguiffo B. Sur une ex-conjecture de L. Auslander. [On a former conjecture of L. Auslander] 84j:22010
 Głowacki, Paweł A calculus of symbols and convolution semigroups on the Heisenberg group. 84f:22018
 Hano, Jun-ichi The complex Laplace-Beltrami operator canonically associated to a polarized abelian variety. 84b:22015
 Ludwig, Jean On primary ideals in the group algebra of a nilpotent Lie group. 84b:22016
 Nghiem Xuân Hai The Fourier integral transform on nilpotent Lie groups. 84j:22011

secondary classifications:

- Benoist, Yves Analyse harmonique sur les espaces symétriques nilpotents. (English summary) [Harmonic analysis on nilpotent symmetric spaces] (84i:22009)
 Chang, Weita Invariant differential operators and P -convexity of solvable Lie groups. (84m:22016)
 Connes, Alain A survey of foliations and operator algebras. (84m:58140)
 Corwin, Lawrence Tempered distributions on Heisenberg groups whose convolution with Schwartz class functions is Schwartz class. (84i:22010)

- Dotti Miatello, Isabel** Ricci curvature of left invariant metrics on solvable unimodular Lie groups. (84a:53044)
- Felix, Rainer** Zentrale Distributionen auf nilpotenten Liegruppen. (English summary) [Central distributions on nilpotent Lie groups] (84g:22021)
- Gallardo, Léonard** Capacités, mouvement brownien et problème de l'épine de Lebesgue sur les groupes de Lie nilpotents. (English summary) [Capacities, Brownian motion and the Lebesgue thorn problem on nilpotent Lie groups] (84a:60089)
- Gaveau, Bernard** (with Laville, Guy) Fonctions holomorphes et particule chargée dans un champ magnétique uniforme. [Holomorphic functions and a charged particle in a uniform magnetic field] (84b:58041)
- Inglis, Ian R.** Bernstein's theorem and the Fourier algebra of the Heisenberg group. (Italian summary) (84g:43014)
- Janas, Jan** On commutators on nilpotent Lie group. (84m:58168)
- Lambe, Larry A.** (with Priddy, Stewart B.) Cohomology of nilmanifolds and torsion-free, nilpotent groups. (84c:55018)
- Laville, Guy** See Gaveau, Bernard, (84b:58041)
- Liedl, Roman** (with Netzer, N.; Reitberger, H.) Über eine Methode zur Auffindung stetiger Iterationen in Lie-Gruppen. [On a method for finding continuous iterations in Lie groups] (84c:22013)
- Ludwig, Jean** On the spectral synthesis problem for points in the dual of a nilpotent Lie group. (84c:43007)
- Mauceri, Giancarlo** Riesz means for the eigenfunction expansions for a class of hypoelliptic differential operators. (French summary) (84c:35125)
- Medina Perea, Alberto** Groupes de Lie munis de pseudo-métriques de Riemann bi-invariantes. [Lie groups equipped with bi-invariant Riemannian pseudometrics] (84c:53062)
- Miller, Kenneth G.** Invariant pseudodifferential operators on two-step nilpotent Lie groups. (84i:58118)
- Netzer, N.** See Liedl, Roman; et al., (84c:22013)
- Nourrigat, J.** Hypoellipticité maximale pour le système de Cauchy-Riemann induit. [Maximal hypoellipticity for the induced Cauchy-Riemann system] (84c:35028)
- Penney, Richard A.** Fourier transform theorem on nilmanifolds and nil-theta functions. (84c:22014)
- Poguntke, Detlev** Einfache Moduln über gewissen Banachschen Algebren: ein Imprimitivitätssatz. [Simple modules over certain Banach algebras: an imprimitivity theorem] (84i:22008)
- Priddy, Stewart B.** See Lambe, Larry A., (84c:55018)
- Reitberger, H.** See Liedl, Roman; et al., (84c:22013)
- Rizzoli, Irina** Complex analytic structures on a class of nilpotent Lie groups. (Romanian. English summary) (84c:53064)
- Safonov, A. V.** A spectral type of ergodic G -induced flows. (Russian) (84c:58132)
- Schempp, Walter** Radar reception and nilpotent harmonic analysis. I. (84m:78024a)
Radar reception and nilpotent harmonic analysis. II. (84m:78024b)
Radar reception and nilpotent harmonic analysis. III. (84m:78024c)
Radar reception and nilpotent harmonic analysis. IV. (84m:78024d)
On the Wigner quasiprobability distribution function. I. (84m:81062a)
On the Wigner quasiprobability distribution function. II. (84m:81062b)
On the Wigner quasiprobability distribution function. III. (84m:81062c)
- Zaitsev, A. A.** Equivalence of holomorphically induced representations of Lie groups with abelian normal subgroups. (Russian) (84j:22019)

22E27 Representations of nilpotent and solvable Lie groups (special orbital integrals, non-Type I representations, etc.)

- Benoist, Yves** Analyse harmonique sur les espaces symétriques nilpotents. (English summary) [Harmonic analysis on nilpotent symmetric spaces] (84i:22009)
- Carey, A. L.** (with Moran, William) Nonmonomial unitary representations of nilpotent groups. I. The abelian case. (84j:22012)
- Felix, Rainer** Zentrale Distributionen auf nilpotenten Liegruppen. (English summary) [Central distributions on nilpotent Lie groups] (84g:22021)
- Frederick, William G.** μ -theta functions. (84g:22022)
- Jacobsen, Jacob** (with Stetkær, Henrik) Eigenspace representations of nilpotent Lie groups. (84b:22016)
- Juhl, Andreas** Symplectic volume of co-adjoint orbits for nilpotent Lie groups and distribution of eigenvalues. (See 84b:58103)
- Moran, William** See Carey, A. L., (84j:22012)
- Sevast'yanov, L. A.** An analogue of the Paley-Wiener theorem for metabelian Lie groups. (Russian. English summary) (84c:22024a)
An analogue of the Paley-Wiener theorem for a nilpotent Lie group. (Russian. English summary) (84c:22024b)
- Sliman, Mohamed Hachmi** Opérateurs semi-invariants dans l'espace d'une représentation unitaire d'un groupe de Lie résoluble. [Semi-invariant operators in the space of a unitary representation of a solvable Lie group] (84c:22023)
- Stetkær, Henrik** See Jacobsen, Jacob, (84b:22016)

secondary classifications:

- Connes, Alain** (with Moscovici, Henri) The L^2 -index theorem for homogeneous spaces of Lie groups. (84i:58108)
- Hano, Jun-ichi** The complex Laplace-Beltrami operator canonically associated to a polarized abelian variety. (84b:22015)
- Khalgui, Mohamed Salah** Sur les caractères des groupes de Lie résolubles. [On the characters of solvable Lie groups] (84c:22018a)
Sur les caractères des groupes de Lie à radical cocompact. (English summary) [Characters of Lie groups with cocompact radicals] (84c:22018b)
Caractères des groupes de Lie. (English summary) [Characters of Lie groups] (84f:22020)
- Korányi, Adam** Kelvin transforms and harmonic polynomials on the Heisenberg group. (84f:43014)

- Lévy-Bruhl, Pierre** Application de la formule de Plancherel à la résolubilité d'opérateurs invariants à gauche sur des groupes nilpotents d'ordre deux. (English summary) [Application of the Plancherel formula to the solvability of left-invariant operators on second-order nilpotent groups] (84b:58104)
- Lion, Gérard** Indices de Maslov et représentation de Weil. [Maslov index and the Weil representations] (84j:58125)
- Ludwig, Jean** Irreducible representations of exponential solvable Lie groups and operators with smooth kernels. (84g:22025)
- Moscovici, Henri** See Connes, Alain, (84i:58108)

22E30 Analysis on real and complex Lie groups [See also 33A75, 43-XX.]

- Aoki, Shigeru** The Paley-Wiener type theorem on the universal covering group of $SL(2, \mathbb{R})$. (84j:22013)
- Chang, Weita** Invariant differential operators and P -convexity of solvable Lie groups. (84m:22016)
- Chao, Wen Min** Fourier transforms of the stabilized invariant integrals. (84j:22014)
Fourier inversion and Plancherel formula for $Sp(2, \mathbb{R})$. (84c:22017)
- Clozel, Laurent** Changement de base pour les représentations tempérées des groupes réductifs réels. [Base change for tempered representations of real reductive groups] (84j:22015)
- Corwin, Lawrence** Tempered distributions on Heisenberg groups whose convolution with Schwartz class functions is Schwartz class. (84c:22010)
- Delorme, P.** Théorème de type Paley-Wiener pour les groupes de Lie semi-simples réels avec une seule classe de conjugaison de sous groupes de Cartan. (English summary) [A theorem of Paley-Wiener type for the real semisimple Lie groups with a single conjugacy class of Cartan subgroups] (84g:22024)
- Duflo, Michel** Analyse harmonique sur les groupes algébriques complexes: formule de Plancherel (d'après M. Andler) et conjecture de M. Vergne. [Harmonic analysis on complex algebraic groups: the Plancherel formula (after M. Andler) and the conjecture of M. Vergne] (84m:22017)
- Gerry, Christopher C.** Generalised coherent states and group representations on Hilbert spaces of analytic functions. (84c:22012)
- Herb, Rebecca A.** An inversion formula for weighted orbital integrals. (84c:22011)
- Karpushchev, S. I.** Conditionally positive-definite functions on locally compact groups and the Lévy-Khinchin formula. (Russian. English summary) (84i:22019)
- Kawazoe, Takeshi** Fourier transform of L^p on real rank 1 semisimple Lie groups. (84i:22016)
- Khalgui, Mohamed Salah** Sur les caractères des groupes de Lie résolubles. [On the characters of solvable Lie groups] (84c:22018a)
Sur les caractères des groupes de Lie à radical cocompact. (English summary) [Characters of Lie groups with cocompact radicals] (84c:22018b)
- Kuchment, P. A.** Functions that are periodic in the mean on symmetric spaces. (Russian) (84c:22012)
- Liedl, Roman** (with Netzer, N.; Reitberger, H.) Über eine Methode zur Auffindung stetiger Iterationen in Lie-Gruppen. [On a method for finding continuous iterations in Lie groups] (84c:22013)
- Ludwig, Jean** Irreducible representations of exponential solvable Lie groups and operators with smooth kernels. (84g:22025)
- Muta, Yôichi** On the spherical functions with one-dimensional K -types and the Paley-Wiener type theorem on some simple Lie groups. (84b:22019)
- Netzer, N.** See Liedl, Roman; et al., (84c:22013)
- Penney, Richard A.** Fourier transform theorem on nilmanifolds and nil-theta functions. (84c:22014)
- Reitberger, H.** See Liedl, Roman; et al., (84c:22013)
- Rothschild, Linda Preiss** (with Tartakoff, David S.) Inversion of analytic matrices and local solvability of some invariant differential operators on nilpotent Lie groups. (84g:22026)
(with Tartakoff, David S.) Analyticity of relative fundamental solutions and projections for left invariant operators on the Heisenberg group. (84c:22017)
- Sekiguchi, Jiro** Invariant measures on orbits associated to a symmetric pair. (84i:22011)
- Simon, Jacques C. H.** Introduction to the 1-cohomology of Lie groups. (See 84c:22001)
- Tartakoff, David S.** See Rothschild, Linda Preiss, (84c:22017 and 84g:22026)
- Trombi, P. C.** Invariant harmonic analysis on split rank one groups with applications. (84c:22015)

secondary classifications:

- Ball, Joseph A.** (with Helton, J. William) A Beurling-Lax theorem for the Lie group $U(m, n)$ which contains most classical interpolation theory. (84m:47046)
- Beylkin, G.** The fundamental identity for iterated spherical means and the inversion formula for diffraction tomography and inverse scattering. (84m:78014)
- Borel, A.** (with Garland, H.) Laplacian and the discrete spectrum of an arithmetic group. (84c:58220)
- Bruggeman, Roelof W.** ★ Fourier coefficients of automorphic forms. (84b:10034)
- Cowling, Michael G.** (with Mantero, Anna Maria; Ricci, Fulvio) Pointwise estimates for some kernels on compact Lie groups. (Italian summary) (84c:43023)
- Dani, S. G.** On uniformly distributed orbits of certain horocycle flows. (84g:58068)
- Dreseler, B.** Norms of zonal spherical functions and Fourier series on compact symmetric spaces. (84j:43010)
- Eguchi, Masaaki** Some properties of Fourier transform on Riemannian symmetric spaces. (84c:43026)
(with Kumahara, Keisaku) An L^p Fourier analysis on symmetric spaces. (84c:43010)
- Garland, H.** See Borel, A., (84c:58220)
- Gaveau, Bernard** (with Laville, Guy) Fonctions holomorphes et particule chargée dans un champ magnétique uniforme. [Holomorphic functions and a charged particle in a uniform magnetic field] (84b:58041)
- Giachalone, Ermanno** Hardy's inequality for compact Lie groups. (84b:43025)

- Ginzburg, V. A. Rapidly decreasing functions and characters of real algebraic groups. (Russian) (84b:22021)
- Gorbatschik, V. V. Modifications of transitive actions of Lie groups on compact manifolds and their applications. (Russian) (84m:57025)
- Harris, Michael (with Jakobsen, Hans Plesner) Singular holomorphic representations and singular modular forms. (84b:22023)
- Hashizume, Michihiko Whittaker functions on semisimple Lie groups. (84d:22018)
- Helfer, Bernard Conditions nécessaires d'hypoanalyticité pour des opérateurs invariants à gauche homogènes sur un groupe nilpotent gradué. [Necessary conditions of hypoanalyticity for homogeneous left-invariant operators on a graded nilpotent group] (84c:35026)
- Helton, J. William See Ball, Joseph A., (84m:47046)
- Herb, Rebecca A. Discrete series characters and Fourier inversion on semisimple real Lie groups. (84b:22032)
- Hoogenboom, B. ★ Intertwining functions on compact Lie groups. I. (84m:22025)
- Ikeda, Mineo (with Mackawa, Takayoshi; Miyachi, Yoshihiko) On the form of spherically symmetric Yang-Mills fields. (84m:53077)
- Jakobsen, Hans Plesner See Harris, Michael, (84b:22023)
- Kaplan, Arnold On the geometry of groups of Heisenberg type. (84h:53063)
- Kasparov, G. G. Index of invariant elliptic operators, K -theory and representations of Lie groups. (Russian) (84g:58100)
- Kimura, Tatsuo The b -functions and holonomy diagrams of irreducible regular prehomogeneous vector spaces. (84j:32017)
- Koranyi, Adam On the injectivity of the Poisson transform. (84i:43008)
- Kottwitz, Robert E. Sign changes in harmonic analysis on reductive groups. (84i:22012)
- Kumahara, Keisaku See Eguchi, Masaaki, (84c:43010)
- Laville, Guy See Gaveau, Bernard, (84b:58041)
- Leptin, Horst (with Müller, Detlef Horst) Schranken für verschränkte Faltungsooperatoren. [Bounds for twisted convolution operators] (84f:46053)
- Lichtenstein, Woody Quadrature, scattering, and representations. (84b:43009)
- Liedl, Roman (with Netzer, N.) Was ist Produktintegration? [What is product integration?] (84c:26001)
- Lipsman, Ronald L. Type I criteria and the Plancherel formula for Lie groups with co-compact radical. (84f:22021)
- Mackawa, Takayoshi See Ikeda, Mineo; et al., (84m:53077)
- Mantero, Anna Maria See Cowling, Michael G.; et al., (84h:43023)
- Mauceri, Giancarlo Riesz means for the eigenfunction expansions for a class of hypoelliptic differential operators. (French summary) (84h:35125)
- Meyer, Yves Les opérateurs pseudo-différentiels classiques et leurs conjugués par changement de variable. [The classical pseudodifferential operators and their conjugates under a change of variable] (84j:35162)
- Miyachi, Yoshihiko See Ikeda, Mineo; et al., (84m:53077)
- Molchanov, V. F. Plancherel's formula for the pseudo-Riemannian space $SL(3, \mathbb{R})/GL(2, \mathbb{R})$. (Russian) (84h:22029)
- Müller, Detlef Horst See Leptin, Horst, (84f:46053)
- Muro, Masakazu Singular spectrums of hyperfunctions and Fourier transforms of group invariant measures on singular orbits of prehomogeneous vector spaces. I. (84i:58113)
- Netzer, N. See Liedl, Roman, (84c:26001)
- Okamoto, Kiyosato (with Sakurai, Takatoshi) On a certain class of irreducible unitary representations of the infinite-dimensional rotation group. II. (84j:22029)
- Olver, Peter J. ★ Applications of Lie groups to differential equations. (84c:58197)
- Proskurin, N. V. Expansion of automorphic functions. (Russian) (84f:10039)
- Przebinda, Tomasz Holomorphicity of a class of semigroups of measures operating on $L^p(G/H)$. (84c:47043)
- Pysiak, Leszek First-order differential G -invariant operators in G -homogeneous vector bundles. (Russian summary) (84j:58135)
- Rallis, Stephen Langlands' functoriality and the Weil representation. (84c:10025)
- Reimann, H. M. Invariant differential operators in hyperbolic space. (84i:58133)
- Ricci, Fulvio See Cowling, Michael G.; et al., (84h:43023)
- Rothschild, Linda Preis Local solvability of second order differential operators on nilpotent Lie groups. (84c:58080)
- Ruppert, Wolfgang On semitopological compactifications of nonabelian groups. (84c:43009)
- Saka, Koichi Singular integrals on a matrix space. (84h:43028)
- Sakurai, Takatoshi See Okamoto, Kiyosato, (84j:22029)
- Shahshahani, Mehرداد M. Invariant hyperbolic systems on symmetric spaces. (84m:58149)
- Smolich, V. P. The spectrum of the perturbed Laplace operator on the fundamental domain of a discrete group on the Lobachevskii plane. (Russian. English summary) (84m:58158)
- Stein, Erwin An example on the Heisenberg group related to the Lewy operator. (84c:35031)
- Strichartz, Robert S. A Poisson summation formula for integrals over quadratic surfaces. (84c:42026)
- Travaglini, Giancarlo Weyl functions and the A_p condition on compact Lie groups. (84c:43004)
- Wang, Si Lei A survey of developments in Littlewood-Paley theory. (Chinese) (84c:42016)

22E35 Analysis on p -adic Lie groups [See also 12A85.]

- Hina, Tatsuo (with Sugano, Takashi) On the local Hecke series of some classical groups over p -adic fields. 84g:22027
- Kottwitz, Robert E. Sign changes in harmonic analysis on reductive groups. 84i:22012
- Sugano, Takashi See Hina, Tatsuo, 84g:22027
- Vignéras, Marie-France Caractérisation des intégrales orbitales sur un groupe réductif p -adique. [Characterization of the orbital integrals on a reductive p -adic group] 84d:22017

secondary classifications:

- Clozel, Laurent Conjecture de Howe pour $GL(n)$. (English summary) [Howe's conjecture for $GL(n)$] (84h:22039)
- Igusa, Jun-ichi Some observations on metaplectic groups. (84i:22015)
- Karel, Martin L. Values of certain Whittaker functions on a p -adic reductive group. (84f:10033)
- Rodier, François Représentations de $GL(n, k)$ où k est un corps p -adique. [Representations of $GL(n, k)$ where k is a p -adic field] (84h:22040)

22E40 Discrete subgroups of Lie groups [See also 20Hxx and 32Nxx.]

- Bartels, Hans-Jochen Nicht-euklidische Gitterpunktprobleme und Gleichverteilung in linearen algebraischen Gruppen. [Non-Euclidean lattice point problems and uniform distribution in linear algebraic groups] 84c:22013
- Desmier, P. E. (with Patera, J.; Sharp, R. T.) Finite subgroup bases for compact Lie groups. 84c:22014
- Humphreys, James E. Arithmetic groups. 84m:22018
- Kazhdan, David On arithmetic varieties. II. 84h:22020
- Lee, Ronnie (with Schwermer, J.) The Lefschetz number of an involution on the space of harmonic cusp forms of SL_3 . 84c:22016
- Margulis, G. A. On the decomposition of discrete subgroups into amalgams. 84j:22016
- Miatello, Roberto J. Alternating sum formulas for multiplicities in $E^2(\Gamma \backslash G)$. II. 84c:22017
- Moody, R. V. (with Patera, J.; Sharp, R. T.) Character generators for elements of finite order in simple Lie groups A_1, A_2, A_3, B_2 , and G_2 . 84c:22018
- Patera, J. See Desmier, P. E.; et al., 84c:22014 and Moody, R. V.; et al., 84c:22018
- Ragunathan, M. S. Arithmetic lattices in semisimple groups. 84c:22025
- Schwermer, J. See Lee, Ronnie, 84c:22016
- Sharp, R. T. See Desmier, P. E.; et al., 84c:22014 and Moody, R. V.; et al., 84c:22018
- Spatzier, R. J. On lattices acting on boundaries of semisimple groups. 84b:22018a
- Stuhler, Ulrich On the cohomology of SL_n over rings of algebraic functions. 84h:22021
- Zimmer, Robert J. Equivariant images of projective space under the action of $SL(n, \mathbb{Z})$. 84c:22018b
- Ergodic theory, semisimple Lie groups, and foliations by manifolds of negative curvature. 84h:22022

secondary classifications:

- Apanasov, B. N. Geometrically finite groups of transformations of a space. (Russian) (84h:30075)
- Cathelineau, Jean-Louis Remarques sur l'homologie de $SO(n, \mathbb{R})$ considéré comme groupe discret. (English summary) [Remarks on the homology of $SO(n, \mathbb{R})$ viewed as a discrete group] (84c:57043)
- DeGeorge, David Lee On a theorem of Osborne and Warner. Multiplicities in the cuspidal spectrum. (84h:22027)
- Fried, David (with Goldman, William M.) Three-dimensional affine crystallographic groups. (84d:20047)
- Goldman, William M. See Fried, David, (84d:20047)
- Grunewald, Fritz J. (with Segal, Daniel) Conjugacy of subgroups in arithmetic groups. (84c:20052)
- de la Harpe, Pierre Free groups in linear groups. (84i:20050)
- Im Hof, Hans-Christoph (with Ruh, Ernst A.) The vanishing of cohomology associated to discrete subgroups of complex simple Lie groups. (84h:53051)
- Johnson, Francis E. A. Automorphisms of direct products of groups and their geometric realisations. (84g:20073)
- Kolotilina, L. Yu. Application of net subgroups to the theory of sparse matrices. (Russian) (84c:20042)
- Nichols, Peter J. Discrete groups on the sphere at infinity. (84g:58085)
- Proskurin, N. V. Expansion of automorphic functions. (Russian) (84f:10039)
- Ramakrishnan, Dinakar On the monodromy of higher logarithms. (84b:53049)
- Ratner, Marina Rigidity of horocycle flows. (84c:58062)
- Ruh, Ernst A. See Im Hof, Hans-Christoph, (84h:53051)
- Segal, Daniel See Grunewald, Fritz J., (84c:20052)
- Tetenov, A. V. Locally finite fundamental domains of discrete groups in a space. (Russian) (84i:30058)
- Zimmer, Robert J. Orbit equivalence and rigidity of ergodic actions of Lie groups. (84c:22019)

22E41 Continuous cohomology [See also 57R32, 57Txx, 58H10.]

- Blanc, Philippe (with Wigner, David) Homologie des groupes de Lie et dualité de Poincaré. [Homology of Lie groups and Poincaré duality] 84i:22013
- Erven, Joachim (with Falkowski, Bernd-Jürgen) ★ Low order cohomology and applications. 84h:22023
- Falkowski, Bernd-Jürgen See Erven, Joachim, 84h:22023
- Komy, S. R. First cohomology groups for Lie groups. (See 84m:81012)
- Wigner, David See Blanc, Philippe, 84i:22013

secondary classifications:

- Borel, A. Regularization theorems in Lie algebra cohomology. Applications. (84h:17009)
- Karpushev, S. I. Conditionally positive-definite functions on locally compact groups and the Lévy-Khinchin formula. (Russian. English summary) (84f:22019)
- Natsume, Hiroko (with Natsume, Toshikazu) On a theorem of Bott and Haefliger. (84c:58243)
- Natsume, Toshikazu See Natsume, Hiroko, (84c:58243)
- Speh, Birgit Unitary representations of $GL(n, \mathbb{R})$ with nontrivial (\mathfrak{g}, K) -cohomology. (84c:22024)

22E43 Structure and representation of the Lorentz group

- Basu, Debabrata** (with Wolf, Kurt Bernardo) The Clebsch-Gordan coefficients for the covering of the $(2+1)$ -Lorentz group in the parabolic basis. **84c:22015**
(with Wolf, Kurt Bernardo) The Clebsch-Gordan coefficients of the three-dimensional Lorentz algebra in the parabolic basis. **84g:22028**
- Berezin, A. V.** Analogue of the Gel'fand-Graev transform for the complementary series of unitary representations of the Lorentz group. (Russian. English summary) **84h:22024**
- Bizongani, Bamazi** Applications of intertwining operators: the case of Lorentz groups. (See **84d:47002**)
- Ek, Bengt** Nuclearity of the differentiable vectors of continuous spin representations. **84c:22019**
- Fluch, Wolfgang** Correction: "A subgroup of the Lorentz group" [Nederl. Akad. Wetensch. Indag. Math. **44** (1982), no. 2, 147-152; MR **83k:22034**]. (German) **84b:22019**
- Fradkin, David M.** Representation of the active Lorentz transformation for particle dynamics. **84c:22011**
- Gopala Rao, A. V.** See **Srinivasa Rao, K. N.**; et al., **84c:22020**
- Mărgulescu, George** Les représentations spinorielles du groupe conforme de l'espace de Minkowski. [The spinor representations of the conformal group of Minkowski space] **84m:22019**
- Narahari, B. S.** See **Srinivasa Rao, K. N.**; et al., **84c:22020**
- Shneerson, M. S.** Quaternionic analyticity and a realization of a representation of the proper Lorentz group. (Russian) **84h:22025**
- Srinivasa Rao, K. N.** (with Gopala Rao, A. V.; Narahari, B. S.) Special properties of the irreducible representations of the proper Lorentz group. **84c:22020**
- Wolf, Kurt Bernardo** See **Basu, Debabrata**, **84c:22015** and **84g:22028**

secondary classifications:

- Antippa, Adel F.** See **Marchildon, Louis**; et al., **(84c:83009)**
- Bergmann, Peter G.** (with Komar, Arthur) The Hamiltonian in relativistic systems of interacting particles. **(84c:22023)**
- Chandola, H. C.** See **Rajput, B. S.**; et al., **(84c:81062)**
- Everett, Allen E.** See **Marchildon, Louis**; et al., **(84c:83009)**
- Flato, M.** (with Sternheimer, D.; Fronsdal, Christian) Difficulties with massless particles? **(84m:81071)**
- Fronsdal, Christian** See **Flato, M.**; et al., **(84m:81071)**
- Hussin, V.** A remark on invariant symmetric second rank spinors and electromagnetic tensors. **(84b:53016)**
- Juárez, Manuela** (with Santander, Mariano) Turns for the Lorentz group. **(84b:83001)**
- Kaneta, Hitoshi** Irreducibility of some unitary representations of the Poincaré group with respect to the Poincaré subsemigroup. II, III. **(84h:22028)**
- Kiseľ, V. V.** The structure of matrices of relativistic P -invariant wave equations for particles with half-integer spin. (Russian. English summary) **(84m:81085)**
- Komar, Arthur** See **Bergmann, Peter G.**, **(84c:22023)**
- Marchildon, Louis** (with Antippa, Adel F.; Everett, Allen E.) Superluminal coordinate transformations: four-dimensional case. **(84c:83009)**
- Purohit, K. D.** See **Rajput, B. S.**; et al., **(84c:81062)**
- Rajput, B. S.** (with Purohit, K. D.; Chandola, H. C.) Reduction of four-dimensional vector-field in terms of standard helicity representations of Lorentz group. **(84c:81062)**
- Rideau, G.** Extensions of unitary irreducible representations of Poincaré group. Application to quantum field theory. (See **84j:81006**)
- Santander, Mariano** See **Juárez, Manuela**, **(84b:83001)**
- Shaw, Ronald** ★Linear algebra and group representations. Vol. I. **(84m:15002)**
★Linear algebra and group representations. Vol. II. **(84m:15003)**
- Shkol'nikov, P. L.** See **Strazhev, V. I.**, **(84j:81061)**
- Simon, Jacques C. H.** Nonlinear group representations and applications to nonlinear equations. (See **84j:81006**)
- Sternheimer, D.** See **Flato, M.**; et al., **(84m:81071)**
- Strazhev, V. I.** (with Shkol'nikov, P. L.) Polarization symmetries of relativistic wave equations. (Russian) **(84j:81061)**
- Verdier, Isbrev A.** The invariants of the nondegenerate representations of the group of the pseudo-orthogonal matrices $SO(p, 1)$. (See **84k:00008**)

22E45 Representations of Lie and linear algebraic groups over real fields: analytic methods [For the purely algebraic theory, see 20G05.]

- Aldaya, Victor** (with de Azcárraga, J. A.; Wolf, Kurt Bernardo) Polarization, the Bargmann transform and the harmonic oscillator. **84b:22020**
- Andler, Martin** La formule de Plancherel pour les groupes algébriques complexes unimodulaires. (English summary) [Plancherel formula for complex algebraic unimodular groups] **84c:22016**
- Arthur, James** A Paley-Wiener theorem for real reductive groups. **84c:22021**
- de Azcárraga, J. A.** See **Aldaya, Victor**; et al., **84b:22020**
- Baggett, Larry** (with Taylor, Keith F.) On asymptotic behavior of induced representations. **84j:22017**
- Baldoni Silva, M. W.** (with Barbasch, Dan) The unitary spectrum for real rank one groups. **84c:22022**
- Barbasch, Dan** See **Baldoni Silva, M. W.**, **84c:22022**
- Blackadar, Bruce E.** The regular representation of local affine motion groups. **84h:22026**
- Carrihena, José F.** (with del Olmo, Mariano A.; Santander, Mariano) Locally-operating realizations of groups and super-equivalence of factor systems. **84c:22012**
- Collingwood, David H.** Harish-Chandra modules with the unique embedding property. **84m:22020**
- DeGeorge, David Lee** On a theorem of Osborne and Warner. Multiplicities in the cuspidal spectrum. **84h:22027**
- Dinesha, K. V.** See **Nikam, R. S.**; et al., **84d:22021**

- Enright, Thomas J.** ★Lectures on representations of complex semisimple Lie groups. **84c:22026**
- Fedorovskiy, A. M.** Composition of parameters for orthogonal and unitary groups. (Russian. English summary) **84j:22018**
- Ginzburg, V. A.** Rapidly decreasing functions and characters of real algebraic groups. (Russian) **84h:22021**
- Girardi, G.** (with Sciarrino, A.; Sorba, P.) Generalized Young tableaux and Kronecker products of $SO(n)$ representations. **84g:22029**
(with Sciarrino, A.; Sorba, P.) Generalized Young tableaux and weight multiplicity for classical Lie groups. (See **84k:00008**)
- Gromov, N. A.** Casimir operators of the groups of motions of spaces of constant curvature. (Russian. English summary) **84h:22022**
- Guillemonat, Alain** On some semi-spherical representations of an Hermitian symmetric pair of the tubular type. II. Construction of the unitary representations. **84m:2201b**
On some semispherical representations of an Hermitian symmetric pair of the tubular type. Study in the symmetric algebra. **84m:2201a**
- Harris, Michael** (with Jakobsen, Hans Plesner) Singular holomorphic representations and singular modular forms. **84b:22023**
- Hashizume, Michihiko** Whittaker functions on semisimple Lie groups. **84d:22018**
- Hecht, Henryk** (with Schmid, Wilfried) On the asymptotics of Harish-Chandra modules. **84g:22030**
- Heckman, G. J.** Projections of orbits and asymptotic behavior of multiplicities for compact connected Lie groups. **84d:22019**
- Jakobsen, Hans Plesner** See **Harris, Michael**, **84b:22023**
- Kaneta, Hitoshi** Irreducibility of some unitary representations of the Poincaré group with respect to the Poincaré subsemigroup. II, III. **84h:22028**
- Kerov, S. V.** See **Vershik, A. M.**, **84g:22032**
- Khalgui, Mohamed Salah** Caractères des groupes de Lie. (English summary) [Characters of Lie groups] **84f:22020**
- Klimyk, A. U.** Representations of the groups $Sp(n, \mathbb{R})$ and $Sp(n)$ in a $U(n)$ basis. **84d:22020**
Wigner-Eckart theorem and infinitesimal operators of group representations. **84c:22023**
- Koornwinder, Tom H.** A note on the multiplicity free reduction of certain orthogonal and unitary groups. **84b:22024**
- Lipsman, Ronald L.** Type I criteria and the Plancherel formula for Lie groups with co-compact radical. **84f:22021**
- Molchanov, V. F.** Plancherel's formula for the pseudo-Riemannian space $SL(3, \mathbb{R})/GL(2, \mathbb{R})$. (Russian) **84h:22029**
- Nagura, Toshinobu** On the Jacobi differential operators associated to minimal isometric immersions of symmetric spaces into spheres. II. **84c:22027**
- Nikam, R. S.** (with Dinesha, K. V.; Sarma, C. R.) Reduction of inner-product representations of unitary groups. **84d:22021**
- del Olmo, Mariano A.** See **Carrihena, José F.**; et al., **84c:22012**
- Perroud, Marcel** Casimir operators for inhomogeneous classical groups. (See **84k:00008**)
- Pichaud, Joëlle** G -homologie et (g, K) -homologie dans la catégorie des G -modules différentiables. (English summary) [G -homology and (g, K) -homology in the category of differentiable G -modules] **84m:22028**
- Pinzon, Georges** (with Simon, Jacques C. H.) Models of nonlinear representations and examples of linearization techniques. **84m:22022**
- Popov, A. M.** Some theorems on the existence of stationary subgroups in general position. (Russian) **84m:22023**
- Rosenberg, Jonathan** L^2 -cohomology and Lie algebra cohomology. **84c:22029**
- Rossmann, W.** Tempered representations and orbits. **84m:22024**
- Santander, Mariano** See **Carrihena, José F.**; et al., **84c:22012**
- Sarma, C. R.** See **Nikam, R. S.**; et al., **84d:22021**
- Schlichtkrull, Henrik** The Langlands parameters of Flenssted-Jensen's discrete series for semisimple symmetric spaces. **84b:22030**
- Schmid, Wilfried** See **Hecht, Henryk**, **84g:22030**
- Sciarrino, A.** See **Girardi, G.**; et al., **84g:22029** and (See **84k:00008**)
- Shelstad, D.** L -indistinguishability for real groups. **84c:22017**
- Simon, Jacques C. H.** Nonlinear representations of Poincaré group and global solutions of relativistic wave equations. **84g:22031**
See also **Pinzon, Georges**, **84m:22022**
- Sorba, P.** See **Girardi, G.**; et al., **84g:22029** and (See **84k:00008**)
- Speh, Birgit** Unitary representations of $GL(n, \mathbb{R})$ with nontrivial (g, K) -cohomology. **84c:22024**
- (Sundar, Vajayanthi)** See **Enright, Thomas J.**, **84c:22026**
- Taylor, Keith F.** See **Baggett, Larry**, **84j:22017**
- Terras, Audrey** Analysis on positive matrices as it might have occurred to Fourier. **84b:22025**
- Trombi, P. C.** The role of differential equations in the Plancherel theorem. (See **84c:22001**)
Harmonic analysis of $\mathcal{O}^p(G; F)$ ($1 \leq p < 2$). **84c:22030**
- Vershik, A. M.** (with Kerov, S. V.) Characters and factor-representations of the infinite unitary group. (Russian) **84g:22032**
- Wang, S. P.** On the Mautner phenomenon and groups with property (T). **84g:22033**
- Williams, Floyd L.** Vanishing theorems for type $(0, q)$ cohomology of locally symmetric spaces. II. **84h:22031**
- Wolf, Kurt Bernardo** See **Aldaya, Victor**; et al., **84b:22020**
- Zaitsev, A. A.** Equivalence of holomorphically induced representations of Lie groups with abelian normal subgroups. (Russian) **84j:22019**
- Zuckerman, Gregg J.** Noncompact groups and irreducible representations. (See **84k:00008**)

secondary classifications:

- Aldinger, R. R.** See **Bohm, A.**, (See **84k:00008**)
- Anderson, Greg W.** An Archimedean analogue of the root number. (See **84a:10004**)

- Antoine, Jean-Pierre (with Mathot, F.) Regular operators on partial inner product spaces. (French summary) (84m:47049)
- Bacławski, Kenneth Recursive algorithms for unitary and symplectic group representations. (84g:22003)
- Bais, F. A. (with Sasaki, Ryu) On the complete integrability of the static axially symmetric self-dual gauge field equations for an arbitrary group. (84i:58052)
- Bohm, A. (with Aldinger, R. R.) Examples of group contraction. (See 84k:00008)
- Cathelineau, Jean-Louis Remarques sur l'homologie de $SO(n, \mathbb{R})$ considérée comme groupe discret. (English summary) [Remarks on the homology of $SO(n, \mathbb{R})$ viewed as a discrete group] (84a:57043)
- Chao, Wen Min Fourier transforms of the stabilized invariant integrals. (84j:22014)
- Chiney, S. P. Extended Jacobi polynomials and group representations. (84b:33014)
- Clozel, Laurent Changement de base pour les représentations tempérées des groupes réductifs réels. [Base change for tempered representations of real reductive groups] (84j:22015)
- Connes, Alain (with Moscovici, Henri) L^2 -index theory on homogeneous spaces and discrete series representations. (84c:58076)
(with Moscovici, Henri) The L^2 -index theorem for homogeneous spaces of Lie groups. (84f:58108)
(with Moscovici, Henri) Invariant elliptic equations and discrete series representations. (See 84m:46003)
- Dube, Mahesh See Jain, Rajendra Nath, (84m:33023)
- Fegan, H. D. Special function potentials for the Laplacian. (84f:58107)
- Flato, M. (with Sternheimer, D.) Deformations of Poisson brackets, separate and joint analyticity in group representations, nonlinear group representations and physical applications. (See 84c:22001)
- Folland, G. B. (with Stein, Erwin) \star Hardy spaces on homogeneous groups. (84h:43027)
- Guillemin, Victor (with Sternberg, Shlomo) Homogeneous quantization and multiplicities of group representations. (84d:58034)
- Heble, M. P. The one-dimensional diffusion process and unitary representations of \mathbb{R}^n . (84j:60088)
- Hecht, Henryk (with Schmid, Wilfried) Characters, asymptotics and n -homology of Harish-Chandra modules. (84c:22026)
- Hurt, Norman E. \star Geometric quantization in action. (84f:58053)
- Imai, Kaori (with Terras, Audrey) The Fourier expansion of Eisenstein series for $GL(3, \mathbb{Z})$. (84d:10033)
- Jain, Rajendra Nath (with Dube, Mahesh) On Laguerre polynomials of two variables from the viewpoint of Lie algebra. (Hindi. English summary) (84m:33023)
- Klimyk, A. U. Infinitesimal operators for representations of complex Lie groups and Clebsch-Gordan coefficients for compact groups. (84c:22015)
- Knapp, A. W. (with Zuckerman, Gregg J.) Classification of irreducible tempered representations of semisimple groups. (84h:22034a)
(with Zuckerman, Gregg J.) Classification of irreducible tempered representations of semisimple groups. II. (84h:22034b)
- Lichtenstein, Woody Quadrature, scattering, and representations. (84b:43009)
- Malliavin, Paul Sur certaines intégrales stochastiques oscillantes. (English summary) [Some stochastic oscillatory integrals] (84c:60077)
- Mathot, F. See Antoine, Jean-Pierre, (84m:47049)
- Moscovici, Henri See Connes, Alain, (84c:58076); (84f:58108) and (See 84m:46003)
- Ouchi, Moto Action of semigroups on Borel spaces and von Neumann algebras of groupoids of type II₁. (84h:46092)
- Sasaki, Ryu See Bais, F. A., (84i:58052)
- Schmid, Wilfried See Hecht, Henryk, (84c:22026)
- Semenov-Tyan-Shanskii, M. A. Group-theoretical aspects of completely integrable systems. (See 84c:32001)
- Sitaram, B. R. (with Tripathy, K. C.) Geometric quantization and UIRs of semisimple Lie groups. II. Discrete series. (84c:22038)
- Stein, Erwin See Folland, G. B., (84h:43027)
- Sternberg, Shlomo See Guillemin, Victor, (84d:58034)
- Sternheimer, D. See Flato, M., (See 84c:22001)
- Suslov, S. K. Matrix elements of Lorentz boosts and the orthogonality of Hahn polynomials on a contour. (84m:33024)
- Terras, Audrey Non-Euclidean harmonic analysis. (84b:10034)
See also Imai, Kaori, (84d:10033)
- Tripathy, K. C. See Sitaram, B. R., (84c:22038)
- Trombi, P. C. Invariant harmonic analysis on split rank one groups with applications. (84k:22015)
- Werth, J.-E. Integrability for representations appearing in geometric pre-quantization. (84d:58038)
- Wolf, Kurt Bernardo Canonical transformations to phase variables in quantum oscillator systems. A group theoretic solution. (Spanish summary) (84c:81023)
- Zuckerman, Gregg J. See Knapp, A. W., (84h:22034a) and (84h:22034b)
- 22E46 Semisimple Lie groups and their representations**
- Aguirre, M. (with Buzzo, R.; Iommi Amunátegui, G.) A closed general reduction formula for $SU_n \rightarrow Sp_n$. 84c:22018
- Amar, V. (with Dozzio, U.; Oleari, C.) An algorithm for computing inner multiplicities of orthogonal groups. (Italian and Russian summaries) 84d:22022a
(with Dozzio, U.; Oleari, C.) Erratum: "An algorithm for computing inner multiplicities of orthogonal groups". 84d:22022b
- Atiyah, Michael (with Schmid, Wilfried) A geometric construction of the discrete series for semisimple Lie groups. (See 84k:22001)
- Bodine, C. (with Gaskell, R. W.) Generating functions for IR multiplicities. 84g:22034
- Buzzo, R. See Aguirre, M.; et al., 84c:22018
- Cartwright, Donald I. L_p -norms of characters on the exceptional compact Lie groups. (Italian summary) 84i:22014
- Cohen, Arjeh M. See Koornwinder, Tom H.; et al., 84h:22035
- Dozzio, U. See Amar, V.; et al., 84d:22022a and 84d:22022b
- Duflo, Michel Représentations unitaires des groupes semi-simples complexes. (English summary) [Unitary representations of complex semisimple groups] 84h:22026
- Farmer, Thomas A. The dual of the nilradical of the parabolic subgroups of symplectic groups. 84c:22025
- Gaskell, R. W. See Bodine, C., 84g:22034
- Goncharov, A. B. Constructions of Weyl representations of some simple Lie algebras. (Russian) 84d:22023
- Hannabuss, K. S. On a property of highest weight vectors. 84j:22020
- Hecht, Henryk (with Schmid, Wilfried) Characters, asymptotics and n -homology of Harish-Chandra modules. 84c:22026
- Helmink, A. G. See Koornwinder, Tom H.; et al., 84h:22035
- Herb, Rebecca A. Fourier inversion and the Plancherel theorem for semisimple real Lie groups. 84c:22013
Discrete series characters and Fourier inversion on semisimple real Lie groups. 84h:22032
- Hoogenboom, B. \star Intertwining functions on compact Lie groups. I. 84m:22025
See also Koornwinder, Tom H.; et al., 84h:22035
- Iommi Amunátegui, G. See Aguirre, M.; et al., 84c:22018
- Ishitoya, Kiminao Subgroups of maximal rank of compact exceptional Lie groups. 84h:22033
- Khovanova, T. G. Models of representations and generalized Clifford algebras. (Russian) 84d:22024
- King, Ronald Curtis (with Wybourne, Brian G.) Some noteworthy spin plethysms. 84d:22031
- Klimyk, A. U. Infinitesimal operators for representations of complex Lie groups and Clebsch-Gordan coefficients for compact groups. 84c:22015
- Knapp, A. W. (with Zuckerman, Gregg J.) Classification of irreducible tempered representations of semisimple groups. 84h:22034a
(with Zuckerman, Gregg J.) Classification of irreducible tempered representations of semisimple groups. II. 84h:22034b
(with Speh, Birgit) Irreducible unitary representations of $SU(2, 2)$. 84j:22021
- Koornwinder, Tom H. (with Hoogenboom, B.; Cohen, Arjeh M.; de Vries, Jan; Helmink, A. G.) \star The structure of real semisimple Lie groups. 84h:22035
The representation theory of $SL(2, \mathbb{R})$, a noninfinitesimal approach. 84c:22016
- Marbes, Heinz On the spectra of compact locally symmetric Riemannian manifolds. 84d:22025
On the spectra of $\Gamma \backslash SL(2, \mathbb{R})/SO(2)$ and $\Gamma \backslash SL(2, \mathbb{C})/SU(2)$. 84d:22026
- Midorikawa, Hisaichi Clebsch-Gordan coefficients for a tensor product representation $Ad \otimes \pi$ of a maximal compact subgroup of real semisimple Lie group. 84c:22017
- Mikami, Shunsuke On the characters of the averaged discrete series representations of semisimple Lie groups. 84g:22035
- Miličić, Dragan (with Primc, Mirko) On the irreducibility of unitary principal series representations. 84c:22019
- Oleari, C. See Amar, V.; et al., 84d:22022a and 84d:22022b
- Primc, Mirko See Miličić, Dragan, 84c:22019
- Rader, Cary Invariant polynomials and zonal spherical functions. 84g:22036
- Rawnsley, J. H. (with Schmid, Wilfried; Wolf, Joseph A.) Singular unitary representations and indefinite harmonic theory. 84j:22022
- Sano, Shigeru The Plancherel formula for $Sp(n, \mathbb{R})$. 84c:22014
- Schlichtkrull, Henrik A series of unitary irreducible representations induced from a symmetric subgroup of a semisimple Lie group. 84d:22027
- Schmid, Wilfried Singular unitary representations and indefinite harmonic theory. (See 84j:22022)
- See also Rawnsley, J. H.; et al., 84j:22022; Hecht, Henryk, 84c:22026 and Atiyah, Michael, (See 84k:22001)
- Seligman, T. H. (with Sharp, R. T.) Internal labels of degenerate representations. 84f:22022
- Sharp, R. T. See Seligman, T. H., 84f:22022
- Simon, Jacques C. H. Nonlinear group representations and applications to nonlinear equations. (See 84j:81006)
- Speh, Birgit See Knapp, A. W., 84j:22021
- Tirao, Juan A. A restriction theorem for semisimple Lie groups of rank one. 84k:22027
- Trofimov, V. V. Semi-invariants of the coadjoint representation of Borel subalgebras of simple Lie algebras. (Russian) 84m:22026
- Unterberger, André (with Unterberger, Julianne) La série discrète de $SL(2, \mathbb{R})$ et les opérateurs pseudo-différentiels sur une demi-droite. (English summary) [The discrete series of $SL(2, \mathbb{R})$ and pseudodifferential operators on the half line] 84g:22037
- Unterberger, Julianne See Unterberger, André, 84g:22037
- Varadarajan, V. S. Infinitesimal theory of representations of semisimple Lie groups. (See 84k:22001)
- Verdier, Isbrev A. The invariants of the nondegenerate representations of the group of the pseudo-orthogonal matrices $SO(p, 1)$. (See 84k:00008)
- Vergne, Michèle A Poisson-Plancherel formula for semisimple Lie groups. 84d:22028
- Vogan, David A., Jr. Irreducible characters of semisimple Lie groups. IV. Character-multiplicity duality. 84h:22037
Irreducible characters of semisimple Lie groups. III. Proof of Kazhdan-Lusztig conjecture in the integral case. 84h:22036
- de Vries, Jan See Koornwinder, Tom H.; et al., 84h:22035
- Williams, Floyd L. Unitarizable highest weight modules of the conformal group. 84h:22027
- Wolf, Joseph A. Foundations of representation theory for semisimple Lie groups. (See 84k:22001)
- See also Rawnsley, J. H.; et al., 84j:22022
- Wybourne, Brian G. See King, Ronald Curtis, 84d:22031
- Zet, Gh. On reduction of the representations from d_1 -series of $SU(2, 2)$ to the maximal compact subgroup. (Romanian summary) 84m:22027
- Zuckerman, Gregg J. See Knapp, A. W., 84h:22034a and 84h:22034b
- secondary classifications:
- Arthur, James A Paley-Wiener theorem for real reductive groups. (84k:22021)
- Borel, A. Regularization theorems in Lie algebra cohomology. Applications. (84h:17009)

- Chao, Wen Min Fourier inversion and Plancherel formula for $Sp(2, \mathbb{R})$. (84b:22017)
- Comes, Alain (with Moscovici, Henri) The L^2 -index theorem for homogeneous spaces of Lie groups. (84f:58108)
- Delorme, P. Théorème de type Paley-Wiener pour les groupes de Lie semi-simples réels avec une seule classe de conjugaison de sous groupes de Cartan. (English summary) [A theorem of Paley-Wiener type for the real semisimple Lie groups with a single conjugacy class of Cartan subgroups] (84g:22024)
- Grindlinger, O. M. Interpretations of the exceptional simple Lie groups and their parabolic subgroups. (Russian) (84m:51014)
- Hecht, Henryk (with Schmid, Wilfried) On the asymptotics of Harish-Chandra modules. (84g:22030)
- Imai, Takao (with Yokota, Ichiro) Another definition of exceptional simple Lie groups of type E_{7-25} and E_{7-133} . (84b:22029)
- (with Yokota, Ichiro) Simply connected compact simple Lie group E_{7-133} of type E_7 . (84j:22027)
- (with Yokota, Ichiro) Simply connected compact simple Lie group E_{7-248} of type E_7 . (84j:22028)
- Kaneda, Eiji The spectra of 1-forms on simply connected compact irreducible Riemannian symmetric spaces. (84b:58224)
- Kimura, Tatsuo Remark on some combinatorial construction of relative invariants. (84g:20078)
- Klein, Abel (with Landau, Lawrence J.) From the Euclidean group to the Poincaré group via Osterwalder-Schrader positivity. (84g:22043)
- Lachaud, Gilles Scattering theory and automorphic functions. (See 84j:81006)
- Landau, Lawrence J. See Klein, Abel, (84g:22043)
- Magnin, L. Analyticity and Lie generators. (84d:22033)
- Miatello, Roberto J. Alternating sum formulas for multiplicities in $\hat{E}^2(\Gamma \backslash G)$. II. (84c:22017)
- Molchanov, V. F. Harmonic analysis on pseudo-Riemannian symmetric spaces of the group $SL(2, \mathbb{R})$. (Russian) (84c:43006)
- Moscovici, Henri See Comes, Alain, (84f:58108)
- Schlichtkrull, Henrik The Langlands parameters of Flensted-Jensen's discrete series for semisimple symmetric spaces. (84d:22030)
- Schmid, Wilfried See Hecht, Henryk, (84g:22030)
- Sitaram, B. R. (with Tripathy, K. C.) Geometric quantization and UIRs of semisimple Lie groups. III. Principal and supplementary series. (84a:22039)
- Tripathy, K. C. See Sitaram, B. R., (84a:22039)
- Tsukamoto, Chiaki Spectra of Laplace-Beltrami operators on $SO(n+2)/SO(2) \times SO(n)$ and $Sp(n+1)/Sp(1) \times Sp(n)$. (84b:58108)
- Yokota, Ichiro See Imai, Takao, (84j:22027); (84j:22028) and (84k:22029)

22E47 Representations of Lie and real algebraic groups: algebraic methods (Verma modules, etc.) [See also 17B35.]

- Barbasch, Dan (with Vogan, David A., Jr.) Primitive ideals and orbital integrals in complex exceptional groups. (84b:22038)
- Charbonnel, Jean-Yves Sur les orbites de la représentation coadjointe. [On the orbits of the coadjoint representation] (84d:22029)
- Gaskell, R. W. (with Sharp, R. T.) G_2 van der Waerden invariant. (84b:22028)
- Polynomials in the components of a single $SU(2)$ tensor—a new recursion technique. (84d:22030)
- Gruber, Bruno Finite-dimensional representations of the Euclidean group in the plane. (84c:22020)
- Kato, Shin-ichi Irreducibility of principal series representations for Hecke algebras of affine type. (84b:22029)
- Sartori, G. A theorem on orbit structures (strata) of compact linear Lie groups. (84c:22028)
- Sharp, R. T. See Gaskell, R. W., (84b:22028)
- Vogan, David A., Jr. See Barbasch, Dan, (84b:22038)

secondary classifications:

- (Bernstein, Joseph N.) See Segal, Graeme, (84b:14029)
- Bouaziz, Abderrazak Sur les représentations induites des algèbres de Lie semisimples complexes. (English summary) [On the induced representations of complex semisimple Lie algebras] (84f:17008)
- Collingwood, David H. Harish-Chandra modules with the unique embedding property. (84m:22020)
- Felt, Walter (with Zuckerman, Gregg J.) Reality properties of conjugacy classes in spin groups and symplectic groups. (84f:20052)
- (Gelfand, I. M.) See Segal, Graeme, (84b:14029)
- (Gelfand, S. I.) See Segal, Graeme, (84b:14029)
- Gustafson, R. A. (with Milne, S. C.) Schur functions, Good's identity, and hypergeometric series well poised in $SU(n)$. (84m:05013)
- Joseph, A. The Enright functor on the Bernstein-Gelfand-Gelfand category \mathcal{O} . (84j:17005)
- Liedl, Roman Noncommutative calculus and Pilgerschritt transformation. (84a:22021)
- Lulek, T. See Mucha, M., (84b:20007)
- Lusztig, George (with Vogan, David A., Jr.) Singularities of closures of K -orbits on flag manifolds. (84b:14060)
- Milne, S. C. See Gustafson, R. A., (84m:05013)
- Mucha, M. (with Lulek, T.) Permutational symmetry of Clebsch-Gordan coefficients for the metacyclic groups. (84b:20007)
- Neretin, Yu. A. Unitary representations with a higher weight of a group of diffeomorphisms of a circle. (Russian) (84k:58047)
- Netzer, N. (with Reiberger, H.) On the convergence of iterated Pilgerschritt transformation in nilpotent Lie groups. (84b:22014)
- On the convergence of the iterated Pilgerschritt transformation. (84a:22022)
- Reiberger, H. See Netzer, N., (84b:22014)

- Segal, Graeme An introduction to the paper: "Schubert cells, and the cohomology of the spaces G/P " [Uspekhi Mat. Nauk 28 (1973), no. 3(171), 3-26; MR 55 #2941] by I. N. Bernstein [Joseph N. Bernstein], I. M. Gelfand and S. I. Gelfand. (84b:14029)
- Vogan, David A., Jr. Irreducible characters of semisimple Lie groups. IV. Character-multiplicity duality. (84b:22037)
- Irreducible characters of semisimple Lie groups. III. Proof of Kazhdan-Lusztig conjecture in the integral case. (84b:22036)
- See also Lusztig, George, (84b:14060)
- Zuckerman, Gregg J. See Felt, Walter, (84f:20052)

22E50 Representations of Lie and linear algebraic groups over local fields

- Casselman, W. A new nonunitarity argument for p -adic representations. (84c:22018)
- Clozel, Laurent Conjecture de Howe pour $GL(n)$. (English summary) [Howe's conjecture for $GL(n)$] (84b:22039)
- Gérardin, Paul Facteurs locaux des algèbres simples de rang 4. I. [Local factors of the simple algebras of rank 4. I] (84f:22023)
- Harris, Michael p -adic measures for spherical representations of reductive p -adic groups. (84d:22031)
- Igusa, Jun-ichi Some observations on metaplectic groups. (84c:22015)
- Kato, Shin-ichi Spherical functions and a q -analogue of Kostant's weight multiplicity formula. (84b:22030)
- Keys, C. David Reducibility of unramified unitary principal series representations of p -adic groups and class-1 representations. (84f:22024)
- On the decomposition of reducible principal series representations of p -adic Chevalley groups. (84d:22032)
- Lusztig, George Some examples of square integrable representations of semisimple p -adic groups. (84j:22023)
- Morita, Yasuo (with Murase, Atsushi) Analytic representations of SL_2 over a p -adic number field. (84c:22019)
- Murase, Atsushi See Morita, Yasuo, (84c:22019)
- Petrov, E. E. Harmonic analysis on the p -adic sphere. (Russian) (84m:22028)
- Piatetski-Shapiro, Ilya Iosifovitch (with Soudry, David) L and ϵ factors for $GSp(4)$. (84m:22029)
- Rodier, François Modèles pour les représentations du groupe $Sp(4, k)$ où k est un corps local. [Models for the representations of $Sp(4, k)$ where k is a local field] (84m:22030)
- Représentations de $GL(n, k)$ où k est un corps p -adique. [Representations of $GL(n, k)$ where k is a p -adic field] (84b:22040)
- Soudry, David See Piatetski-Shapiro, Ilya Iosifovitch, (84m:22029)
- Tadić, M. The dual space of reductive groups over local fields. (See 84a:20002)
- The C^* -algebra of $SL(2, k)$. (Serbo-Croatian summary) (84g:22038)
- Tsuchikawa, Masao The Plancherel transform on $SL_2(k)$ and its application to the decomposition of tensor products of irreducible representations. (84c:22020)
- Zellevinskii, A. V. The p -adic analogue of the Kazhdan-Lusztig conjecture. (Russian) (84g:22039)

secondary classifications:

- Blackadar, Bruce E. The regular representation of local affine motion groups. (84b:22026)
- Bushnell, Colin J. (with Fröhlich, Albrecht) ★ Gauss sums and p -adic division algebras. (84m:12017)
- Drinfel'd, V. G. Two-dimensional l -adic representations of the fundamental group of a curve over a finite field and automorphic forms on $GL(2)$. (84c:12011)
- Fröhlich, Albrecht See Bushnell, Colin J., (84m:12017)
- Gérardin, Paul Relèvement des représentations du groupe $GL(n)$ sur un corps fini, d'après T. Shintani. [Lifting of representations of $GL(n)$ over a finite field, following T. Shintani] (84b:20005)
- Henniart, Guy Les conjectures de Langlands locales pour $GL(n)$. (English summary) [The local Langlands conjectures for $GL(n)$] (See 84d:10005)
- Igusa, Jun-ichi Multiplicity one theorem and problems related to Jacobi's formula. (84b:14052)
- Monasse, Denis Théorie de Hecke pour $GL(3)$. [Hecke theory for $GL(3)$] (84b:10038)
- Müller, Werner ★ Signature defects of cusps of Hilbert modular varieties and values of L -series at $s=1$. (84j:10037)
- Petrov, E. E. The principal series of representations of the group $SL(2, A)$ over a finite local commutative principal ideal ring A . (Russian) (84b:20049)
- Piatetski-Shapiro, Ilya Iosifovitch ★ Complex representations of $GL(2, K)$ for finite fields K . (84m:20046)
- Rogawski, Jonathan D. Representations of $GL(n)$ and division algebras over a p -adic field. (84j:12018)
- Rubenthaler, Hubert Espaces préhomogènes de type parabolique. [Prehomogeneous spaces of parabolic type] (84j:17009)
- Wang, Jian Pan Sheaf cohomology on G/B and tensor products of Weyl modules. (84b:20032)
- Wang, S. P. On the Mautner phenomenon and groups with property (T). (84g:22033)
- Yoshida, Hiroyuki Weil's representations and Siegel's modular forms. (84j:10035)

22E55 Representations of Lie and linear algebraic groups over global fields and adèle rings [See also 20G05.]

- Flicker, Yuval Z. Outer automorphisms and instability: the adjoint lifting from $SL(2)$ to $PGL(3)$. (See 84b:10005)
- Stable and labile base change for $U(2)$. (84j:17006)
- Morris, L. E. Eisenstein series for reductive groups over global function fields. I. The cusp form case. (84j:22024a)
- Eisenstein series for reductive groups over global function fields. II. The general case. (84j:22024b)

secondary classifications:

- Arthur, James Automorphic representations and number theory. (84c:12012)
The trace formula in invariant form. (84a:10031)
Donkin, Stephen A note on decomposition numbers of reductive algebraic groups. (84c:20017)
Flicker, Yuval Z. ★ The trace formula and base change for $GL(3)$. (84d:10035)
Howe, Roger (with Piatetski-Shapiro, Ilya Iosifovitch) Some examples of automorphic forms on Sp_4 . (84m:10019)
Kottwitz, Robert E. Rational conjugacy classes in reductive groups. (84k:20020)
Monasse, Denis Théorie de Hecke pour $GL(3)$. [Hecke theory for $GL(3)$] (84h:10038)
Panchishkin, A. A. Modular forms. (Russian) (84a:10022)
Piatetski-Shapiro, Ilya Iosifovitch Cuspidal automorphic representations associated to parabolic subgroups and Ramanujan conjecture. (See 84a:10004)
On the Saito-Kurokawa lifting. (84c:10038)
See also Howe, Roger, (84m:10019)
Spaltenstein, Nicolas Caractères unipotents de ${}^3D_4(F_q)$. [Unipotent characters of ${}^3D_4(F_q)$] (84k:20018)

22E60 Lie algebras of Lie groups (For the algebraic theory of Lie algebras, see 17Bxx.)

- Beau, Daniel Generalized Hooke groups and the mass-spectrum problem. 84h:22041
Bincer, Adam M. Missing label operators in the reduction $O(p) \downarrow O(p-2) \times O(2)$. 84j:22025
Cahen, Michel (with Gutt, Simone) Produits ★ sur les orbites des groupes semi-simples de rang 1. (English summary) [Star products on the orbits of the semisimple groups of rank 1] 84j:22026
van Dijk, G. Orbits on real affine symmetric spaces. I. The infinitesimal case. 84h:22042
Günaydin, M. (with Sağcıoğlu, Cihan) Oscillator-like unitary representations of noncompact groups with a Jordan structure and the noncompact groups of supergravity. 84g:22040
Gutt, Simone See Cahen, Michel, 84j:22026
Imai, Takao (with Yokota, Ichiro) Another definition of exceptional simple Lie groups of type $E_{7(-25)}$ and $E_{7(-133)}$. 84c:22029
(with Yokota, Ichiro) Simply connected compact simple Lie group $E_{7(-133)}$ of type E_7 . 84j:22027
(with Yokota, Ichiro) Simply connected compact simple Lie group $E_{8(-248)}$ of type E_8 . 84j:22028
Magnin, L. Analyticity and Lie generators. 84d:22033
Rossmann, W. Limit orbits in reductive Lie algebras. 84c:22021
Sağcıoğlu, Cihan See Günaydin, M., 84g:22040
Wu, Alfred C. T. Cartan-Gram determinants for the simple Lie groups. 84f:22025
Yokota, Ichiro See Imai, Takao, 84j:22027; 84j:22028 and 84c:22029

secondary classifications:

- Askey, Richard A q -beta integral associated with BC_1 . (84h:17006b)
Borovskii, Yu. V. Two-sided closed ideals in the superenvelope of a semisimple Lie algebra. (Russian) (84g:17012)
Fomenko, A. T. Complete integrability of some classical Hamiltonian systems. (Russian) (84c:58115)
Algebraic structure of certain integrable Hamiltonian systems. (Russian) (84j:58061)
Green, H. S. Colour algebras and generalized statistics. (See 84c:00008)
Guillemonat, Alain On some semi-spherical representations of an Hermitian symmetric pair of the tubular type. II. Construction of the unitary representations. (84m:22021b)
On some semispherical representations of an Hermitian symmetric pair of the tubular type. Study in the symmetric algebra. (84m:22021a)
Imai, Takao (with Yokota, Ichiro) Noncompact simple Lie group $E_{7(-25)}$ of type E_7 . (84f:22017a)
(with Yokota, Ichiro) Noncompact simple Lie group $E_{8(-248)}$ of type E_8 . (84f:22017b)
Jantzen, Robert T. Generalized quaternions and spacetime symmetries. (84h:83021)
Kuznetsov, M. I. Witt algebra and linear groups. (84k:17011)
Le Ngok Teuen Commutative sets of functions on orbits in general position of finite-dimensional Lie algebras. (Russian) (84m:58056)
Macdonald, I. G. Some conjectures for root systems. (84h:17006a)
Mikami, Kentaro Coadjoint equivariance of momentum mapping. (84c:58098)
Another proof of existence of momentum mappings. (84c:58099)
Nagy, P. T. On the tangency of degree k of orbits of 1-parameter subgroups. (84c:53046)
Olive, D. I. (with Turok, Neil) The symmetries of Dynkin diagrams and the reduction of Toda field equations. (84m:58060)
Ofshanskii, M. A. (with Perelomov, A. M.) Quantum integrable systems related to Lie algebras. (84k:81007)
Perelomov, A. M. See Ofshanskii, M. A., (84k:81007)
Perroud, Marcel The fundamental invariants of inhomogeneous classical groups. (84j:22032)
Rubenthaler, Hubert Espaces préhomogènes de type parabolique. [Prehomogeneous spaces of parabolic type] (84j:17009)
Rusinek, Jan A theorem on the integration of a Lie algebra representation. (Russian summary) (84i:17010)
Shatkhani, L. A. Poisson algebras, invariant with respect to inner automorphisms of Lie groups. (Russian) (84c:58087)
Shmel'ev, G. S. Classification of indecomposable finite-dimensional representations of the Lie superalgebra $W(0,2)$. (Russian) (84j:17002)
Sokolov, S. N. Modifications of forms of relativistic dynamics related to the Poincaré transformations. (Russian. English summary) (84k:81162)
Szenthe, J. On symplectic actions of compact Lie groups with isotropy subgroups of maximal rank. (84c:58089)
Turok, Neil See Olive, D. I., (84m:58060)
Williams, Floyd L. Unitarizable highest weight modules of the conformal group. (84h:22027)
Winter, David J. A combinatorial theory of symmetry and applications to Lie algebras. (84j:17008)
Yan, Zhi Da Applications of representation theory of Lie groups to differential geometry. (84j:53061)
Yau, Stephen S.-T. Continuous family of finite-dimensional representations of a solvable Lie algebra arising from singularities. (84c:58043)
Yokota, Ichiro See Imai, Takao, (84f:22017a) and (84f:22017b)
Zaitsev, A. A. Equivalence of holomorphically induced representations of Lie groups with abelian normal subgroups. (Russian) (84j:22019)

22E65 Infinite-dimensional Lie groups and their Lie algebras [See also 17B65, 58B25, 58H05.]

- Banaszczyk, Wojciech On the existence of exotic Banach-Lie groups. 84c:22030
de la Harpe, Pierre The real symplectic group of a Hilbert space is essentially simple. 84g:22041
Classical groups and classical Lie algebras of operators. 84d:22034
Kamefuchi, S. See Ohnuki, Y., 84c:22032
Kirillov, A. A. Unitary representations of the group of diffeomorphisms and of some of its subgroups. 84m:22031
Kobayashi, Osamu See Omori, Hideki; et al., 84h:22044
Maeda, Yoshiaki See Omori, Hideki; et al., 84h:22044
Nessonov, N. I. Description of representations of the group of invertible operators in a Hilbert space, containing the identity representation of the unitary subgroup. (Russian) 84f:22026
Ohnuki, Y. (with Kamefuchi, S.) Supersymmetry: generalized Fermi-like and Bose-like numbers. 84c:22032
Okamoto, Kiyosato (with Sakurai, Takatoshi) On a certain class of irreducible unitary representations of the infinite-dimensional rotation group. II. 84j:22029
Ofshanskii, G. I. Unitary representations of infinite-dimensional pairs (G, K) and the formalism of R. Howe. (Russian) 84h:22043
Omori, Hideki (with Maeda, Yoshiaki; Yoshioka, Akira; Kobayashi, Osamu) On regular Fréchet-Lie groups. IV. Definition and fundamental theorems. 84h:22044
Pisanelli, Domingos The second Lie theorem in the group $Gh(n, C)$. 84a:22033
Sakurai, Takatoshi Class one representations of the infinite-dimensional unitary group. 84i:22017
See also Okamoto, Kiyosato, 84j:22029
Segal, Graeme Two papers on representation theory. 84c:22021
Sitaram, B. R. (with Tripathy, K. C.) Representations of graded Lie groups. 84c:22022
Tripathy, K. C. See Sitaram, B. R., 84c:22022
Yang, Ya Li On the quasi-invariant measures on a commutative Lie group and the corresponding topology. (Chinese. English summary) 84j:22030
Yoshioka, Akira See Omori, Hideki; et al., 84h:22044

secondary classifications:

- Albeverio, Sergio (with Hoegh-Krohn, Raphael) Diffusions, quantum fields and groups of mappings. (84a:81014)
Brodimas, G. N. (with Jannussis, A. D.; Sourlas, D.; Zisis, V.; Pouloupoulos, P.) Para-Bose operators. (84d:17017)
Carey, A. L. (with Hurst, C. A.; O'Brien, D. M.) Automorphisms of the canonical anticommutation relations and index theory. (84c:81022)
Dalet'skii, Yu. L. Stochastic differential geometry. (Russian) (84j:58132)
Drinfel'd, V. G. Hamiltonian structures on Lie groups, Lie bialgebras and the geometric meaning of classical Yang-Baxter equations. (Russian) (84i:58044)
Écalle, Jean ★ Les fonctions résurgentes. Tome II. (French) [Resurgent functions. Vol. II] (84h:30077b)
Erven, Joachim (with Falkowski, Bernd-Jürgen) ★ Low order cohomology and applications. (84h:22023)
Falkowski, Bernd-Jürgen See Erven, Joachim, (84h:22023)
Fedoseev, I. A. (with Leznov, A. N.; Sav'ev, M. V.) Heisenberg operators of a generalized Toda lattice. (84b:81028)
Gruber, Bruno (with Santhanam, T. S.) Indecomposable representations for para-Bose algebra. (84f:81039)
Hatzembuher, James Decomposition of elements of the automorphism group of a torus action. II. (84j:57029)
Hoegh-Krohn, Raphael See Albeverio, Sergio, (84a:81014)
Hurst, C. A. See Carey, A. L.; et al., (84c:81022)
Jannussis, A. D. See Brodimas, G. N.; et al., (84d:17017)
Kerov, S. V. See Vershik, A. M., (84g:22032)
Leslie, J. A. A Lie group structure for the group of analytic diffeomorphisms. (84f:58023)
Leznov, A. N. See Fedoseev, I. A.; et al., (84b:81028)
Lukierski, Jerzy Composite gravity and composite supergravity from nonlinear realizations of supersymmetry. (84b:83051)
Neretin, Yu. A. Unitary representations with a higher weight of a group of diffeomorphisms of a circle. (Russian) (84c:58047)
O'Brien, D. M. See Carey, A. L.; et al., (84c:81022)
Pouloupoulos, P. See Brodimas, G. N.; et al., (84d:17017)
Pressley, A. N. The energy flow on the loop space of a compact Lie group. (84f:58100)
Prokhorov, L. V. (with Sazonov, E. A.) Dynamical systems with a finite number of Grassmann variables. (Russian. English summary) (84a:58043)
Santhanam, T. S. See Gruber, Bruno, (84f:81039)
Sav'ev, M. V. See Fedoseev, I. A.; et al., (84b:81028)
Sazonov, E. A. See Prokhorov, L. V., (84a:58043)
Sourlas, D. See Brodimas, G. N.; et al., (84d:17017)
Vershik, A. M. (with Kerov, S. V.) Characters and factor-representations of the infinite unitary group. (Russian) (84g:22032)

Xia, Dao Xing On the representations of the local current algebra and the group of diffeomorphisms. I. (84j:58040)
 Zisis, V. See Brodimas, G. N.; et al., (84b:17017)

22E70 Applications of Lie groups to physics; explicit representations [See also 81C40, 81Gxx.]

Amunategui, Godofredo Iommi The reduction $SU_3 \rightarrow SU_2$ and "beauty". 84b:22031
 Barannik, L. F. Unitary projective representations of the Galilei group. (Russian. English summary) 84g:22042
 Barut, Asim Orhan Group action on homogeneous spaces and solutions of nonlinear dynamical systems. (See 84m:81012)
 Bergmann, Peter G. (with Komar, Arthur) The Hamiltonian in relativistic systems of interacting particles. 84c:22023
 Couvreur, G. (with Deenen, J.; Quesne, C.) Complementary group with respect to $SO(n)$. 84c:22018
 Deenen, J. See Couvreur, G.; et al., 84c:22018
 Doebner, Heinz-Dietrich See Gruber, Bruno; et al., 84f:22027
 Eichten, Estia (with Kang, Kyungsik; Koh, In Gyu) Anomaly-free complex representations in $SU(N)$. 84m:22032
 El-Sharkaway, Nahid G. I. See King, Ronald Curtis, 84b:22032
 Feinsilver, Philip J. See Gruber, Bruno; et al., 84f:22027
 Gruber, Bruno (with Doebner, Heinz-Dietrich; Feinsilver, Philip J.) Representations of the Heisenberg-Weyl algebra and group. (Spanish summary) 84f:22027
 See also Klimik, A. U., 84b:22033
 Kang, Kyungsik See Eichten, Estia; et al., 84m:22032 and Schellekens, A. N.; et al., 84m:22033
 Kasperkovitz, P. Type-adapted subduction matrices. 84b:22045
 Kephart, Thomas W. (with Vaughn, Michael T.) Tensor methods for the exceptional group E_6 . 84b:22046
 King, Ronald Curtis (with El-Sharkaway, Nahid G. I.) The character generators of $SO(2k)$ and $SO(2k+1)$. 84b:22032
 U(1) factors in branching rules. 84a:22034
 Klein, Abel (with Landau, Lawrence J.) From the Euclidean group to the Poincaré group via Osterwalder-Schrader positivity. 84g:22043
 Klimyk, A. U. (with Gruber, Bruno) Structure and matrix elements of the degenerate series representations of $U(p+q)$ and $U(p, q)$ in a $U(p) \times U(q)$ basis. 84b:22033
 Klink, W. H. (with Tuong Ton That) Matrix elements and highest weight Wigner coefficients of $GL(n, C)$. (French summary) 84b:22034
 The $SO(3) \subset SU(3)$ problem from a holomorphic induction point of view. 84j:22031
 Koh, In Gyu See Eichten, Estia; et al., 84m:22032 and Schellekens, A. N.; et al., 84m:22033
 Komar, Arthur See Bergmann, Peter G., 84c:22023
 Kopský, Vojtěch Colour symmetry polemons. 84b:22035
 Kritikos, H. N. Rotational symmetries of electromagnetic radiation fields. 84i:22019
 Kunert, Herbert (with Suffczynski, M.) Induced representations of the full holomorphic double space groups based on the body-centred cubic Bravais lattice. 84a:22035
 Landau, Lawrence J. See Klein, Abel, 84g:22043
 Lègare, Martin Conformal invariance conditions for spinor fields with gauge freedom. 84b:22047
 O'Reilly, Michael F. A closed formula for the product of irreducible representations of $SU(3)$. 84b:22036
 Perroud, Marcel The fundamental invariants of inhomogeneous classical groups. 84j:22032
 Quesne, C. See Couvreur, G.; et al., 84c:22018
 Rzewuski, Jan On differential operators in spinor space. (Russian summary) 84a:22036
 On the projections of representation spaces of the symmetry group on the Minkowski space. 84b:22037
 Sağcıoğlu, Cihan Construction and unitary representations of the noncompact groups of supergravity. (See 84k:00008)
 Schellekens, A. N. (with Koh, In Gyu; Kang, Kyungsik) Reduction of tensor products with definite permutation symmetry: embeddings of irreducible representations of Lie groups into fundamental representations of $SU(M)$ and branchings. 84m:22033
 Sitaram, B. R. (with Tripathy, K. C.) Geometric quantization and representations of semisimple Lie groups: $Spin(2, 1)$ and $Spin(2, 2)$. 84a:22037
 (with Tripathy, K. C.) Geometric quantization and UIRs of semisimple Lie groups. II. Discrete series. 84a:22038
 (with Tripathy, K. C.) Geometric quantization and UIRs of semisimple Lie groups. III. Principal and supplementary series. 84a:22039
 Lie supergroups and graded Lie groups. (See 84k:00008)
 Soni, S. K. Weight vector representatives for $SO(2N)$. 84b:22048
 Suffczynski, M. See Kunert, Herbert, 84a:22035
 Tripathy, K. C. See Sitaram, B. R., 84a:22037; 84a:22038 and 84a:22039
 Tuong Ton That See Klink, W. H., 84b:22034
 Vaughn, Michael T. See Kephart, Thomas W., 84b:22046
 Winternitz, P. Nonlinear action of Lie groups and superposition principles for nonlinear differential equations. 84f:22028
 Wybourne, Brian G. Rank dependency of weight multiplicities for simple Lie groups. 84i:22020

secondary classifications:

Ablamowicz, Roman (with Oziewicz, Zbigniew; Rzewuski, Jan) On the projection of the spinor space on the Minkowski space. (Russian summary) (84i:81044b)
 Aldaya, Victor (with de Azcárraga, J. A.) Relativistic wave equations from supergroup quantization. (See 84k:00008)
 (with de Azcárraga, José A.) Supergroup extensions: from central charges to quantization through relativistic wave equations. (84c:81081)

Alhassid, Y. (with Gürsey, Feza; Iachello, F.) Group theory approach to scattering. (84m:81194)
 (with Gürsey, Feza; Iachello, F.) Potential scattering, transfer matrix, and group theory. (84f:81128)
 Ališauskas, S. Clebsch-Gordan coefficients of the group SU_3 that satisfy boundary conditions. (Russian. English and Lithuanian summaries) (84b:81041)
 Bases of representations of class 2 and certain isofactor groups $U_2 \supset SO_2$ and $SU_2 \supset SU_2 \times SU_2$. (Russian. English and Lithuanian summaries) (84i:81039)
 de Azcárraga, J. A. See Aldaya, Victor, (See 84k:00008) and (84c:81081)
 Baake, M. (with Gemünden, B.; Oedingen, R.) On the relations between irreducible representations of the hyperoctahedral group and $O(4)$ and $SO(4)$. (84g:20012)
 Babich, A. A. (with Kuvshinov, V. I.; Fedorov, F. I.) Conditions for local gauge and relativistic invariance of universal first-order nonlinear equations in the theory of fundamental interactions. (Russian) (84j:81126)
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- Bryant, Robert L. Submanifolds and special structures on the octonians. (84c:53091)
- Cattani, Eduardo (with Kaplan, Aroldo) Polarized mixed Hodge structures and the local monodromy of a variation of Hodge structure. (84c:32046)
- Fushchich, V. I. (with Tychinin, V. A.) Linearization of some nonlinear equations by means of nonlocal transformations. (Russian) (84f:35006)
- Handelman, David E. Positive matrices and dimension groups affiliated to C^* -algebras and topological Markov chains. (84c:46058)
- Hazewinkel, Michiel (with Marcus, Steven I.) On Lie algebras and finite-dimensional filtering. (84j:93093)
- Helton, J. William See Ball, Joseph A., (84j:94033)
- Jain, Renu See Agrawal, B. M., (84j:33003)
- Jørgensen, Palle E. T. Spectral theory of finite volume domains in \mathbb{R}^n . (84c:47024)
- Kaplan, Aroldo See Cattani, Eduardo, (84c:32046)
- Kojima, Sadayoshi On the "monster theorem" of Thurston. (Japanese) (84c:57014)
- Marcus, Steven I. See Hazewinkel, Michiel, (84j:93093)
- Nôno, Takayuki See Sato, Ryuzo, (84d:90018)
- Rubel, Lee A. The motions of a partial differential equation. (84j:35033)
- (Samuelson, Paul A.) See Sato, Ryuzo, (84d:90002)
- Sato, Ryuzo ★Theory of technical change and economic invariance. (84d:90002)
- (with Nôno, Takayuki) ★Invariance principles and the structure of technology. (84d:90018)
- Tychinin, V. A. See Fushchich, V. I., (84f:35006)
- Vavilov, N. A. See Borevich, Z. I., (84c:20043)
- Zulehner, W. (with Ames, W. F.) Group analysis of a semilinear vector diffusion equation. (84j:35094)

26-XX REAL FUNCTIONS [See also 54C30.]

26-01 Elementary exposition, textbooks

- (Aleksanova, Irene) See Il'in, V. A.; et al., 84b:26001a
- Atanasiu, D. See Craiu, M., 84c:26003
- Aumann, Georg (with Haupt, Otto) ★Einführung in die reelle Analysis. III. (German) [Introduction to real analysis. III] 84c:26001
- Bartle, Robert Gardner (with Sherbert, Donald R.) ★Introduction to real analysis. 84c:26001
- Binmore, K. G. ★Mathematical analysis. 84c:26002
- Borden, Robert S. ★A course in advanced calculus. 84c:26001
- Boyarchuk, A. K. See Lyashko, I. I.; et al., 84m:26001
- Caveny, James See Caveny, Regina, 84c:26002
- Caveny, Regina (with Caveny, James) Periodic sums of functions with incommensurable periods. 84c:26002
- Craiu, M. (with Atanasiu, D.) On the inversion of a function and the computation of certain integrals. (Romanian) 84c:26003
- Fischer, Emanuel ★Intermediate real analysis. 84c:26004
- Gai, Ya. G. See Lyashko, I. I.; et al., 84m:26001
- Haupt, Otto See Aumann, Georg, 84c:26001
- Il'in, V. A. (with Poznyak, È. G.) ★Fundamentals of mathematical analysis. Part 1. 84b:26001a
- (with Poznyak, È. G.) ★Fundamentals of mathematical analysis. Part 2. 84b:26001b
- Jost, Dieter Elementare Behandlung von Extremwertaufgaben—Anwendung auf die Regressionsgerade. [Elementary treatment of extremal problems—application to the regression line] 84j:26001
- Kalaïda, A. F. See Lyashko, I. I.; et al., 84m:26001
- Liedl, Roman (with Netzer, N.) Was ist Produktintegration? [What is product integration?] 84c:26001
- Lüneburg, Heinz ★Vorlesungen über Analysis. (German) [Lectures on analysis] 84c:26001
- Lyashko, I. I. (with Boyarchuk, A. K.; Gai, Ya. G.; Kalaïda, A. F.) ★Математический анализ. Часть I. (Russian) [Mathematical analysis. Part I] 84m:26001
- Netzer, N. See Liedl, Roman, 84c:26001
- Poznyak, È. G. See Il'in, V. A., 84b:26001
- Sherbert, Donald R. See Bartle, Robert Gardner, 84c:26001
- (Shokurov, Vladimir) See Il'in, V. A.; et al., 84b:26001b
- Smith, Kennan T. ★Primer of modern analysis. 84m:26002
- Zorich, V. A. ★Математический анализ. Часть I. (Russian) [Mathematical analysis. Part I] 84m:26003

secondary classifications:

- Gardiner, A. ★ Infinite processes. (84d:00003)
 Gelbaum, Bernard R. ★ Problems in analysis. (84b:00006)
 Meidman, S. I. See Soltan, V. P., (84i:51031)
 Simmons, James G. ★ A brief on tensor analysis. (84h:53002)
 Soltan, V. P. (with Meidman, S. I.) ★ Тождества и неравенства в треугольнике. (Russian) [Identities and inequalities in a triangle] (84i:51031)

26-02 Advanced exposition (research surveys, monographs, etc.)

26-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Andersen, Kirsti See Bos, Henk J. M.; et al., (84i:01005)
 Bilodeau, G. G. The origin and early development of nonanalytic infinitely differentiable functions. (84g:26017)
 (Bolzano, Bernard) See Wubling, Hans, (84h:01058)
 Bos, Henk J. M. (with Bunn, R.; Dauben, Joseph W.; Grattan-Guinness, Ivor; Hawkins, Thomas W.; Andersen, Kirsti) ★ From the calculus to set theory, 1630-1910. (84i:01005)
 Bottazzini, Umberto ★ Il calcolo sublime: storia dell'analisi matematica da Euler a Weierstrass. (Italian) [The sublime calculus: the history of mathematical analysis from Euler to Weierstrass] (84h:01003)
 Bunn, R. See Bos, Henk J. M.; et al., (84i:01005)
 Cartwright, M. L. Manuscripts of Hardy, Littlewood, Marcel Riesz and Titchmarsh. (84c:01042)
 Cassinet, Jean L'école italienne et les mises en évidence de l'utilisation d'un principe de choix dans les démonstrations entre 1890 et 1902. [The Italian school and the first signs of the use of a principle of choice in proofs between 1890 and 1902] (84h:01034)
 Dauben, Joseph W. See Bos, Henk J. M.; et al., (84i:01005)
 Grattan-Guinness, Ivor See Bos, Henk J. M.; et al., (84i:01005)
 (Hardy, Godfrey Harold) See Cartwright, M. L., (84c:01042)
 Hawkins, Thomas W. See Bos, Henk J. M.; et al., (84i:01005)
 Knobloch, Eberhard Von Riemann zu Lebesgue—zur Entwicklung der Integrationstheorie. (English and French summaries) [From Riemann to Lebesgue—on the development of integration theory] (84m:01027)
 Lin, Shen How to extend Geng Zhi Zu's axiom. I. (Chinese) (84i:01023a)
 How to extend Geng Zhi Zu's axiom. II. (Chinese. English summary) (84i:01023b)
 (Littlewood, John Edensor) See Cartwright, M. L., (84c:01042)
 Mawhin, Jean Présences des sommes de Riemann dans l'évolution du calcul intégral. [The presence of Riemann sums in the evolution of integral calculus] (84j:01047)
 (Riesz, Marcel) See Cartwright, M. L., (84c:01042)
 Sion, Maurice A brief history of the integral to 1900. (84g:01008)
 Smithies, F. The background to Cauchy's definition of the integral. (84h:01035)
 Thorvaldsen, Steinar Integral and differential calculus before Newton and Leibniz. (Norwegian. English summary) (84e:01024)
 (Titchmarsh, Edward Charles) See Cartwright, M. L., (84c:01042)
 Waterhouse, William C. Quantifier problems beyond uniformity. (French and Latin summaries) (84k:01051)
 Wubling, Hans Bernard Bolzano und die Grundlegung der Analysis. [Bernard Bolzano and the foundation of analysis] (84h:01058)
 (Zu, Geng Zhi) See Lin, Shen, (84i:01023a) and (84i:01023b)
 Anniversary:
 Birth of Bolzano, Bernard See Wubling, Hans, (84h:01058)
 Biography:
 Bolzano, Bernard See Wubling, Hans, (84h:01058)

26-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Eriksen, Ole (with Staumstrup, Jørgen) Concurrent algorithms for root searching. (84b:68029)
 Staumstrup, Jørgen See Eriksen, Ole, (84b:68029)

26-06 Proceedings, conferences, etc.

- Deschamps, C. See Ramis, E.; et al., 84h:26001
 Odoux, J. See Ramis, E.; et al., 84h:26001
 Ramis, E. (with Deschamps, C.; Odoux, J.) ★ Cours de mathématiques spéciales. 3. (French) [Course on special mathematics. 3] 84h:26001

secondary classifications:

- (Brudnyi, Yu. A.) See Studies in the theory of functions of several variables, (84g:00009)
 Studies in the theory of functions of several variables ★ Исследования по теории функций многих вещественных переменных. (Russian) [Studies in the theory of functions of several real variables] (84g:00009)

26Axx Functions of one variable

26A03 Foundations: limits and generalizations, elementary topology of the line

- Ganguly, D. K. Kinney's functions in study of some properties of the Cantor set. 84i:26002
 Ginchev, Ivan A problem about set translations on the real line. 84d:26001

Leinfelder, Herbert A unifying principle in real analysis. 84i:26003

Rieger, G. J. A new approach to the real numbers (motivated by continued fractions). 84j:26002

secondary classifications:

- Lunina, M. A. Absolute and conditional convergence of series of continuous functions. (Russian) (84e:40002)
 Rădulescu, Florin A topological property of \mathbb{R}^2 related to Froda theorem concerning discontinuities. (84h:26006)

26A06 One-variable calculus

- Brunner, Norbert On tolerance analysis. 84d:26002
 Glasser, M. L. A remarkable property of definite integrals. 84c:26003
 Grözl, Wolfgang Ein direkter Zugang zu den zentralen Sätzen der Differentialrechnung. [A direct approach to the central theorems of differential calculus] 84f:26001
 Grossman, Jane (with Grossman, Michael; Katz, Robert) ★ Averages. 84h:26002
 Grossman, Michael ★ Biegeometric calculus. 84h:26003
 See also Grossman, Jane; et al., 84h:26002
 Guenther, Raymond A. Product integrals and sum integrals. 84f:26002
 Katz, Robert See Grossman, Jane; et al., 84h:26002
 Rühling, Dieter Applications of heuristic strategies in elementary differential calculus. 84f:26003
 Volčič, Aljoša An elementary version of the fundamental theorem of integral calculus. (Slovenian. English summary) 84c:26004

secondary classifications:

- Davenport, James Harold ★ On the integration of algebraic functions. (84k:14024)
 Forti, Gian Luigi On some conditional Cauchy equations on thin sets. (Italian summary) (84h:39007)
 Magajna, Bojan Infinitesimals. (Slovenian. English summary) (84i:03116)
 Roy, Ranjan On a paper of Ramanujan on definite integrals. (84d:33001)

26A09 Elementary functions

- Bursuc, Ion On some problems of monotonicity. (Romanian) 84h:26004
 Gould, H. W. Remark on a paper of B. M. Stauffer: "A special fifth degree polynomial" [Proc. West Virginia Acad. Sci. 48 (1976), no. 2-4, 93-94 (1979); MR 80g:26004]. 84j:26003
 Shopova, Dimitrichka N. An elementary solution of a problem in real analysis. (Bulgarian. English summary) 84h:26002
 (Stauffer, B. M.) See Gould, H. W., 84j:26003

26A12 Rate of growth of functions, orders of infinity, slowly increasing functions [See also 26A48.]

- Aljančić, S. Some applications of O -regularly varying functions. 84i:26004
 Juneja, O. P. (with Srivastava, G. S.) On regularly varying functions with applications to functions theory. (Spanish summary) 84e:26005
 Srivastava, G. S. See Juneja, O. P., 84e:26005

secondary classifications:

- Aljančić, S. Regularly varying functions in asymptotic Mercerian theorems. (84h:40001)
 Embrechts, Paul (with Omey, E.) On subordinated distributions and random record processes. (84h:60042)
 Frenk, J. B. G. The behavior of the renewal sequence in case the tail of the waiting-time distribution is regularly varying with index -1 . (84f:60117)
 Mohan, N. R. A strong renewal theorem. (84b:60117)
 Omey, E. Regular variation and its applications to second order linear differential equations. (84d:34028)
 See also Embrechts, Paul, (84h:60042)
 Soni, K. (with Soni, R. P.) Slowly varying functions and asymptotic behavior of a class of integral transforms. IV. (84h:44002)
 Soni, R. P. See Soni, K., (84h:44002)
 Ueda, Hideharu On the growth of subharmonic functions. (84e:30037a)
 On the growth of entire functions of order less than $\frac{1}{2}$. (84e:30037b)

26A15 Continuity and related questions (modulus of continuity, semicontinuity, discontinuities, etc.) [For properties determined by Fourier coefficients, see 42A16; for those determined by approximation properties, see 41A25.]

- Aversa, V. (with Wilczyński, Władysław) AC ω -points for a function. (Italian. English summary) 84d:26003
 Bagchi, Amitava (with Reingold, Edward M.) A naturally occurring function continuous only at irrationals. 84h:26002
 Beer, Gerald Cone lattices of upper semicontinuous functions. 84j:26004
 On Dini's theorem and a metric on $C(X)$ topologically equivalent to the uniform metric. 84j:26005
 Belna, C. L. Symmetric continuity of real functions. 84g:26001
 Bosznay, Adam P. A remark on a problem of A. Rényi. 84c:26005
 Cox, G. V. (with Humke, Paul D.) A note on pointwise limits of functions which are approximately continuous and almost everywhere continuous. 84g:26002
 Czajka-Zgirska, Marta (with Lipiński, Jan S.) On the continuity for connected functions. (Russian summary) 84g:26003
 Dzyadyk, V. K. (with Shevchuk, I. A.) Continuation of functions which, on an arbitrary set of the line, are traces of functions with a given second modulus of continuity. (Russian) 84h:26005

- Gibson, Richard G. (with Roush, Fred W.) The Cantor intermediate value property. **84d:26004**
- Humke, Paul D. See Cox, G. V., **84g:26002**
- Kellum, Kenneth R. Almost continuity and connectivity—sometimes it's as easy to prove a stronger result. **84j:26006**
- Lipinski, Jan S. On continuous periodic extensions of functions. **84b:26003**
See also Czajka-Zgirska, Marta, **84g:26003**
- Mandelkern, Mark Constructive continuity. **84j:26007**
- Rădulescu, Florin A topological property of \mathbb{R}^2 related to Froda theorem concerning discontinuities. **84h:26006**
- Reingold, Edward M. See Bagchi, Amitava, **84b:26002**
- Roush, Fred W. See Gibson, Richard G., **84d:26004**
- Shevchuk, I. A. See Dryadyk, V. K., **84h:26005**
- Snoha, L'ubomir On connectivity points. (Russian summary) **84c:26006**
- Wilczyński, Władysław See Aversa, V., **84d:26003**

secondary classifications:

- Bainov, D. D. See Simeonov, P. S., **(84h:34028)**
- Bereková, Helena The principle of induction in continuum and related methods. (Russian and Slovak summaries) **(84d:04004)**
- Bloom, Walter R. (with Elliott, David) The modulus of continuity of the remainder in the approximation of Lipschitz functions. **(84a:41016)**
- Brudnyi, Yu. A. Continuation of a function with preservation of order of decrease of moduli of continuity. (Russian) **(84m:46034)**
- Ceder, Jack (with Petruska, Gy.) Most Darboux Baire 1 functions map big sets onto small sets. **(84c:26005)**
- Doboš, Jozef (with Salát, Tibor) Cliques functions, Riemann integrable functions and quasi-uniform convergence. (Russian and Slovak summaries) **(84a:54003)**
- Elliott, David See Bloom, Walter R., **(84a:41016)**
- Ewert, Janina (with Lipiński, Jan S.) On points of continuity, quasicontinuity and cliquishness of real functions. **(84f:54012)**
- Guthrie, J. A. A continuous modulus of continuity. **(84a:54016)**
- Lipiński, Jan S. See Ewert, Janina, **(84f:54012)**
- Nepeivoda, N. N. Some possibilities for the application of constructive analysis to classical analysis. (Russian) **(84d:03076)**
- Petruska, Gy. See Ceder, Jack, **(84c:26005)**
- Salát, Tibor See Doboš, Jozef, **(84a:54003)**
- Schanuel, Stephen H. Continuous extrapolation to triangular matrices characterizes smooth functions. **(84c:58009)**
- Simeonov, P. S. (with Bainov, D. D.) On some generalizations of the Gronwall-Bellman integral inequality for scalar functions of many variables. **(84h:34028)**
- Smital, Jaroslav (with Stanová, Eva) On almost continuous functions. (Russian and Slovak summaries) **(84b:54026)**
- Stanová, Eva See Smital, Jaroslav, **(84b:54026)**

26A16 Lipschitz (Hölder) classes

- Fabrizi, Augusto Examples of uniformly Hölder functions. (Italian) **84b:26004**
- Levy, Ronnie (with Rice, Michael O.) The approximation and extension of uniformly continuous Banach space valued mappings. **84c:26003**
- Rice, Michael O. See Levy, Ronnie, **84c:26003**
- Wójcicki, Zygmunt The structure of the sets $\{x: f(x)=h(x)\}$ for a typical continuous function f and for a class of Lipschitz functions h . **84c:26004**

secondary classifications:

- Basu, A. K. On rates of convergence to infinitely divisible laws for dependent random variables. (French summary) **(84c:60033)**
- Bloom, Walter R. (with Elliott, David) The modulus of continuity of the remainder in the approximation of Lipschitz functions. **(84a:41016)**
- Elliott, David See Bloom, Walter R., **(84a:41016)**
- Fraguela Collar, Andrés On the characteristic structures and the constructive characteristics of certain classes of functions Lebesgue integrable with respect to the weight function $(1+x)^k$ in the interval $[-1, 1]$. (Spanish) **(84d:41045)**
- Gehring, Frederick W. (with Martio, O.) Quasidisks and the Hardy-Littlewood property. **(84k:30020)**
- Levy, Ronnie (with Rice, M. D.) The approximation and extension of uniformly continuous mappings. **(84d:54029)**
- Martio, O. See Gehring, Frederick W., **(84k:30020)**
- Mustăța, Costică Extension of bounded Lipschitz functions. **(84h:54017)**
About the determination of extrema of a Hölder function. (See **84i:00008**)
- Rice, M. D. See Levy, Ronnie, **(84d:54029)**

26A18 Iteration [See also 39B10, 47H10, 54H25.]

- Boyarsky, Abraham (with Byers, William) Fullness of maps. **84d:26005**
- Byers, William See Boyarsky, Abraham, **84d:26005**
- Liao, Gong Fu Maps of a closed interval with prime periodic points. (Chinese. English summary) **84j:26008**
- Mocanu, Constanța Monotony of weight-means of higher order. **84b:26007**
- Smital, Jaroslav A chaotic function with some extremal properties. **84b:26008**

secondary classifications:

- Blokh, A. M. "Spectral expansion" for piecewise monotone mappings of an interval. (Russian) **(84h:58092)**
- Coppel, W. A. Šarkovskii-minimal orbits. **(84h:58120)**
- Cosnard, Michel Comportement d'itérations d'un opérateur de renormalisation. (English summary) [Behavior of the iterations of a renormalization operator] **(84h:58076)**
- Evans, Michael Jon (with Weil, Clifford E.) On iterated L_p derivatives. **(84a:26002)**

- Hu, Bambi (with Mao, J. M.) Period doubling: universality and critical-point order. **(84b:58078)**
- Kolyada, S. F. (with Sharkovskii, A. N.) The measure of repellers of one-dimensional smooth mappings. (Russian) **(84c:58051)**
- Lam, Ping Fun Embedding homeomorphisms in C^1 -flows. **(84c:58073)**
- Levin, Genadii Mironovich Sequences of bifurcations of a one-parameter family of mappings. (Russian) **(84f:58098)**
- Mao, J. M. See Hu, Bambi, **(84b:58078)**
- Misiurewicz, Michał Periodic points of maps of degree one of a circle. **(84j:58101)**
- Rippon, P. J. Infinite exponentials. **(84b:30028)**
- Sharkovskii, A. N. See Kolyada, S. F., **(84c:58051)**
- Smital, Jaroslav (with Smitalová, Kristina) Structural stability of nonchaotic difference equations. **(84d:58046)**
- Smitalová, Kristina See Smital, Jaroslav, **(84d:58046)**
- Weil, Clifford E. See Evans, Michael Jon, **(84a:26002)**

26A21 Classification of real functions; Baire classification of sets and functions [See also 04A15, 28A05, 54C50.]

- Ceder, Jack On Baire 1 selections. **84f:26004**
(with Petruska, Gy.) Most Darboux Baire 1 functions map big sets onto small sets. **84c:26005**
- Grande, Zbigniew Sur une fonction de classe 2 de Baire dont le graphe coupe les graphes de toutes les fonctions de classe 1. [On a Baire 2 function whose graph intersects the graphs of all the 1 functions] **84m:26004**
- Petruska, Gy. See Ceder, Jack, **84c:26005**
- Preiss, David Algebra generated by derivatives. **84g:26004**

secondary classifications:

- Davies, Roy O. (with Tricot, Claude, Jr.) A theorem about countable decomposability. **(84c:54019)**
- Gibson, Richard G. (with Roush, Fred W.) The Cantor intermediate value property. **(84d:26004)**
- O'Malley, R. J. Bi-selective derivatives are of honorary Baire class two. **(84i:26007)**
- Roush, Fred W. See Gibson, Richard G., **(84d:26004)**
- Tricot, Claude, Jr. See Davies, Roy O., **(84c:54019)**

26A24 Differentiation (functions of one variable): general theory, generalized derivatives, mean-value theorems [See also 28A15.]

- Brandt, J. J. A. M. (with Hautus, Mathus L. J.) Asymptotic properties of matrix differential operators. **84m:26005**
- De Franchis, Michele Some conditions for (ordinary) differentiability of a.e. asymptotically differentiable functions. (Italian) **84c:26006**
- Del Vecchio, Teresa Summability of relative derivatives. (Italian. English summary) **84h:26009**
- Diab, F. M. (with Mohamed, A. G.) On the differential properties of real continuous functions. (Arabic summary) **84f:26005**
- Dostál, Miloš A. On roots of differentiable functions. **84c:26006**
- Dutta, T. K. Generalised smooth functions. **84c:26007**
- Evans, Michael Jon (with Humke, Paul D.) Parametric differentiation. **84b:26005**
(with Weil, Clifford E.) On iterated L_p derivatives. **84a:26002**
- Foran, James Changes of variable which preserve almost everywhere approximate differentiability. **84c:26007**
A chain rule for the approximate derivative and change of variables for the \mathcal{D} -integral. **84g:26005**
- Gorlenko, S. V. Reconstruction of a continuous real function from the set of its derivative sets. (Russian) **84m:26006**
- Gorokhovik, V. V. On the quasidifferentiability of real-valued functions. (Russian) **84d:26006**
- Grande, Zbigniew (with Topolewska, Maria) Sur les fonctions vectorielles approximativement continues. (Czech summary) [Approximately continuous vector functions] **84b:26005**
- Hautus, Mathus L. J. See Brandt, J. J. A. M., **84m:26005**
- Humke, Paul D. See Evans, Michael Jon, **84b:26005**
- Laczko, M. Derivations on differentiable functions. **84a:26003**
- Larson, Lee The Baire class of approximate symmetric derivatives. **84h:26010**
The symmetric derivative. **84j:26009**
- Lee, Cheng Ming On absolute Peano derivatives. **84m:26007**
On generalized Peano derivatives. **84c:26008**
- López Melero, Bernardo A negative result in differentiation theory. **84d:26007**
- Lorence, M. F. (with Maniscalco, Ignazia) A property of the Darboux functions. (Italian) **84c:26009**
- Maniscalco, Ignazia See Lorence, M. F., **84c:26009**
- Marik, Jan Multipliers of summable derivatives. **84f:26006**
(with Weil, Clifford E.) Products of powers of nonnegative derivatives. **84m:26008**
- Mohamed, A. G. See Diab, F. M., **84f:26005**
- Nistor, Victor On a problem of Pompeiu concerning derivatives. **84f:26007**
- O'Malley, R. J. Selective differentiation: redefining selections. **84c:26010**
Bi-selective derivatives are of honorary Baire class two. **84i:26007**
- Preiss, David (with Zajíček, L.) On the symmetry of approximate Dini derivatives of arbitrary functions. **84f:26008**
- Pu, Huan Wen See Pu, Huo Hui Min, **84c:26008**
- Pu, Huo Hui Min (with Pu, Huan Wen) Derivates for symmetric functions. **84c:26008**
- Salzberg, Pablo M. A reflection principle for calculating the derivatives of a polynomial. **84c:26006**
- Schoenberg, Isaac J. Two applications of approximate differentiation formulae: an extremum problem for multiply monotone functions and the differentiation of asymptotic expansions. **84d:26008**

- Tang, Jane On the construction and interpretation of means. **84c:26011**
 Thomson, B. S. Derivation bases on the real line. I. **84i:26008a**
 Derivation bases on the real line. II. **84i:26008b**
 Some theorems for extreme derivatives. **84c:26012**
 Topolewska, Maria See Grande, Zbigniew, **84c:26005**
 Uher, Jaromir Symmetrically differentiable functions are differentiable almost everywhere. **84f:26009**
 Weil, Clifford E. See Evans, Michael Jon, **84c:26002** and Marik, Jan, **84m:26008**
 Zajíček, L. See Preiss, David, **84f:26008**

secondary classifications:

- Aversa, V. (with Laczkovich, M.) Extension theorems on derivatives of additive interval functions. **(84m:26015b)**
 Carrese, Rosalba Differentiability of functions that are almost everywhere partially differentiable. (Italian) **(84c:26013)**
 Dubuc, Serge (with Todor, Fabian) La règle du trapèze appliquée à quelques fonctions sans dérivées. [The trapezoid rule applied to some functions without derivatives] **(84m:41042)**
 Kaplan, L. I. Discontinuity points of a function and points of existence of a finite and infinite derivative. (Russian) **(84c:26007)**
 Laczkovich, M. On additive and strongly derivable interval functions. **(84m:26015a)**
 See also Aversa, V., **(84m:26015b)**
 Lee, Cheng Ming Regular approximate Peano derivatives are the ordinary ones. **(84c:26014)**
 Preiss, David Algebra generated by derivatives. **(84g:26004)**
 Pu, Huan Wen (with Pu, Huo Hui Min) Darboux property for transformations. **(84c:54022)**
 Pu, Huo Hui Min See Pu, Huan Wen, **(84c:54022)**
 Todor, Fabian See Dubuc, Serge, **(84m:41042)**

26A27 Nondifferentiability (nondifferentiable functions, points of nondifferentiability), discontinuous derivatives

- Cater, F. S. A typical nowhere differentiable function. **84b:26011**
 Tall, David The blancmange function. Continuous everywhere but differentiable nowhere. **84b:26006**

secondary classifications:

- Dubuc, Serge Une foire de courbes sans tangentes. [A throng of curves without tangents] **(84c:58060)**
 Kaplan, L. I. Discontinuity points of a function and points of existence of a finite and infinite derivative. (Russian) **(84c:26007)**
 Preiss, David (with Zajíček, L.) On the symmetry of approximate Dini derivatives of arbitrary functions. **(84f:26008)**
 Saint-Pierre, Jean Sur le théorème de Rademacher. [The Rademacher theorem] **(84f:26016)**
 Zajíček, L. See Preiss, David, **(84f:26008)**

26A30 Singular functions, Cantor functions, functions with other special properties

- Arias de Reyna Martinez, Juan Definition and study of an infinitely differentiable function with compact support. (Spanish) **84d:26009**
 Barbieri, Francesco (with Zironi, Fernando) An experimental study of singular functions: the moments of the Vitali function. (Italian) **84b:26012**
 Kaplan, L. I. Discontinuity points of a function and points of existence of a finite and infinite derivative. (Russian) **84c:26007**
 Wen, Liu A space filling curve. **84c:26009**
 Zironi, Fernando See Barbieri, Francesco, **84b:26012**

secondary classifications:

- Ceder, Jack (with Petruska, Gy.) Most Darboux Baire I functions map big sets onto small sets. **(84i:26005)**
 Ganguly, D. K. Kinney's functions in study of some properties of the Cantor set. **(84i:26002)**
 Pach, János (with Rogers, C. A.) Partly convex Peano curves. **(84m:54036)**
 Petruska, Gy. See Ceder, Jack, **(84i:26005)**
 Rogers, C. A. See Pach, János, **(84m:54036)**

26A33 Fractional derivatives and integrals

- Al-Bassam, M. A. On fractional calculus and its applications to the theory of ordinary differential equations of generalized order. **84c:26013**
 Mamedov, R. G. (with Orudzhev, G. N.) Some characteristics of classes of functions that have fractional derivatives. (Russian) **84j:26010**
 (with Orudzhev, G. N.) Some classes of functions, their interconnection and characteristics. (Russian) **84j:26011**
 McBride, Adam C. A note on the index laws of fractional calculus. **84g:26006**
 Nishimoto, Katsuyuki On a half order's integral equation $\alpha f \cdot z = f_{-1/2}$ (Volterra type) and simultaneous half order's differintegral equations. **84b:26013**
 See also Sekine, Tadayuki, **84m:26009a** and Owa, Shigeyoshi, **84m:26009b**
 Oldham, Keith B. The reformulation of an infinite sum via semi-integration. **84k:26008**
 Orudzhev, G. N. See Mamedov, R. G., **84j:26010** and **84j:26011**
 Owa, Shigeyoshi (with Nishimoto, Katsuyuki) On the orthogonality of fractional differintegrated functions $(\log az \cdot z^p)$, and $(e^{az} z^p)$. **84m:26009b**
 Rakesh, S. L. On fractional integration operators. **84f:26010**
 Roberts, K. L. C_∞ fractional integrals equivalent to a constant. **84b:26007**
 Sekine, Tadayuki (with Nishimoto, Katsuyuki) On the orthogonality of fractional differintegrated functions $(z^a (\log az))_a$ and $((\log az) \cdot z^a)_a$. **84m:26009a**

secondary classifications:

- Ahuja, Gopi A study of fractional differentiation for generalized functions. **(84b:46048)**
 Alisher, A. Solution of nonlinear differential equations of fractional rank. (Russian. English summary) **(84g:34019)**
 Banerji, P. K. (with Sethi, P. L.) Operators of a generalized function of n variables. **(84c:33004)**
 Conlan, James (with Koh, E. L.) Further results on the association of variables. (See **84g:93005a**)
 Duggal, B. P. On a functional relation satisfied by fractional integrals. **(84h:44006)**
 Goyal, S. P. See Gupta, K. C.; et al., **(84c:44009)**
 Gupta, K. C. (with Goyal, S. P.; Handa, S.) Fractional integral operators involving two variables. **(84c:44009)**
 Handa, S. See Gupta, K. C.; et al., **(84c:44009)**
 Koh, E. L. A direct extension of Meller's calculus. **(84d:44006)**
 See also Conlan, James, (See **84g:93005a**)
 Koul, C. L. See Raina, R. K., **(84c:44002)**
 Nishimoto, Katsuyuki See Owa, Shigeyoshi, **(84m:30021)**
 Owa, Shigeyoshi (with Nishimoto, Katsuyuki) On a fractional differintegral equation. **(84m:30021)**
 Raina, R. K. (with Koul, C. L.) On Laplace transforms and their applications. **(84c:44002)**
 Saigo, Megumi A certain boundary value problem for the Euler-Darboux equation. **(84a:35233)**
 A certain boundary value problem for the Euler-Darboux equation. II. **(84a:35234)**
 A certain boundary value problem for the Euler-Darboux equation. III. **(84a:35235)**
 Semenchuk, N. P. A class of differential equations of nonintegral order. (Russian) **(84c:34023)**
 Sethi, P. L. See Banerji, P. K., **(84c:33004)**
 Singh, Sankatha Prasad See Singh, Surya Narain, **(84b:33006)**
 Singh, Surya Narain (with Singh, Sankatha Prasad) Transformation of Kampé de Fériet function. **(84b:33006)**
 Skórnik, Krystyna On tempered integrals and derivatives of nonnegative orders. **(84b:46044)**
 Srivastava, Hari M. The Weyl fractional integral of a general class of polynomials. (Italian summary) **(84c:33018)**
 Tazali, Ahmad Zain-Alabedeen Mohammad Local existence theorems for ordinary differential equations of fractional order. **(84c:34004)**
 Wang, Chi Hsu On the generalization of block pulse operational matrices for fractional and operational calculus. **(84h:44014)**
 Wiener, Klaus Über Anfangswertprobleme bei Differentialgleichungen von nichtganzzahliger Ordnung mit singulären Koeffizienten und rechten Seiten. [On initial value problems in differential equations of noninteger order with singular coefficients and right sides] **(84m:34006)**
 Über Differentialgleichungen von nichtganzzahliger Ordnung mit nichtkonstanten Koeffizienten. [On differential equations of noninteger order with nonconstant coefficients] **(84m:34020)**

26A36 Antidifferentiation

- Rzaev, K. U. Criteria of F. Riesz type on $(-\infty, +\infty)$ in the complex-valued case. (Russian. English and Azerbaijani summaries) **84k:26009**

26A39 Denjoy and Perron integrals, other special integrals

- Bullen, P. S. The Burkill approximately continuous integral. **84m:26010**
 Chakrabarti, P. S. (with Mukhopadhyay, S. N.) A scale of approximate Cesàro-Perron integrals. **84g:26007**
 Cross, G. E. The exceptional sets in the definition of the P^* -integral. **84a:26004**
 Henstock, Ralph Density integration and Walsh functions. **84c:26010**
 A problem in two-dimensional integration. **84c:26010**
 Lee, Cheng Ming Regular approximate Peano derivatives are the ordinary ones. **84c:26014**
 Lee, Peng Yee (with Wittaya, Naak In) A direct proof that Henstock and Denjoy integrals are equivalent. **84f:26011**
 Mukhopadhyay, S. N. See Chakrabarti, P. S., **84g:26007**
 Skvortsov, V. A. Constructive variant of the definition of an HD-integral. (Russian. English summary) **84f:26012**
 Wittaya, Naak In See Lee, Peng Yee, **84f:26011**

secondary classifications:

- Burkill, J. C. Corrigendum: "Integrals and trigonometric series" [Proc. London Math. Soc. (3) 1 (1951), 46-57; MR 13, 126]. **(84d:42003)**
 Foran, James A chain rule for the approximate derivative and change of variables for the Φ -integral. **(84g:26005)**
 Lee, Cheng Ming On generalized Peano derivatives. **(84c:26008)**
 Lukashenko, T. P. Functions of generalized bounded variation. (Russian) **(84m:26011)**
 Ragni, Marcello The classical and generalized Weierstrass integral. (Italian) **(84c:49044)**
 The generalized Weierstrass parametric integral in the calculus of variations. (Italian) **(84d:49044)**
 Thomson, B. S. Derivation bases on the real line. I. **(84i:26008a)**
 Derivation bases on the real line. II. **(84i:26008b)**

- 26A42 Integrals of Riemann, Stieltjes and Lebesgue type [See also 28-XX.]

Appling, William D. L. A preservation of integrability characterization theorem. **84i:26011**
 Günzler, Hans. Abstract absolute Riemannian integration. (Italian summary) **84i:26012**
 Jedryka, Halina J. (with Jedryka, Tadeusz Marian) Introduction to the definite integral. (Polish. English and German summaries) **84j:26012**
 Jedryka, Tadeusz Marian. See Jedryka, Halina J., **84j:26012**
 Lewis, James T. (with Shisha, Oved) The generalized Riemann, simple, dominated and improper integrals. **84h:26014**
 Love, E. R. The Ross-Riemann-Stieltjes integral. **84i:26013**
 Lukashenko, T. P. A-integrability of functions. (Russian. English summary) **84e:26009**
 Pannikov, B. V. Convergence of Riemann sums of monotone functions and Diophantine approximations. (Russian) **84b:26008**
 Pfeffer, W. F. Integration by parts for the generalized Riemann-Stieltjes integral. **84c:26010**
 Shisha, Oved. See Lewis, James T., **84h:26014**

secondary classifications:

Bullen, P. S. The Burkill approximately continuous integral. (**84m:26010**)
 Glasser, M. L. A remarkable property of definite integrals. (**84c:26003**)
 Loy, Richard J. On the uniqueness of Riemann integration. (**84f:28009**)
 Musielak, Helena. Approximative properties of some Stieltjes integrals in Orlicz spaces. (**84j:46045**)

26A45 Functions of bounded variation, generalizations

Giovannelli, Nicolò (with Reas, Pier Giorgio) On second algebraic variation. (Italian) **84h:26015**
 Lukashenko, T. P. Functions of generalized bounded variation. (Russian) **84m:26011**
 Mikhalyuk, M. I. Some properties of functions with bounded second variation. (Ukrainian. Russian summary) **84d:26010**
 Reas, Pier Giorgio. See Giovannelli, Nicolò, **84h:26015**

secondary classifications:

Borucka-Cieslewicz, Anna. Convergence in the space of functions on generalized q -integral M -variations. (**84j:46066**)
 Rzaev, K. U. Criteria of F. Riesz type on $(-\infty, s+\infty)$ in the complex-valued case. (Russian. English and Azerbaijani summaries) (**84k:26009**)
 Shiba, Masaaki. On the Fourier coefficients of a function of Λ -bounded variation. (**84a:42007**)
 Wu, Cong Xin (with Zhao, Lin Sheng) The bounded variation functions of order 2 on the sequence spaces. (Chinese. English summary) (**84h:46016**)
 Zhao, Lin Sheng. See Wu, Cong Xin, (**84h:46016**)

26A46 Absolutely continuous functions

secondary classifications:

Bardaro, Carlo (with Gori Cocchieri, Candida) Properties of some second-order seminorms. (Italian) (**84k:49020**)
 Brunozzi, Anna Maria (with Fiacca, Antonella; Lodovici, Carla) "Absolute continuity" and "quasiboundedness with respect to a pair" in measure spaces. (Italian. English summary) (**84h:49091**)
 Fiacca, Antonella. See Brunozzi, Anna Maria; et al., (**84h:49091**)
 Gori Cocchieri, Candida. See Bardaro, Carlo, (**84k:49020**)
 Hasumi, Morisuke. Remarks on theorems of Müntz-Szász type. (**84h:42045**)
 Lodovici, Carla. See Brunozzi, Anna Maria; et al., (**84h:49091**)
 Lukashenko, T. P. Functions of generalized bounded variation. (Russian) (**84m:26011**)

26A48 Monotonic functions, generalizations

Castoldi, Luigi. On a strictly increasing function on $I \equiv [0, 1]$, equipped with a set (R) —countable and dense in I —of "jump points", differentiable with derivative zero in $I - R$. (Italian. English summary) **84j:26013**
 Šalát, Tibor. On functions that are monotone on no interval. **84e:26011**

secondary classifications:

Aljančić, S. Some applications of O -regularly varying functions. (**84i:26004**)
 Daboni, L. Exchangeability and completely monotone functions. (**84d:60020**)
 Daykin, David E. Chebyshev's inequalities for functions monotone in the mean. (**84i:26019**)
 Fink, A. M. Kolmogorov-Landau inequalities for monotone functions. (**84e:26017**)
 Jirina, Miloslav. Interpolation of completely monotone functions. (**84e:41002**)
 Mandelkern, Mark. Constructive continuity. (**84j:26007**)
 Mocanu, Constanța. Monotony of weight-means of higher order. (**84h:26007**)
 Omieciński, Jan. On some homeomorphisms of class C^∞ transforming a denumerable set onto denumerable sets. (Russian summary) (**84k:26021**)
 Schoenberg, Isaac J. Two applications of approximate differentiation formulae: an extremum problem for multiply monotone functions and the differentiation of asymptotic expansions. (**84d:26008**)
 Tuy, Heang K. On almost monotonic real functions. (**84e:12028**)

26A51 Convexity, generalizations

Buhăescu, T. T. Concave fuzzy functions. (French and Romanian summaries) **84f:26013**
 Chelaru, Victor. The characterization of functions as convex or concave. (Romanian) **84f:26014**

Doeringer, Willibald. A note on K -convex functions. (German summary) **84i:26014**
 Hartwig, Helga. On generalized convex functions. (German and Russian summaries) **84f:26015**
 Kominek, Zygryd. On the continuity of Q -convex functions and additive functions. **84c:26012**
 Lorch, Lee (with Newman, Donald J.) On the composition of completely monotonic functions and completely monotonic sequences and related questions. **84i:26015**
 Matheson, R. M. Hereditary $\lambda(n, k)$ -families and generalized convexity of functions. **84c:26015**
 Newman, Donald J. See Lorch, Lee, **84i:26015**
 Novitskii, M. V. Functions convex with respect to some sequence. (Russian) **84b:26011**
 Olteanu, Octav. Une propriété des fonctions convexes d'une variable réelle. [A property of the convex functions of a real variable] **84c:26016**
 Tidjane Diallo, A. Une notion de convexité pour les fonctions opératoires. [A concept of convexity for operator-valued functions] **84m:26012**
 Umamaheswaram, S. An intermediate value property: some comparison and convergence theorems in $\lambda(n, k)$ -parameter. **84g:26008**
 Vujčić, Vera V. On a property of pseudoconvex functions. (Serbo-Croatian. English summary) **84d:26011**

secondary classifications:

Cross, G. E. The exceptional sets in the definition of the P^* -integral. (**84a:26004**)
 Ding, Guang Gui. Some properties of quasibounded functions. (Chinese) (**84e:46044**)
 Florian, A. Bemerkungen zu einer Ungleichung für konvexe Funktionen. [Comments on an inequality for convex functions] (**84g:26014**)
 Gupta, Sharat Chand. See Vaish, Satendra Kumar, (**84c:30048**)
 Kolumbian, Josef. Verallgemeinerte konvexe Funktionen und das Prinzip der lokalen Beschränktheit. [Generalized convex functions and the local boundedness principle] (**84i:46015**)
 Liu, Guang Zhong. Some properties of quasiconvex functions. (Chinese. English summary) (**84c:90066**)
 Lupas, A. (with Manole, C.) A property of the S. N. Bernstein polynomials. (Romanian. English and French summaries) (**84j:41012**)
 Manole, C. See Lupas, A., (**84j:41012**)
 Pečarić, Josip E. An inequality for m -convex sequences. (**84c:26019**)
 A short proof of a variant of Jensen's inequality. (**84c:26020**)
 Popoviciu, Elena. Sur une allure de quasi-convexité d'ordre supérieur. [The behavior of higher-order quasiconvexity] (**84m:41005**)
 Radecki, Jerzy. On integral transforms of Volterra type preserving convexity. (**84f:44002**)
 Rapa, Ion. On a measure-theoretical concept of convexity. (**84k:46020**)
 Vaish, Satendra Kumar (with Gupta, Sharat Chand) On the logarithmic mean of an entire function represented by Dirichlet series. (Arabic summary) (**84c:30048**)
 Vial, Jean-Philippe. Strong and weak convexity of sets and functions. (**84m:90107**)
 Wang, Chung Lie (with Wang, Xing Hua) On an extension of Hadamard inequalities for convex functions. (Chinese summary) (**84d:26018**)
 Wang, Xing Hua. See Wang, Chung Lie, (**84d:26018**)
 Wellstein, H. Iterierte arithmetische Mittelung und eine Verallgemeinerung der Jensenschen Ungleichung. [Iterated arithmetic mean and a generalization of Jensen's inequality] (**84c:26022**)

26A99 None of the above, but in this section

Brunner, Norbert. Relative Differenzeigenschaft. (Czech summary) [Relative difference property] **84b:26009**
 Dubois, Didier (with Prade, Henri) Towards fuzzy differential calculus. I. Integration of fuzzy mappings. **84b:26010a**
 (with Prade, Henri) Towards fuzzy differential calculus. II. Integration on fuzzy intervals. **84b:26010b**
 (with Prade, Henri) Towards fuzzy differential calculus. III. Differentiation. **84b:26010c**
 Haruki, H. (with Haruki, S.) Euler's integrals. **84k:26012**
 Haruki, S. See Haruki, H., **84k:26012**
 Humke, Paul D. (with Vessey, Theodore) Another note on σ -porous sets. **84g:26009**
 Laczko, M. (with Petruska, Gy.) Averaging processes on function classes. **84m:26013**
 O'Neil, Richard. Spaces formed with special atoms. **84a:26005**
 Petruska, Gy. See Laczko, M., **84m:26013**
 Prade, Henri. See Dubois, Didier, **84b:26010a**; **84b:26010b** and **84b:26010c**
 Vessey, Theodore. See Humke, Paul D., **84g:26009**

secondary classifications:

Kahane, Jean-Pierre. Hélices et quasi-hélices. [Helices and quasihelices] (**84i:43005**)
 Kamo, Shizuo. Nonstandard real number systems with regular gaps. (**84f:03060**)
 Kwong, Man Kam (with Zettl, A.) Asymptotically constant functions and second order linear oscillation. (**84k:34044**)
 Zettl, A. See Kwong, Man Kam, (**84k:34044**)

26Bxx Functions of several variables

26B05 Continuity and differentiation questions

Aversa, V. (with Laczko, M.) Extension theorems on derivatives of additive interval functions. **84m:26015b**
 Carrese, Rosalba. Differentiability of functions that are almost everywhere partially differentiable. (Italian) **84c:26013**
 Di Bari, Cristina Maria (with Vetro, Pasquale) On an approximation condition based on C^1 -functions. (Italian) **84c:26017**
 Grande, Eulalia (with Grande, Zbigniew) Functions of two variables that are almost everywhere upper semicontinuous with respect to one variable. **84m:26014**

Grande, Zbigniew Sur les fonctions dont les sections sont approximativement continues. (Polish summary) [Functions whose sections are approximately continuous] **84j:26014**
 See also **Grande, Eulalia**, **84m:26014**

Laczkovich, M. On additive and strongly derivable interval functions. **84m:26015a**
 See also **Aversa, V.**, **84m:26015b**

López Fernández-Asenjo, F. F. On the strong commutability theorem of Schwarz. (Spanish) **84m:26016**

Nikulina, N. G. Continuity of a class of functions. (Russian) **84m:26017**

Saint-Pierre, Jean Sur le théorème de Rademacher. [The Rademacher theorem] **84j:26016**

Sjödin, Tord On L^p -differentiability and difference properties of functions. **84j:26017**
Smith, James Raphael An invariant derivation of the common ∇ -operator identities. **84j:26016**

Vetro, Pasquale See **Di Bari, Cristina Maria**, **84c:26017**

secondary classifications:

Caputti, Telma The plenary hull of the generalized Jacobian matrix and the inverse function theorem in subdifferential calculus. **(84i:58016)**

Chen, Wen Wei The partial derivative along arbitrary curves and its application. (Chinese. English summary) **(84k:76004)**

Cox, G. V. (with Humke, Paul D.) A note on pointwise limits of functions which are approximately continuous and almost everywhere continuous. **(84g:26002)**

Dem'yanov, V. F. (with Rubinov, A. M.) Some approaches to a nonsmooth optimization problem. (Russian) **(84m:90109)**

Dzhuraev, M. See **Imanaliyev, M. I.**; et al., **(84d:45009)**

Humke, Paul D. See **Cox, G. V.**, **(84g:26002)**

Imanaliyev, M. I. (with Seitkazieva, A. S.; Dzhuraev, M.) Finding the second-order approximate mixed derivative of a function of two variables. (Russian) **(84d:45009)**

Rubinov, A. M. See **Dem'yanov, V. F.**, **(84m:90109)**

Seitkazieva, A. S. See **Imanaliyev, M. I.**; et al., **(84d:45009)**

Shieh, Narn Rueih Strong differentiation and martingales in product spaces. **(84c:60068)**

26B10 Implicit function theorems, Jacobians, transformations with several variables

Harmse, J. E. (with Vamanamurthy, M. K.) A note on the implicit function theorem in Euclidean spaces. **84m:26018**

Parthasarathy, T. ★ On global univalence theorems. **84m:26019**

Shen, Zu He A computationally verifiable sufficient condition for the implicit function existence theorem. (Chinese. English summary) **84j:26018**

Vamanamurthy, M. K. See **Harmse, J. E.**, **84m:26018**

secondary classifications:

Darbo, Gabriele A global implicit function theorem. (Italian. English summary) **(84b:58011)**

Gol'dshtein, V. M. See **Vodop'yanov, S. K.**; et al., **(84b:46036)**

Hiriart-Urruty, Jean-Baptiste Characterizations of the plenary hull of the generalized Jacobian matrix. **(84f:90080)**

Joyal, André Une théorie combinatoire des séries formelles. (English summary) [A combinatorial theory of formal series] **(84d:05025)**

Meisters, Gary H. Jacobian problems in differential equations and algebraic geometry. **(84c:58048)**

Pourciau, B. H. Univalence and degree for Lipschitz continuous maps. **(84e:49015)**

Reshetnyak, Yu. G. See **Vodop'yanov, S. K.**; et al., **(84b:46036)**

Vodop'yanov, S. K. (with Gol'dshtein, V. M.; Reshetnyak, Yu. G.) The geometric properties of functions with generalized first derivatives. (Russian) **(84b:46036)**

Warga, J. Errata: "Fat homeomorphisms and unbounded derivate containers" [J. Math. Anal. Appl. **81** (1981), no. 2, 545–560; MR **83f:58007**]. **(84b:58016)**

Zangwill, W. I. Nonconvexities in univalence. **(84j:58029)**

26B12 Calculus of vector functions

Dement'eva, A. M. (with Krasnosel'skii, V. M.; Krasnosel'skii, M. A.) Investigation on the extremum of functions of several variables. (Russian) **84k:26013**

Krasnosel'skii, M. A. See **Dement'eva, A. M.**; et al., **84k:26013**

Krasnosel'skii, V. M. See **Dement'eva, A. M.**; et al., **84k:26013**

Smith, James Raphael An invariant derivation of the common ∇ -operator identities. **84j:26016**

secondary classifications:

Chang, Shau Jin (with Wortis, Michael; Wright, Jon A.) Tricritical points and bifurcations in a quartic map. **(84h:58108)**

Morgado, A. Passos (with Morgado, C. M. Passos) Some considerations about differential operators. **(84e:53020)**

Morgado, C. M. Passos See **Morgado, A. Passos**, **(84e:53020)**

Wortis, Michael See **Chang, Shau Jin**; et al., **(84h:58108)**

Wright, Jon A. See **Chang, Shau Jin**; et al., **(84h:58108)**

26B15 Integration: length, area, volume [See also 28A75, 51M25.]

Fava, N. (with Keilhauer, G.; Larotonda, A.) Surface integrals, spherical coordinates and the area element of S^{n-1} . **84j:26015**

Haupt, Otto Zur Verallgemeinerung des riemannschen Integrals. [On generalizing the Riemann integral] **84j:26016**

Keilhauer, G. See **Fava, N.**; et al., **84j:26015**

Larotonda, A. See **Fava, N.**; et al., **84j:26015**

Nica, Alexandru On the influence of the choice of the norm in the bidimensional Riemann integral theory. **84k:26014**

Okikolu, G. O. Integrals involving norms of linear sums of vectors, and products of norms of orthogonal classes. **84m:26020a**

Integrals involving norms of linear sums of vectors, and products of norms of orthogonal classes. II. Identities and estimates involving minimum value expressions. **84m:26020b**

secondary classifications:

Shelomanov, A. A. Calculation of multiple integrals by means of an ergodic theorem. (Russian. English summary) **(84g:65036)**

26B20 Integral formulas (Stokes, Gauss, Green, etc.)

Sampson, J. H. On Pizzetti's formula. (Italian summary) **84c:26014**

secondary classifications:

Jerison, David S. (with Kenig, Carlos E.) The Neumann problem on Lipschitz domains. **(84a:35064)**

Kenig, Carlos E. See **Jerison, David S.**, **(84a:35064)**

Toralballe, L. C. See **Toralballe, L. V.**, **(84a:49061a)** and **(84a:49061b)**

Toralballe, L. V. (with Toralballe, L. C.) A theory of surface integrals. I. Surface integrals on nonparametric surfaces. **(84a:49061a)**

(with Toralballe, L. C.) A theory of surface integrals. II. Integrals on parametric surfaces. **(84a:49061b)**

26B25 Convexity, generalizations

Bergstrom, Roy C. See **McLinden, L.**, **84a:26006**

Das, Chakradhar Generalized convexity and optimization problems. **84b:26011**

Kiselev, Yu. N. A convexity criterion for a positively homogeneous function. (Russian) **84j:26017**

Komlósi, Sándor Some properties of nondifferentiable pseudoconvex functions. **84m:26021**

McLinden, L. (with Bergstrom, Roy C.) Preservation of convergence of convex sets and functions in finite dimensions. **84a:26006**

Segal, Uzi A theorem on the additivity of the quasiconvex closure of an additive convex function. **84m:26022**

secondary classifications:

Behringer, Fred Alois Discrete and nondiscrete quasiconvexlike functions and single-peakedness (unimodality). (German and Russian summaries) **(84g:90012)**

Kaul, R. N. (with Kaur, Surjeet) Sufficient optimality conditions using generalized convex functions. **(84g:90078)**

Kaur, Surjeet See **Kaul, R. N.**, **(84g:90078)**

Kohn, Robert V. (with Strang, Gilbert) Explicit relaxation of a variational problem in optimal design. **(84h:49064)**

Mond, B. Generalized convexity in mathematical programming. **(84j:90074)**

Reznick, Bruce Some inequalities for products of power sums. **(84g:26015)**

Singer, Ivan Surrogate conjugate functionals and surrogate convexity. **(84m:49035)**

Strang, Gilbert See **Kohn, Robert V.**, **(84h:49064)**

Temam, Roger A characterization of quasiconvex functions. **(84h:49035)**

Yomdin, Yosef On functions representable as a supremum of a family of smooth functions. **(84g:58016)**

26B30 Absolutely continuous functions, functions of bounded variation

Cater, F. S. Most monotone functions are not singular. **84e:26015**

Ganshin, G. S. Estimation of a function that satisfies coordinate-wise the Lipschitz condition. (Russian) **84m:26023**

Russell, A. M. (with Upton, C. J. F.) A generalization of a theorem by F. Riesz. (Russian summary) **84m:26024**

Upton, C. J. F. See **Russell, A. M.**, **84m:26024**

secondary classifications:

Bongiorno, Benedetto Essential variations. **(84a:28004)**

Darst, Richard B. (with Honargohar, Zorabi) Weak-star convergence in the dual of the continuous functions on the n -cube, $1 \leq n < \infty$. **(84a:46058)**

Honargohar, Zorabi See **Darst, Richard B.**, **(84a:46058)**

Ragni, Marcello Rectangle functions. I. The generalized variation. (Italian) **(84a:49059)**

Rectangle functions. II. The Burkil integral in generalized sense. (Italian)

(84a:49060)

Terekhin, A. P. Mixed q -integral p -variation and mixed differentiability in L_p of functions from L_q . (Russian) **(84e:46035)**

26B35 Special properties of functions of several variables, Hölder conditions, etc.

Kominek, Zygfryd Some remarks on the set classes A_n^N and B_n^N . **84j:26017**

Meres, Lucjan On the singular points of Pringsheim-Du Bois Reymond of a function of two variables. **84m:26025**

Pu, Huan Wén (with Pu, Huo Hui Min) A local criterion for Radaković's \oplus^* functions and its applications. **84k:26015**

Pu, Huo Hui Min See **Pu, Huan Wén**, **84k:26015**

Smital, Jaroslav (with Snoha, L'ubomir) Generalization of a theorem of S. Piccard. (Russian and Slovak summaries) **84b:26012**

Snoha, L'ubomir See **Smital, Jaroslav**, **84b:26012**

26B40 Representation and superposition of functions

Schrempf, Wolfgang Der Kolmogoroff'sche Darstellungssatz bei halbstetigen Funktionen. (English summary) [Kolmogorov's representation theorem with semicontinuous functions] **84m:26026**

secondary classifications:

Mosčenkov, V. B. Superposition of functions in a Sobolev space. (Russian) **(84d:46040)**

Neuman, František Factorizations of matrices and functions of two variables. **(84d:15017)**

Pu, Huan Wén (with Pu, Huo Hui Min) A local criterion for Radaković's Φ^* functions and its applications. **(84c:26015)**

Pu, Huo Hui Min See **Pu, Huan Wén**, **(84c:26015)**

26B99 None of the above, but in this section

Ding, Shan Rui On the equivalence problem of classes of infinitely differentiable functions of several variables. (Chinese. English summary) **84c:26016**

Laczkovich, M. (with Petruska, Gy.) Sectionwise properties and measurability of functions of two variables. **84c:26016**

Páles, Zsolt Characterization of quasideviation means. **84j:26018**

Petruska, Gy. See **Laczkovich, M.**, **84c:26016**

secondary classifications:

Ancel, Fredric D. Collections of paths and rays in the plane which fix its topology. **(84c:54007)**

Dzhvarshishvili, A. G. The cluster set of a function of two variables. (Russian) **(84j:32007)**

Kharazishvili, A. B. An application of the Baire property. (Russian. English and Georgian summaries) **(84h:54038)**

Mukhiddinov, S. R. Determination of a differential form from its integrals along geodesics. (Russian) (See **84m:35003**)

Stein, Erwin Editor's note: the differentiability of functions in \mathbb{R}^n . **(84j:35077)**

Vuorinen, Matti On the Harnack constant and the boundary behavior of Harnack functions. **(84c:31008)**

26Cxx Polynomials, rational functions

26C05 Polynomials: analytic properties, inequalities, etc.

Rack, Heinz-Joachim Abschätzung der Teilsummen reeller Polynome. [Estimate of partial sums of real polynomials] **84g:26010**

secondary classifications:

Benallou, A. (with Mellichamp, D. A.; Seborg, D. E.) On the number of solutions of multivariable polynomial systems. **(84i:93084)**

Dewan, K. K. (with Govil, N. K.) An inequality for self-inversive polynomials. **(84i:30001)**

Gemidzhiev, Georgi Some methods of division, algorithms and criteria for polynomials. (Bulgarian. English and Russian summaries) **(84h:32004)**

Govil, N. K. See **Dewan, K. K.**, **(84i:30001)**

Kemperman, J. H. B. A Hurwitz matrix is totally positive. **(84i:15012)**

Mellichamp, D. A. See **Benallou, A.**; et al., **(84i:93084)**

Nigro, Alfio Some properties of integer-valued rational functions that are useful in certain problems of financial mathematics. (Italian. English summary) **(84g:26015)**

Reznick, Bruce Some inequalities for products of power sums. **(84g:26015)**

Seborg, D. E. See **Benallou, A.**; et al., **(84i:93084)**

Strömberg, Jan-Olov (with Wheeden, Richard L.) Relations between H_p^q and L_p^q with polynomial weights. **(84h:30048)**

Varma, A. K. Some inequalities of algebraic polynomials having all zeros inside $[-1, 1]$. **(84d:41024)**

Wheeden, Richard L. See **Strömberg, Jan-Olov**, **(84h:30048)**

26C10 Polynomials: location of zeros [See also 12D10, 30C15, 65H05.]

Cai, Yao Zhi On a bound for the zeros of polynomials of degree n . (Chinese. English summary) **84m:26027**

secondary classifications:

Aziz, Abdul On the zeros of composite polynomials. **(84h:30008)**

Górecki, Henryk (with Szymkat, Maciej) Application of an elimination method to the study of the geometry of zeros of real polynomials. **(84j:30014)**

Prák, Vlastimil (with Young, Nicholas J.) Zero location by Hermitian forms: the singular case. **(84c:12014)**

Saito, Kyoji Certain irreducible polynomials with multiplicatively independent roots. **(84g:12028)**

Shih, Mou Hsiang (with Wang, Hann Tzong) Unit lemniscates contained in the unit ball. **(84c:30014)**

Szymkat, Maciej See **Górecki, Henryk**, **(84j:30014)**

Wang, Hann Tzong See **Shih, Mou Hsiang**, **(84c:30014)**

Young, Nicholas J. See **Prák, Vlastimil**, **(84c:12014)**

Zaheer, Neyamat On Lucas-sets for vector-valued abstract polynomials in K -inner product spaces. **(84d:30014)**

26C15 Rational functions [See also 14G30.]

26C99 None of the above, but in this section

secondary classifications:

Barrar, R. B. (with Loeb, H. L.) Oscillating Tchebycheff systems. **(84c:41002)**

Loeb, H. L. See **Barrar, R. B.**, **(84c:41002)**

26Dxx Inequalities (For maximal function inequalities, see 42B25; for functional inequalities, see 39C05.)

26D05 Inequalities for trigonometric functions and polynomials

Lorch, Lee Alternative proof of a sharpened form of Bernstein's inequality for Legendre polynomials. **84c:26017**

Pierre, R. (with Rahman, Qazi Ibadur) On a problem of Turán about polynomials. III. **84c:26017**

Rahman, Qazi Ibadur See **Pierre, R.**, **84c:26017**

Taberski, Roman Inequalities for trigonometric and algebraic polynomials. **84g:26011**

secondary classifications:

Mirsky, L. An inequality of the Markov-Bernstein type for polynomials. **(84h:41030)**

26D10 Inequalities involving derivatives and differential and integral operators

Agarwal, Ravi P. See **Thandapani, E.**, **84h:26020**

Bainov, D. D. See **Khristova, S. G.**, **84d:26012** and **Hristova, S. G.**, **84h:26019**

Beesack, Paul R. On inequalities complementary to Jensen's. **84h:26018**

Ditzian, Zeev On inequalities of periodic functions and their derivatives. **84f:26019**

Fink, A. M. Kolmogorov-Landau inequalities for monotone functions. **84c:26017**

Goldstein, Jerome A. (with Kwong, Man Kam; Zettl, A.) Weighted Landau inequalities. **84j:26019**

Khristova, S. G. (with Bainov, D. D.) Integral inequalities for functions of many variables. **84d:26012**

(with Bainov, D. D.) On some integral inequalities for a scalar function of a vector argument. (Russian and Bulgarian summaries) **84h:26019**

Kwong, Man Kam See **Goldstein, Jerome A.**; et al., **84j:26019**

Lepins, A. See **Zyagintsev, A. I.**, **84g:26013b**

Li, Kuo Wei Majorization of finite partially ordered sets. **84d:26013**

Lin, Chin Ts'ai On some new integro-differential inequalities. **84j:26020**

Pachpatte, B. G. Some inequalities between functions and their derivatives. **84h:26018**

On some fundamental discrete inequalities in two independent variables. **84k:26019**

A note on some fundamental integro-differential inequalities. **84c:26018**

See also **Singare, V. M.**, **84d:26014** and **84g:26012**

Russell, A. M. Some inequalities arising from a Banach algebra norm. **84c:26018**

Sato, Masae The Landau inequality for bounded intervals with $\|f^{(1)}\|$ finite. **84k:26020**

Singare, V. M. (with Pachpatte, B. G.) On some basic partial integral inequalities and their applications. **84d:26014**

(with Pachpatte, B. G.) On some fundamental multidimensional integral inequalities. **84g:26012**

Thandapani, E. (with Agarwal, Ravi P.) On some new integro-differential inequalities: theory and applications. **84h:26020**

Wattamwar, M. J. On some integral inequalities of Gronwall-Bellman type. **84c:26018**

Yeh, Cheh Chih On some integral inequalities in n independent variables and their applications. **84f:26020**

Young, Eutiquio C. Functional integral inequalities in N variables. **84c:26007**

On Bellmann-Bihari integral inequalities. **84d:26015**

Zettl, A. See **Goldstein, Jerome A.**; et al., **84j:26019**

Zyagintsev, A. I. Kolmogorov's inequalities for $n=4$. (Russian) **84g:26013a**

(with Lepins, A.) Kolmogorov's inequalities between the upper bounds of derivatives of functions for $n=3$. (Russian) **84g:26013b**

secondary classifications:

Goetgheluck, Pierre Généralisation de l'inégalité de Markov. [Generalization of the Markov inequality] **(84f:41018)**

Pachpatte, B. G. On some fundamental hyperbolic partial integral inequalities. **(84d:45031)**

Turinici, Mihai Differential inequalities on abstract metric spaces. **(84c:34015)**

26D15 Inequalities for sums, series and integrals

Agarwal, Ravi P. On integro-differential inequalities in two independent variables. **84h:26021a**

Inequalities involving partial derivatives. **84h:26021b**

Chen, Wen Zhong (with Feng, Gong Ji; Wang, Xing Hua) Twenty years of Opial inequalities. (Chinese) **84j:26021**

Daykin, David E. Chebyshev's inequalities for functions monotone in the mean. **84c:26019**

Feng, Gong Ji See **Chen, Wen Zhong**; et al., **84j:26021**

Fink, A. M. Steffensen type inequalities. **84f:26021**

Florian, A. Bemerkungen zu einer Ungleichung für konvexe Funktionen. [Comments on an inequality for convex functions] **84g:26014**

Garrea, Ioan (with Ivan, Mircea) Sur une inégalité de Levinson-Popoviciu. [A Levinson-Popoviciu inequality] **84f:26022**

Györi, István (with Pintér, Lajos) On some Stieltjes integral inequalities. **84c:26019**

(Haber, S.) See **Mercer, A. McD.**, **84j:26023**

Ivan, Mircea See **Garrea, Ioan**, **84f:26022**

Johnson, Peter D., Jr. (with Mohapatra, Ram Narayan) Best possible results in a class of inequalities. **84j:26022**

- Lin, Chin Ts'ai On Wendroff's inequality in n independent variables. **84i:26020**
- Marinov, Marin Stefanov An inequality concerning a norm. (Russian. English and Bulgarian summaries) **84a:26008**
- McKee, Sean Generalised discrete Gronwall lemmas. (German and Russian summaries) **84d:26016**
- Mercer, A. McD. A note on a paper: "An elementary inequality" [Internat. J. Math. Math. Sci. **2** (1979), no. 3, 531–535; MR 81b:26013] by S. Haber. **84j:26023**
- Mohapatra, Ram Narayan See Johnson, Peter D., Jr., **84j:26022**
- Páles, Zolt A generalization of the Minkowski inequality. **84j:26024**
- Pečarić, Josip E. Inverse of Jensen-Steffensen's inequality. (Serbo-Croatian summary) **84j:26025**
An inequality for m -convex sequences. **84c:26019**
Inverse of Steffensen's inequality. (Serbo-Croatian summary) **84f:26023**
An inequality for 3-convex functions. **84c:26013**
A short proof of a variant of Jensen's inequality. **84c:26020**
See also Vasić, P. M., **84f:26025**
- Pintér, Lajos See Györi, István, **84c:26019**
- Raşa, Ion On the inequalities of Popoviciu and Radó. **84f:26024**
- Redheffer, Raymond M. (with Volkmann, Peter) Über eine Ungleichung von Schur. (English summary) [On an inequality of Schur] **84m:26028**
(with Volkmann, Peter) Schur's generalization of Hilbert's inequality. **84d:26017**
- Reznick, Bruce Some inequalities for products of power sums. **84g:26015**
- Shan, Zan Some inequalities associated with permutation groups. (Chinese. English summary) **84c:26022**
- Vasić, P. M. (with Pečarić, Josip E.) Comments on Čebyšev's inequality. **84f:26025**
- Volkmann, Peter See Redheffer, Raymond M., **84d:26017** and **84m:26028**
- Vukmirović, Jovan A note on an inequality for the cyclic sums introduced by D. E. Daykin. **84m:26029**
- Wang, Chung Lie (with Wang, Xing Hua) On an extension of Hadamard inequalities for convex functions. (Chinese summary) **84d:26018**
- Wang, Xing Hua See Wang, Chung Lie, **84d:26018** and Chen, Wen Zhong; et al., **84j:26021**
- Wu, Chang I (with Yang, Kuo Sheng) On discrete Gronwall's inequalities. **84a:26009**
- Yang, Kuo Sheng A note on an integro-differential inequality. **84a:26010**
See also Wu, Chang I, **84a:26009**
- secondary classifications:
- Abramowich, J. On Gronwall and Wendroff type inequalities. **(84c:34015)**
- Atkinson, F. V. (with Haddock, John R.; Staffans, Olof J.) Integral inequalities and exponential convergence of solutions of differential equations with bounded delay. **(84g:34123)**
- Bainov, D. D. (with Khristova, S. G.) Integral inequalities of Bihari type for functions of two variables. **(84m:34011)**
See also Khristova, S. G., **(84a:34017)**
- Barel, M. (with Tamir, Arie) Nested matrices and the existence of least majorized elements. **(84a:15021)**
- Barnes, David C. Some remarks on a result of Atanacković. **(84c:73045)**
- Chatterji, S. D. Erratum: "Some comments on the maximal inequality in martingale theory" [Measure theory, Oberwolfach 1979 (Oberwolfach, 1979), pp. 361–364, Lecture Notes in Math., 794, Springer, Berlin, 1980; MR 82a:60068]. **(84b:60065)**
- Haddock, John R. See Atkinson, F. V.; et al., **(84g:34123)**
- Heinig, Hans P. (with Johnson, Raymond L.) Weighted norm inequalities for L^p -valued integral operators and applications. **(84g:42018)**
- Johnson, Raymond L. See Heinig, Hans P., **(84g:42018)**
- Khristova, S. G. (with Bainov, D. D.) Some integral inequalities for a scalar function with vector argument. (Russian. Romanian summary) **(84a:34017)**
See also Bainov, D. D., **(84m:34011)**
- Korenblum, Boris Some problems in potential theory and the notion of harmonic entropy. **(84j:31001)**
- Maligranda, Lech On Hardy's inequality in weighted rearrangement invariant spaces and applications. I, II. **(84g:46043)**
- Muckenhoupt, Benjamin Weighted norm inequalities for the Fourier transform. **(84m:42019)**
- Novotná, Jarmila A sharpening of discrete analogues of Wirtinger's inequality. (Russian summary) **(84c:52019)**
- Okikiolu, G. O. Integrals involving norms of linear sums of vectors, and products of norms of orthogonal classes. **(84m:26020a)**
Integrals involving norms of linear sums of vectors, and products of norms of orthogonal classes. II. Identities and estimates involving minimum value expressions. **(84m:26020b)**
- Pachpatte, B. G. Some inequalities between functions and their derivatives. **(84k:26018)**
- Pavlovic, Miroslav Some inequalities in L^p spaces. (Russian) **(84a:46065)**
- Petrov, V. V. Some inequalities for moments. (Russian) **(84f:60029)**
- Rafal'son, S. Z. An inequality between norms of a function and its derivative in integral metrics. (Russian) **(84m:41024)**
- Staffans, Olof J. See Atkinson, F. V.; et al., **(84g:34123)**
- Tamir, Arie See Barel, M., **(84a:15021)**
- 26D20 Other analytical inequalities
- Godunova, E. K. (with Levin, Viktor Iosifovich) Lower bound of a cyclical sum. (Russian) **84c:26021**
- Levin, Viktor Iosifovich See Godunova, E. K., **84c:26021**
- Okikiolu, G. O. Jensen-type convex function inequalities involving positive linear operators. **84b:26023**
- Proschan, Frank (with Sethuraman, Jayaram) Two generalizations of Muirhead's theorem. **84d:26019**
- Schoenberg, Isaac J. The Landau problem. II. The case of motions on curves. **84d:26020a**
The Landau problem. III. Motions on special curves and time-optimal control problems. **84d:26020b**

- Sethuraman, Jayaram See Proschan, Frank, **84d:26019**
- Wang, Si Lei An elementary proof of Garsia's inequality. **84g:26016**
- Wellstein, H. Iterierte arithmetische Mittelung und eine Verallgemeinerung der Jensenschen Ungleichung. [Iterated arithmetical mean and a generalization of Jensen's inequality] **84c:26022**

secondary classifications:

- Iwamoto, Seiichi (with Wang, Chung Lie) Continuous dynamic programming approach to inequalities. **(84m:90125)**
- Kershaw, Donald Some extensions of W. Gautschi's inequalities for the gamma function. **(84m:33003)**
- Manoukian, Edward B. Lower bounds to Feynman integrals and class H^n . (French summary) **(84j:81034)**
- Sato, Masae (with Satō, Ryōtarō) A simple proof of the Chui-Smith theorem on Landau's problem. **(84c:41008)**
- Satō, Ryōtarō See Sato, Masae, **(84c:41008)**
- Wang, Chung Lie See Iwamoto, Seiichi, **(84m:90125)**

26D99 None of the above, but in this section

secondary classifications:

- Carroll, C. E. Proof of Oppenheim's area inequalities for triangles and quadrilaterals. **(84m:51021)**
- Daróczy, Z. (with Páles, Zolt) On comparison of mean values. **(84c:39007)**
- Páles, Zolt See Daróczy, Z., **(84c:39007)**
- Pečarić, Josip E. Notes on two identities of D. D. Adamović. **(84a:05006)**

26Exx Miscellaneous topics [See also 58Cxx.]

26E05 Real-analytic functions

secondary classifications:

- Pour-El, Marian Boykan (with Richards, Ian) Computability and noncomputability in classical analysis. **(84c:03056)**
- Richards, Ian See Pour-El, Marian Boykan, **(84c:03056)**
- Zinzius, E. Ein spieltheoretische Folgerung aus einem Satz über die Nullstellenmenge reell-analytischer Funktionen mehrerer Veränderlicher. (English and Russian summaries) [A game-theoretic corollary of a theorem on the zero set of real-analytic functions of several variables] **(84j:90104)**

26E10 C^∞ -functions, quasi-analytic functions

- Bilodeau, G. G. The origin and early development of nonanalytic infinitely differentiable functions. **84g:26017**
- Dzhrbashyan, M. M. (with Martirosyan, V. M.) On the theory of a -quasianalytic classes. (Russian. English and Armenian summaries) **84i:26021**
- Martirosyan, V. M. See Dzhrbashyan, M. M., **84i:26021**
- Omicini, Jan On some homeomorphisms of class C^∞ transforming a denumerable set onto denumerable sets. (Russian summary) **84k:26021**
- Wen, Zhi Ying Some properties of classes of infinitely differentiable functions of two variables. (Chinese) **84j:26026**

secondary classifications:

- Cioranescu, Ioana On quasianalytic vectors for some classes of operators. **(84f:47041)**
- Colombeau, Jean-François ★ Differential calculus and holomorphy. **(84i:46005)**
- Ivanov, Anatolii Fiodorovich See Sharkovskii, A. N., **(84m:58066)**
- Pham-Gia, T. On the spectrum of a distribution function and on unique factorization. **(84d:60022)**
- de Roeper, J. W. Extensions of ultradifferentiable functions on closed sets. **(84g:46054)**
- Sharkovskii, A. N. (with Ivanov, Anatolii Fiodorovich) C^∞ -mappings of an interval with attracting cycles with arbitrarily large periods. (Russian) **(84m:58066)**

26E15 Calculus of functions on infinite-dimensional spaces

secondary classifications:

- Coimbra, Elvira ★ On derivation in super- v -metric spaces. Taylor's formula. **(84f:46059)**
- Colombeau, Jean-François ★ Differential calculus and holomorphy. **(84i:46005)**
- Pham Huy Đôn Some results on locally Lipschitzian mappings. **(84c:58023)**
- Ribarić, M. Application of general systems methodology to the study of implicit functions and the stability of functional analytic properties of operators. **(84k:58024)**
- Turinici, Mihai Differential inequalities on abstract metric spaces. **(84i:34015)**

26E20 Calculus of functions taking values in infinite-dimensional spaces

secondary classifications:

- Výborný, Rudolf Mean value theorems and a Taylor theorem for vector valued functions. **(84c:46046)**

26E25 Set-valued functions [See also 54C60.]

secondary classifications:

- Ceder, Jack On Baire 1 selections. **(84f:26004)**
- Ioffe, Alexandre D. Nonsmooth analysis and the theory of fans. **(84m:58014)**
- Thibault, Lionel Tangent cones and quasi-interiorly tangent cones to multifunctions. **(84i:58018)**

26E30 Non-Archimedean analysis [See also 12J25.]

secondary classifications:

Jha, S. N. (with Singh, Madan Prasad) A generalisation of Mertens' theorem. (84b:12024)

Singh, Madan Prasad See Jha, S. N., (84b:12024)

26E35 Nonstandard analysis [See also 03H05.]

Laugwitz, Detlef Die Nichtstandard-Analyse: eine Wiederaufnahme der Ideen und Methoden von Leibniz und Euler. [Nonstandard analysis: a revival of the ideas and methods of Leibniz and Euler] (See 84m:01021)

 Ω -calculus as a generalization of field extension—an alternative approach to nonstandard analysis. 84b:26024

Pasini, Leonardo Real closure of generalized Hardy fields. (Italian. English summary) 84c:26020

secondary classifications:

Fisher, Dawn Extending functions to infinitesimals of finite order. (84f:03058)

Heinrich, Stefan (with Henson, C. Ward; Moore, L. C., Jr.) Elementary equivalence of L_1 -preduals. (84j:46021)

Henson, C. Ward See Heinrich, Stefan; et al., (84j:46021)

Moore, L. C., Jr. See Heinrich, Stefan; et al., (84j:46021)

Reeb, Georges La mathématique non standard vieille de soixante ans? [Nonstandard mathematics sixty years old?] (84b:03085)

Richter, Michael M. ★ Ideale Punkte, Monaden und Nichtstandard-Methoden. (German) [Ideal points, monads and nonstandard methods] (84g:03107)

Tall, David Elementary axioms and pictures for infinitesimal calculus. (84j:03139c)

Živaljević, Rade A Loeb measure approach to the Riesz representation theorem. (84h:28020)

26E99 None of the above, but in this section

secondary classifications:

Aubin, Jean-Pierre Ioffe's fans and generalized derivatives of vector-valued maps. (84h:58018)

Efendieva, S. Kh. Some generalizations of the Laplace operator and their applications. (Russian) (84c:41022)

Gilezan, Koriolan Les dérivées partielles des fonctions pseudo-bouliennes généralisées. (English summary) [Partial derivatives of generalized pseudo-Boolean functions] (84e:06018)

Liedl, Roman (with Netzer, N.) Was ist Produktintegration? [What is product integration?] (84c:26001)

Netzer, N. See Liedl, Roman, (84c:26001)

Pu, Huan Wén (with Pu, Huo Hui Min) Uniform limits of strong Darboux functions. (84c:54017)

Pu, Huo Hui Min See Pu, Huan Wén, (84c:54017)

28-XX MEASURE AND INTEGRATION (For analysis on manifolds, see 58-XX.)

28-01 Elementary exposition, textbooks

de Barra, Gearoid ★ Measure theory and integration. 84h:28001

secondary classifications:

Aumann, Georg (with Haupt, Otto) ★ Einführung in die reelle Analysis. III. (German) [Introduction to real analysis. III] (84c:26001)

(Dombrovskii, M.) See Kolmogorov, A. N.; et al., (84i:46002)

Fomin, S. V. See Kolmogorov, A. N., (84i:46002)

Gelbaum, Bernard R. ★ Problems in analysis. (84b:00006)

Haupt, Otto See Aumann, Georg, (84c:26001)

I'in, V. A. (with Poznyak, E. G.) ★ Fundamentals of mathematical analysis. Part 2. (84h:26001b)

Kolmogorov, A. N. (with Fomin, S. V.) ★ Elementos da teoria das funções e de análise funcional. (Portuguese) [Elements of the theory of functions and functional analysis] (84i:46002)

Parthasarathy, Kalyanapuram Rangachari ★ Введение в теорию вероятностей и теорию меры. (Russian) [Introduction to probability and measure] (84j:60001)

Plachky, Detlef ★ Stochastik. II. (German) [Stochastics. II] (84f:60002)

Poznyak, E. G. See I'in, V. A., (84h:26001b)

(Prokhorov, A. V.) See Parthasarathy, Kalyanapuram Rangachari, (84j:60001)

(Sazonov, V. V.) See Parthasarathy, Kalyanapuram Rangachari, (84j:60001)

(Shokurov, Vladimir) See I'in, V. A.; et al., (84h:26001b)

28-02 Advanced exposition (research surveys, monographs, etc.)

Gardner, R. J. The regularity of Borel measures. 84a:28001

Rao, B. V. See Rao, K. P. S. Bhaskara, 84c:28001

Rao, K. P. S. Bhaskara (with Rao, B. V.) Borel spaces. 84c:28001

28-03 Historical (must also be assigned at least one classification number from Section 01)

Terpe, Frank Über die Beiträge von Willi Rinow zur Maßtheorie. [On the contributions of Willi Rinow to measure theory] 84a:28002

secondary classifications:

Grzegorek, E. (with Ryll-Nardzewski, C.) The papers of Roman Sikorski in measure theory. (Polish) (84j:01073c)

Itô, Yûji See Yosida, Kôsaku, (84e:01088)

(Kakutani, Shizuo) See Yosida, Kôsaku; et al., (84e:01088)

Knobloch, Eberhard Von Riemann zu Lebesgue—zur Entwicklung der Integrationstheorie. (English and French summaries) [From Riemann to Lebesgue—on the development of integration theory] (84m:01027)

Mawhin, Jean Présences des sommes de Riemann dans l'évolution du calcul intégral. [The presence of Riemann sums in the evolution of integral calculus] (84j:01047)

Ryll-Nardzewski, C. See Grzegorek, E., (84j:01073c)

(Sikorski, Roman) See Grzegorek, E.; et al., (84j:01073c)

Sion, Maurice A brief history of the integral to 1900. (84g:01008)

Yosida, Kôsaku (with Itô, Yûji) Award of Academy-Imperial Prize to Shizuo Kakutani. (Japanese) (84e:01088)

28-04 Explicit machine computation and programs (not the theory of computation or programming)

28-06 Proceedings, conferences, etc.

(Belley, Jean-Marc) See Measure theory and its applications. 84c:28001

(Dubois, Jacques) See Measure theory and its applications. 84c:28001

(Morales, Pedro) See Measure theory and its applications. 84c:28001

Conference:

Measure theory and its applications ★ Measure theory and its applications. 84c:28001

Measure theory and its applications ★ Measure theory and its applications. 84c:28001

Sherbrooke, Que. ★ Measure theory and its applications. 84c:28001

28Axx Classical measure theory

28A05 Classes of sets (Borel fields, σ -rings, etc.), measurable sets, Suslin sets, analytic sets [See also 04A15, 26A21, 54H05.]

(Chu, Jun Tsu) See Yang, An Zhou, 84j:28003

Kanovei, V. G. An answer to N. N. Luzin's question on the separability of CA-curves. (Russian) 84c:28001

Lahiri, B. K. Local measurability. 84c:28002

Mauldin, R. Daniel (with Stone, A. H.) Realization of maps. 84h:28001

Miller, Harry I. On a paper of N. G. Saha and K. C. Ray: "On sets under certain transformations in \mathbb{R}_n ." [Publ. Inst. Math. (Beograd) (N.S.) 22(36) (1977), 237-244; MR 58 #6127]. 84d:28001

(Ray, K. C.) See Miller, Harry I., 84d:28001

Rudin, Walter Well-distributed measurable sets. 84m:28001

(Saha, N. G.) See Miller, Harry I., 84d:28001

Shortt, Rae Michael The extension of measurable functions. 84d:28002

Stone, A. H. See Mauldin, R. Daniel, 84h:28001

Szkopinska, Bożena Some structural properties of measurable sets. 84j:28001

Volčič, Aljoša On some counterexamples in measure theory. 84j:28002

Yang, An Zhou Comment: "A note on minimal rings and fields" [J. Math. Res. Exposition 2 (1982), no. 3, 1-4; MR 83j:28002] by J. T. Chu. (Chinese) 84j:28003

secondary classifications:

Argyros, Spiros A. (with Kalamidas, N.) Property $k_{\alpha, \kappa}$ on spaces with strictly positive measures. (84i:04001)

Brown, J. B. (with Cox, G. V.) Continuous images of Lusin sets. (84i:54040)

Cox, G. V. See Brown, J. B., (84i:54040)

Di Prisco, Carlos A. (with Zbierski, Paweł) Determinacy of Borel sets and projective sets: some applications to infinite games. (Spanish. English summary) (84i:90172)

Kalamidas, N. See Argyros, Spiros A., (84i:04001)

Kanovei, V. G. A generalization of P. S. Novikov's theorem on cross sections of Borel sets. (Russian) (84h:04003)

Kurepa, Djuro Measure and order. (84h:06003)

Laczkovich, M. (with Petruska, Gy.) Sectionwise properties and measurability of functions of two variables. (84e:26016)

Louveau, Alain Ensembles mesurables et ensembles non mesurables sur la droite réelle. [Measurable and nonmeasurable sets on the real line] (84g:03076)

(with Simpson, Stephen G.) A separable image theorem for Ramsey mappings. (Russian summary) (84g:04002)

Lukashenko, T. P. \mathcal{A} -integrability of functions. (Russian. English summary) (84e:26009)

Petruska, Gy. See Laczkovich, M., (84e:26016)

Raisonnier, Jean (with Stern, Jacques) Mesurabilité et propriété de Baire. (English summary) [Measurability and the Baire property] (84g:03077)

Romero, Juan L. When is $L^2(\mu)$ contained in $L^2(\nu)$? (84d:46033)

Sharapov, V. G. A class of measurable partitions, and exact endomorphisms. (Russian) (84m:28029)

Simpson, Stephen G. See Louveau, Alain, (84g:04002)

Stern, Jacques See Raisonnier, Jean, (84g:03077)

Takahashi, Yoichirô Fredholm determinant of unimodal linear maps. (84h:58073)

Topsoe, Flemming The Souslin operation in topology and measure theory, selected topics. (84a:54073)

Zbierski, Paweł See Di Prisco, Carlos A., (84i:90172)

28A10 Real- or complex-valued set functions

Adamski, Wolfgang Tight set functions and essential measure. 84j:28004

Carlson, T. (with Priky, Karel) Ranges of signed measures. 84c:28002

Józa, Miloslav. Remarque sur la mesure intérieure de Lebesgue. (Czech summary) [Remarks on the inner Lebesgue measure] 84b:28002

Příkrý, Karel. See Carlson, T., 84c:28002

Riečanová, Zdena. About σ -additive and σ -maxitive measures. (Russian summary) 84c:28003

Sastry, K. P. R. A note on Hahn decomposition of finitely additive measures. 84c:28004

Siebs, Wilfried. On the Sobczyk-Hammer decomposition of additive set functions. 84c:28002

secondary classifications:

Michálek, Jiří. Random set functions. (84c:60077)

Schmidt, Klaus D. A general Jordan decomposition. (84d:06027)

Tricot, Claude, Jr. Two definitions of fractional dimension. (84d:28013)

28A12 Contents, measures, outer measures, capacities

Abian, Alexander. Measurable outer kernels of sets. 84c:28003

Adamski, Wolfgang. On the relations between continuous and nonatomic measures. 84d:28003

Bhakta, P. C. (with Roy, S. K.) On the construction of a measure vanishing on an ideal. 84c:28002

Bierlein, Dieter. Some new results on measure extension. 84c:28005

Bobkov, S. G. Compact sets of additive measures. (Russian. English summary) 84j:28005

Burdzy, Krzysztof. On the nonexistence of a selector of the maximal measure. (Russian summary) 84c:28002

Candeloro, Domenico (with Martellotti, A.) Continuous finitely additive measures which are extensions of nonatomic measures. (Italian summary) 84c:28003

Černěk, Pavol. Product of submeasures. (Russian and Slovak summaries) 84d:28004

Fernández Novoa, J. See Jiménez Guerra, Pedro, 84b:28003

Hess, Hans-Ulrich. A Kuratowski approach to Wiener measure. 84j:28006

Jiménez Guerra, Pedro (with Fernández Novoa, J.) Mesures archimédiennes et θ -propriété de Darboux. [Archimedean measures and the θ -property of Darboux] 84c:28003

Kharazishvili, A. B. Some properties of G -measures in Euclidean spaces. (Russian. English and Georgian summaries) 84c:28002

Lee, Je Yoon. A note on weakly singularity and atomic measure. 84c:28004

Major, Imre. New proof of the invariance of the Jordan measure under isometric transformation. (Hungarian) 84c:28006

Martellotti, A. See Candeloro, Domenico, 84c:28003

Masani, Pesi. The outer regularization of finitely-additive measures over normal topological spaces. 84d:28005

Roy, S. K. See Bhakta, P. C., 84c:28002

Schmidt, Klaus D. On a result of Cobzas on the Hahn decomposition. 84b:28003

Terpe, Frank. Remarks on unique extensions of measures. 84c:28001

Volkmer, Hans (with Weber, Hans) Der Wertebereich atomloser Inhalte. [The value range of atomless contents] 84c:28005

Weber, Hans. See Volkmer, Hans, 84c:28005

secondary classifications:

Akaza, Tohru (with Inoue, Katsumi) On the limit set of a geometrically finite Kleinian group. (84b:30074)

Chiang, Tsu Shu. A note on the irreducibility of Lebesgue measure with applications to random walks on the unit circle. (84d:60104)

Inoue, Katsumi. See Akaza, Tohru, (84b:30074)

Józa, Miloslav. Remarque sur la mesure intérieure de Lebesgue. (Czech summary) [Remarks on the inner Lebesgue measure] (84b:28002)

Kallianpur, G. (with Ramachandran, D.) On the splicing of measures. (84m:28007)

Oberlin, Daniel M. Hausdorff dimension and interpolation by certain function spaces. (84b:42010)

Ortiz, Cesar R. Application of submeasures C to comparative probabilities. (Spanish. English summary) (84b:60006)

Submeasures C and quantification of comparative probabilities. (Spanish. English summary) (84m:60007)

Ramachandran, D. See Kallianpur, G., (84m:28007)

Sales, Ton. Fuzzy sets as set classes. (84j:03107)

Savel'ev, L. Ya. Exterior measures and exterior topologies. (Russian) (84f:06023)

Talagrand, Michel. Sur les résultats de Feyel concernant les épaisseurs. [On Feyel's results on thicknesses] (84j:31011)

28A15 Abstract differentiation theory, differentiation of set functions [See also 26A24.]

Bongiorno, Benedetto. Essential variations. 84c:28004

Di Iorio, Margherita. On the existence of an interval function in \mathbb{R}^2 with given derivative. (Italian) 84c:28003

Lorefice, M. F. (with Riccobono, G.) Density on a set and the measurable sets for which the density theorem holds. (Italian) 84d:28006

(with Maniscalco, C.) Separation in measure and nonmeasurable nuclei. (Italian) 84d:28007

Maniscalco, C. See Lorefice, M. F., 84d:28007

Mejlbro, Leif. Vitali type theorems for a class of measures in \mathbb{R}^n . 84g:28001

Preiss, David (with Tišer, Jaroslav) Differentiation of measures on Hilbert spaces. 84b:28004

Riccobono, G. See Lorefice, M. F., 84d:28006

Studený, M. On the differentiation theorem in metric groups. 84j:28007

Tišer, Jaroslav. See Preiss, David, 84b:28004

secondary classifications:

Grande, Zbigniew (with Topolewska, Maria) Sur les fonctions vectorielles approximativement continues. (Czech summary) [Approximately continuous vector functions] (84c:26005)

Leckband, M. A. (with Neugebauer, C. J.) A general maximal operator and the A_p -condition. (84c:42029)

López Melero, Bernardo. A negative result in differentiation theory. (84d:26007)

Neugebauer, C. J. See Leckband, M. A., (84c:42029)

Sjödín, Tord. On L^p -differentiability and difference properties of functions. (84f:26017)

Thomson, B. S. Derivation bases on the real line. I. (84i:26008a)

Derivation bases on the real line. II. (84i:26008b)

Topolewska, Maria. See Grande, Zbigniew, (84c:26005)

28A20 Measurable and nonmeasurable functions, sequences of measurable functions, modes of convergence

Brézis, Haim (with Lieb, Elliott H.) A relation between pointwise convergence of functions and convergence of functionals. 84c:28003

Chadwick, J. J. M. On the definition of measurability for vector valued functions. 84f:28001

Edgar, G. A. On pointwise-compact sets of measurable functions. 84a:28005

Grande, Zbigniew. Un théorème sur la mesurabilité des fonctions de deux variables. [A theorem on the measurability of functions of two variables] 84b:28004

Kalas, Josef. Limit theorems concerning an integral over a semiadditive measure. (Russian. English and Slovak summaries) 84j:28008

Lieb, Elliott H. See Brézis, Haim, 84c:28003

Lipovan, Octavian. On the convergence of multivalued function sequences. (Romanian. French summary) 84j:28009

Maharam, Dorothy (with Stone, A. H.) Expressing measurable functions by one-one ones. 84c:28007

de Maria González, José L. Various types of measurability of functions defined from (Ω, Σ, μ) into a locally convex space E . (Spanish) 84a:28006

Mott, Thomas E. Some generalizations of the Cantor-Lebesgue theorem. VII. 84m:28003

Nougues-Sainte-Beuve, M.-F. Propriétés de mesurabilité dans les espaces de mesures. [Measurability properties in measure spaces] 84c:28004

Rubel, Lee A. (with Siskakis, Aristomenis) A net of exponentials converging to a nonmeasurable function. 84m:28004

Saint-Raymond, Jean. Convergence diffuse d'une suite de fonctions. (English summary) [Diffuse convergence of a sequence of functions] 84a:28007

Siskakis, Aristomenis. See Rubel, Lee A., 84m:28004

Stone, A. H. See Maharam, Dorothy, 84c:28007

Sujan, Štefan. Codes in ergodic theory and information: some examples. (See 84m:58002)

Talagrand, Michel. Filtrés: mesurabilité, rapidité, propriété de Baire forte. [Filters: measurability, rate of convergence, strong Baire property] 84b:28005

Toma, Vladimir. On measurability of binary relations. (Russian and Slovak summaries) 84i:28004

Wagner-Bojakowska, Elżbieta (with Wilczyński, Władysław) Convergence almost everywhere of sequences of measurable functions. 84c:28006

On the convergence with respect to the σ -ideal. 84c:28005

Wilczyński, Władysław. Upper and lower limits with respect to the σ -ideal. (Polish summary) 84f:28002

See also Wagner-Bojakowska, Elżbieta, 84c:28006

Zalote, Nicolás M. σ -additivity of negligible sets in Riesz spaces. (Spanish. English summary) 84b:28005

secondary classifications:

Applying, William D. L. Quasi-uniform absolute continuity and integral convergence. (84b:28006)

Bernhardt, Chris. Rotation intervals of a class of endomorphisms of the circle. (84f:58065)

Bulatović, Jelena. On a random function defined on a pseudo-Boolean algebra. (84j:06018)

Gevorkyan, G. G. On the representation of measurable functions by martingales. (Russian summary) (84f:60072)

Grande, Eulalia (with Grande, Zbigniew) Functions of two variables that are almost everywhere upper semicontinuous with respect to one variable. (84m:26014)

Grande, Zbigniew. See Grande, Eulalia, (84m:26014)

Hill, Theodore P. (with Pestien, Victor C.) The advantage of using nonmeasurable stop rules. (84f:60065)

Hurd, Albert Emerson. Nonstandard analysis and lattice statistical mechanics: a variational principle. (84a:82033)

Jarai, A. Regularity properties of functional equations. (84c:39015)

Khurana, Surjit Singh. A topology associated with vector measures. (84c:46019)

Klemmt, Heinz-Jürgen. Ein maßtheoretischer Satz mit Anwendungen auf Funktionalgleichungen. [A measure-theoretic theorem with applications to functional equations] (84a:33001)

Kupka, Joseph. Strong liftings with application to measurable cross sections in locally compact groups. (84g:28006)

Okano, Hatsuho. A unified treatment of nonstar convergences. (84a:54006)

Pestien, Victor C. See Hill, Theodore P., (84f:60065)

Shortt, Rae Michael. The extension of measurable functions. (84d:28002)

Szeptycki, Paweł. On solid spaces of measurable functions. (Russian summary) (84c:46067)

Zakharov, V. K. Topological and algebraic aspects of some sets of measurable functions. (84g:54017)

28A25 Integration with respect to measures and other set functions

- Appling, William D. L. Quasi-uniform absolute continuity and integral convergence. **84h:28006**
 Constructive representations of certain closest approximations. **84m:28005**
 Bandt, Christoph (with Feiste, Uwe) Some density measures of Hausdorff measures are themselves Hausdorff measures. **84c:28006**
 Feiste, Uwe See Bandt, Christoph, **84c:28006**
 Navara, Mirko (with Pták, Pavel) Two-valued measures on σ -classes. (Russian and Czech summaries) **84m:28006**
 Pták, Pavel See Navara, Mirko, **84m:28006**
 Stich, Werner Integralwertmengen bei Maßfortsetzungen. [Integral value sets in the context of measure extensions] **84b:28006**
 Vivona, Doretta Integral information. (Italian. French summary) **84d:28008**

secondary classifications:

- Appling, William D. L. A preservation of integrability characterization theorem. **(84i:26011)**
 Goluzina, M. G. On the multiplication and division of Cauchy-Stieltjes-type integrals. (Russian) **(84c:30074)**
 Greco, Gabriele H. Completeness of L^p spaces for finitely additive measures. (Italian. English summary) **(84d:46029)**
 Haupt, Otto Zur Verallgemeinerung des riemannschen Integrals. [On generalizing the Riemann integral] **(84j:26016)**
 Henstock, Ralph Density integration and Walsh functions. **(84i:26010)**
 Kalas, Josef Limit theorems concerning an integral over a semiadditive measure. (Russian. English and Slovak summaries) **(84j:28008)**
 Rodríguez-Salinas, Baltasar Integration of functions with values in a locally convex space with respect to infinite measures. I, II. (Spanish. English summary) **(84j:46074)**
 Sawyer, Eric T. A characterization of a two-weight norm inequality for maximal operators. **(84i:42032)**
 Schmidt, Klaus D. On a result of Cobzas on the Hahn decomposition. **(84h:28003)**

28A33 Spaces of measures, convergence of measures [See also 46E27, 60Bxx.]

- Constantinescu, Corneliu Spaces of measures on topological spaces. **84d:28009**
 Hoang Huu Nhu Stability of the Radon-Nikodym theorem and its applications. (Russian) **84c:28008**
 Letta, G. Sur les suites simplement convergentes de mesures de Daniell. (Italian summary) [Pointwise convergent sequences of Daniell measures] **84g:28002**
 Lipceki, Z. On unique extensions of positive additive set functions. **84c:28007**
 Serfozo, Richard Convergence of Lebesgue integrals with varying measures. **84g:28003**
 Steerneman, Ton On the total variation and Hellinger distance between signed measures; an application to product measures. **84h:28007**

secondary classifications:

- Bergström, Harald ★Weak convergence of measures. **(84m:60027)**
 Brandi, Primo (with Salvadori, Anna) On convergence in area in the generalized sense. **(84i:49087)**
 Cook, C. H. Characterization of certain measures on a completely regular space. **(84a:28013)**
 Darst, Richard B. (with Honoghohar, Zorabi) Weak-star convergence in the dual of the continuous functions on the n -cube, $1 \leq n < \infty$. **(84a:46058)**
 Fritz, Günter (with Oppel, Ulrich G.) Generalized Radon transformations. **(84c:92006)**
 Honoghohar, Zorabi See Darst, Richard B., **(84a:46058)**
 Oppel, Ulrich G. See Fritz, Günter, **(84c:92006)**
 Ramamoorthi, R. V. (with Yamada, Sakutarō) On the union of compact statistical structures. **(84c:62012)**
 Salvadori, Anna See Brandi, Primo, **(84i:49087)**
 Temam, Roger Approximation de fonctions convexes sur un espace de mesures et applications. (English summary) [Approximation of convex functions on a space of measures, and applications] **(84c:46024)**
 Yamada, Sakutarō See Ramamoorthi, R. V., **(84c:62012)**

28A35 Measures and integrals in product spaces

- Armstrong, Thomas E. (with Sudderth, William D.) Nearly strategic measures. **84c:28008**
 Ershov, M. P. On a generalization of the Ionescu Tulcea construction of a measure by transition kernels. **84b:28007**
 Graf, Siegfried Realizing automorphisms of quotients of product σ -fields. **84j:28010**
 Johnson, Roy A. Absolute continuity, singularity and product measures. **84a:28009**
 Jursboe, Ole (with Mejlbø, Leif; Topsøe, Flemming) Some Vitali theorems for Lebesgue measure. **84h:28008**
 Kallianpur, G. (with Ramachandran, D.) On the splicing of measures. **84m:28007**
 Mejlbø, Leif See Jursboe, Ole; et al., **84h:28008**
 Okada, Susumu The product of pre-Radon measures. **84d:28010**
 Pachl, Jan K. Correction to: "Two classes of measures" [Colloq. Math. 42 (1979), 331-340; MR 82b:28012] **84c:28009**
 Ramachandran, D. See Kallianpur, G., **84m:28007**
 Šenšel, Pavel About the Kolmogorov's theorem. (Russian and Slovak summaries) **84h:28009**
 Spătaru, Aurel On absolute continuity and singularity of product probability measures. **84f:28003**
 Sudderth, William D. See Armstrong, Thomas E., **84c:28008**
 Talagrand, Michel Un théorème de théorie de la mesure, lié à deux théorèmes de Mokobodzki. [A theorem of measure theory related to two theorems of Mokobodzki] **84m:28008**
 Topsøe, Flemming See Jursboe, Ole; et al., **84h:28008**

secondary classifications:

- Allan, G. R. An inequality involving product measures. **(84m:46062)**
 Černěk, Pavol Product of submeasures. (Russian and Slovak summaries) **(84d:28004)**
 Lopotko, O. V. (with Rudinskii, I. I.) An integral representation of even positive definite bounded functions of an infinite number of variables. (Russian) **(84d:46070)**
 Mussmann, D. On atoms of measures on product spaces. **(84m:60006)**
 Rudinskii, I. I. See Lopotko, O. V., **(84d:46070)**

28A50 Integration and disintegration of measures

- Dubins, Lester E. (with Heath, David C.) With respect to tail sigma fields, standard measures possess measurable disintegrations. **84g:28004**
 van Haagen, A. J. Finite signed measures on function spaces. **84g:28005**
 Heath, David C. See Dubins, Lester E., **84g:28004**

secondary classifications:

- Heller, G. On a local version of pseudocompactness. **(84d:54044)**

28A51 Lifting theory [See also 46G15.]

- Kupka, Joseph Strong liftings with application to measurable cross sections in locally compact groups. **84g:28006**
 Losert, Viktor Strong liftings for certain classes of compact spaces. **84h:28010**
 Sapounakis, A. The existence of strong liftings for totally ordered measure spaces. **84c:28007**
 von Weizsäcker, Heinrich The nonexistence of "liftings" for arithmetic density. **84c:28010**

secondary classifications:

- Kusraev, A. G. General formulas of disintegration. (Russian) **(84j:47106)**

28A60 Measures on Boolean rings, measure algebras [See also 54H10.]

- Brook, Cecilia H. The control measure problem and the universal measure topology. **84h:28011**
 Frič, Roman (with Piatka, L'udovit) Continuous homomorphisms in set algebras. (Slovak. English, German and Russian summaries) **84d:28011**
 Lenzi, Domenico On the finitely additive functions in a Boolean algebra. (Italian. English summary) **84d:28012**
 Piatka, L'udovit See Frič, Roman, **84d:28011**
 Szezo, Mabel Measure repleteness and mapping preservations. **84h:28008**
 Weber, Hans Die atomare Struktur topologischer Boolescher Ringe und s -beschränkter Inhalte. (English summary) [The atomic structure of topological Boolean rings and of s -bounded contents] **84m:28009**

secondary classifications:

- Armstrong, Thomas E. When is the algebra of regular sets for a finitely additive Borel measure a σ -algebra? **(84f:28010)**
 Ferenczi, M. Measures on cylindric algebras. **(84c:03146)**
 Gensheimer, H. Measures on orthomodular lattices. **(84c:06010)**
 Tulpani, Sauro Invariants of elementary equivalence for an axiomatic class of general measure spaces. (Italian. English summary) **(84a:03037)**

28A75 Length, area, volume, other geometric measure theory [See also 26B15, 49F20.]

- Borsuk, Karol Some problems on n -dimensional geometric measure. (See **84c:54003**)
 Cohen, Regina (with Fickett, James W.) The max norm in \mathbb{R}^n -isometries and measure. **84c:28008**
 Coppel, W. A. An interesting Cantor set. **84c:28005**
 Davies, Roy O. Some counterexamples in measure theory. **84c:28009**
 Fickett, James W. See Cohen, Regina, **84c:28008**
 de Guzmán, Miguel Some paradoxical sets with applications in the geometric theory of real variable. **84c:28008**
 Luh, Jiang (with Putcha, Mohan S.) When do two regions commute? **84m:28010**
 Mattila, Pertti On the structure of self-similar fractals. **84j:28011**
 Maude, Ronald The recognition of certain Hausdorff-like measures. **84g:28007**
 Putcha, Mohan S. See Luh, Jiang, **84m:28010**
 Triot, Claude, Jr. Two definitions of fractional dimension. **84d:28013**

secondary classifications:

- Barbieri, Francesco (with Tondi, Adriana) On the geometry of spaces of rectifiable curves. (Italian) **(84h:49054)**
 Brandi, Primo (with Salvadori, Anna) On convergence in area in the generalized sense. **(84i:49087)**
 Brunozi, Anna Maria (with Fiacca, Antonella; Lodovici, Carla) "Absolute continuity" and "quasisubadditivity with respect to a pair" in measure spaces. (Italian. English summary) **(84h:49091)**
 Carey, Richard W. (with Pincus, Joel D.) Principal functions, index theory, geometric measure theory and function algebras. **(84c:47048)**
 Danielich, I. A. On the convergence of the areas of surfaces whose absolute mean integral curvatures are bounded as a whole. (Russian) **(84a:53071)**
 Fiacca, Antonella See Brunozi, Anna Maria; et al., **(84h:49091)**
 Lin, En Wu The relation between capacities and Hausdorff measures. (Chinese. English summary) **(84d:31008)**
 Lodovici, Carla Measures associated with a Burkil-Cesari integral. (Italian) **(84a:49058)**
 See also Brunozi, Anna Maria; et al., **(84h:49091)**

- Mauldin, R. Daniel (with Preiss, David; von Weizsäcker, Heinrich) Orthogonal transition kernels. (84i:60006)
 Pincus, Joel D. See Carey, Richard W., (84c:47048)
 Preiss, David See Mauldin, R. Daniel; et al., (84i:60006)
 Salvadori, Anna On the nonconservation of quasiadditivity in subsets. (Italian) (84d:49045)
 See also Brandi, Primo, (84i:49087)
 Tondi, Adriana See Barbieri, Francesco, (84b:49054)
 von Weizsäcker, Heinrich See Mauldin, R. Daniel; et al., (84i:60006)
 Wilker, J. B. Hausdorff obstructions to packing $(N-1)$ -balls in N -space. (84b:52025)
 Young, L. C. Generalized curve, generalized varieties, optimal control. (See 84m:00013)

28A99 None of the above, but in this section

- Butnariu, Dan Additive fuzzy measures and integrals. I. 84h:28012
 Cheng, Shao Zhong See Liu, Doo Su, 84j:28012
 Dubins, Lester E. The Hausdorff-Banach-Tarski paradox. (Czech) 84a:28011
 Gupta, Madan M. See Tsukamoto, Yahachiro; et al., (See 84h:00009) and (See 84h:03004)
 Höhle, Ulrich Fuzzy measures as extensions of stochastic measures. 84g:28008
 Klement, Erich Peter On the relationship between different notions of fuzzy measures. (See 84h:00009)
 Fuzzy measures assuming their values in the set of fuzzy numbers. 84h:28013
 A theory of fuzzy measures: a survey. 84i:28006
 On the relationship between different notions of fuzzy measures. (See 84h:03004)
 (Kolář, Ivan) See Dubins, Lester E., 84a:28011
 Kruse, Rudolf A note on λ -additive fuzzy measures. 84i:28007
 Fuzzy integrals and conditional fuzzy measures. 84i:28008
 On the entropy of fuzzy events. 84c:28010
 Liu, Zuo Shu Fuzzy measure and integral theory. II. (Chinese. English summary) 84c:28011
 (with Cheng, Shao Zhong) Fuzzy random measure and its extension theorem. 84j:28012
 Nikiforuk, P. N. See Tsukamoto, Yahachiro; et al., (See 84h:00009) and (See 84h:03004)
 Peng, Zu Zeng Fuzzy measures on fuzzy subsets. (Chinese. English summary) 84m:28011
 Qu, Yin Sheng Measures of fuzzy sets. 84d:28014
 Riera, Teresa (with Trillas, Enric) From measures of fuzziness to Booleanity control. 84m:28012
 Salekhor, D. V. The relation between sets of Lebesgue-Banach points and Lebesgue E -points of functions from symmetric spaces. (Russian) 84m:28013
 Trillas, Enric See Riera, Teresa, 84m:28012
 Tsukamoto, Yahachiro (with Gupta, Madan M.; Nikiforuk, P. N.) On density function of λ -fuzzy measure. (See 84h:00009)
 (with Gupta, Madan M.; Nikiforuk, P. N.) On density of λ -fuzzy measure. (See 84h:03004)
 Wang, Zi Xiao The structure of fuzzy Lebesgue measure. 84m:28014
 Wierchoń, S. T. On fuzzy measure and fuzzy integral. 84m:28015
 An algorithm for identification of fuzzy measure. 84m:28016
 Zhou, Zu Gen Contraction mappings in Euclidean spaces. (Chinese) 84j:28013

secondary classifications:

- Bachman, George (with Stratigos, Panagiotis D.) On general lattice repleteness and completeness. (84m:54029)
 Bakhtin, V. I. Properties of the entropy and Hausdorff dimensions. (Russian. English summary) (84a:54066)
 Cutland, Nigel Infinitesimal methods in measure theory, probability theory and stochastic analysis. (84j:03139)
 Di Nola, Antonio (with Ventre, Aldo G. S.) Ordering via fuzzy entropy. (84i:03096)
 Dubois, Didier (with Prade, Henri) On several representations of an uncertain body of evidence. (See 84d:90004)
 (with Prade, Henri) What does "convergence" mean for fuzzy numbers? (See 84d:93002)
 Golden, K. (with Papanicolaou, George C.) Bounds for effective parameters of heterogeneous media by analytic continuation. (84c:78006)
 Kania, Aleksander A. Fuzzy transformation in terms of possibilistic measure. (See 84h:03004)
 Possibilistic measure, fuzzy trust and some properties of fuzzy transformations. (See 84h:03004)
 Klement, Erich Peter Operations on fuzzy sets—an axiomatic approach. (84c:03094)
 Lipecki, Z. (with Plachky, Detlef) On monogenic operators and measures. (84c:47039)
 Liu, Liang Shen A theorem of extreme boundary. (84a:52006)
 Neubrunn, Tibor (with Šipoš, Ján) Generalized measure spaces and dominance. (Russian and Slovak summaries) (84c:06011)
 Nguyen, Hung T. Possibility measures and related topics. (See 84d:90004)
 Papanicolaou, George C. See Golden, K., (84c:78006)
 Peters, James V. The ham sandwich theorem and some related results. (84d:44007)
 Plachky, Detlef See Lipecki, Z., (84c:47039)
 Prade, Henri See Dubois, Didier, (See 84d:90004) and (See 84d:93002)
 Rašković, Miodrag Measure and integration in the alternative set theory. (84k:03126)
 Šipoš, Ján See Neubrunn, Tibor, (84c:06011)
 Stratigos, Panagiotis D. See Bachman, George, (84m:54029)
 Tsukamoto, Yahachiro A measure theoretic approach to evaluation of fuzzy sets defined on a probability space. (Chinese summary) (84c:03074)
 Tulipani, Sauro A use of the method of interpretations for decidability or undecidability of measure spaces. (84i:03087)
 Ventre, Aldo G. S. See Di Nola, Antonio, (84i:03096)
 Wattel, Evert Partitions of \mathbb{R}^n into $n+1$ homogeneous zero-dimensional homeomorphic measurable parts. (84f:54051)

- Wierchoń, S. T. Applications of fuzzy decision-making theory to coping with ill-defined problems. (84f:90014)
 Zakowski, Wojciech On a concept of rough sets. (84i:03092)
 Zheng, Dao Peng The topological structure in DSUL and fuzzy measure spaces. (Chinese. English summary) (84a:03068)

28Bxx Measures and integrals with values in abstract spaces

28B05 Vector-valued measures and integrals [See also 46G10.]

- Blondia, C. A Radon-Nikodým theorem for vector valued measures. 84g:28009
 Brook, Cecilia H. Continuity properties of vector measures. 84h:28014
 Butković, Davor Completions and the null-completion of vector measures. 84g:28010
 Dinculeanu, Nicolae Uniform σ -additivity in spaces of Bochner or Pettis integrable functions over a locally compact group. 84f:28004
 Glicksberg, Irving A controlled approach to Liapounoff convexity. 84h:28015
 de Maria González, José L. Un théorème de Marczewski-Sikorski pour les espaces L.F. [A Marczewski-Sikorski theorem for LF spaces] 84a:28012
 Niemi, Hannu Diagonal measure of a positive definite bimeasure. 84c:28012
 Schachermayer, Walter On some classical measure-theoretic theorems for non-sigma-complete Boolean algebras. 84d:28015
 Schmidt, Klaus D. On the Jordan decomposition for vector measures. 84k:28009
 Voigt, Jürgen On the abscissa of convergence for the Laplace transform of vector valued measures. 84c:28010
 Volkmer, Hans (with Weber, Hans) A unified treatment of vector integration. 84g:28011
 Weber, Hans See Volkmer, Hans, 84g:28011

secondary classifications:

- Azarnia, N. (with Wright, J. D. Maitland) A noncommutative Pettis theorem. (84j:46089)
 Bardaro, Carlo The generalized Steiner inequality for sublinear functions of measures. (Italian) (84j:49040)
 Batt, Jürgen (with Hiernmeyer, Wolfgang) On compactness in $L_p(\mu, X)$ in the weak topology and in the topology $\sigma(L_p(\mu, X), L_q(\mu, X))$. (84m:46039)
 Bouleau, Nicolas Sur la variation quadratique de certaines mesures vectorielles. [The quadratic variation of certain vector measures] (84b:60060)
 Brooks, James K. (with Dinculeanu, Nicolae) On weak compactness in the space of Pettis integrable functions. (84g:46042)
 Bru, B. (with Heinrich, H.) Sur l'espérance des variables aléatoires vectorielles. (English summary) [Expectation of vector-valued random variables] (84g:60005)
 (with Heinrich, H.) Sur l'espérance des variables aléatoires à valeurs dans les espaces de Banach réticulés. (English summary) [Expectation of random variables with values in Banach lattices] (84g:60006)
 Chatterji, S. D. Orthogonally scattered dilation of Hilbert space valued set functions. (84a:46099)
 Dinculeanu, Nicolae See Brooks, James K., (84g:46042)
 Eggle, Leo Weak and strong convergence of amarts in Fréchet spaces. (84g:60060)
 Ghossoub, Nassif (with Saab, Elias) On the range of a basically scattered vector measure. (84f:46060)
 Heinrich, H. See Bru, B., (84g:60005) and (84g:60006)
 Hiernmeyer, Wolfgang See Batt, Jürgen, (84m:46039)
 Maritz, P. On a theorem of A. A. Lyapunov. (84d:46062)
 Martikainen, Olli Convolution of generalized vector measures. (84c:46081)
 Nougues-Sainte-Beuve, M.-F. Propriétés de mesurabilité dans les espaces de mesures. [Measurability properties in measure spaces] (84c:28004)
 Rodriguez-Salinas, Baltasar Differentiation of vector measures in almost- μ -Lusin spaces. (Spanish. English summary) (84b:46048)
 Differentiation of vector measures in topological spaces. (Spanish. English summary) (84b:46049)
 Rzaev, K. U. Generalization of the Radon-Nikodým theorem. (Russian. English and Azerbaijani summaries) (84k:46037)
 Saab, Elias See Ghossoub, Nassif, (84f:46060)
 Schmidt, Franz Positive operatorwertige Maße und banachraumwertige stationäre Prozesse auf LCA-Gruppen. (English summary) [Positive operator-valued measures and Banach space-valued stationary processes on LCA groups] (84b:60047)
 Smith, William V. Spectral measures. I. General theory in a topological vector space. (84d:46063)
 Wheeler, Robert F. The retraction property, CCC property, and Dunford-Pettis-Phillips property for Banach spaces. (84f:46025)
 Wright, J. D. Maitland See Azarnia, N., (84j:46089)
 Zafarani, Jafar A space of vector-valued measures and a strict topology. (84a:46059)

28B10 Group- or semigroup-valued measures and integrals

- Dalgas, Klaus-Peter A general extension theorem for group-valued measures. 84f:28005
 Fox, Geoffrey (with Morales, Pedro) On uniform semigroup-valued additive set functions. 84h:28016
 de Lucia, A. B. D'Andrea (with de Lucia, P.) Passage to the limit under the integral sign for functions with values in a topological group. (Italian) 84f:28006
 de Lucia, P. See de Lucia, A. B. D'Andrea, 84f:28006
 Morales, Pedro Extension of a tight set function with values in a uniform semigroup. 84m:28017
 See also Fox, Geoffrey, 84h:28016
 Nedogibchenko, G. V. (with Savel'ev, L. Ya.) Inductive limits of directed sets of continuous measures. (Russian) 84d:28016
 Pap, Endre On semigroup valued additive exhaustive set functions. (Serbo-Croatian summary) 84m:28018
 Riečan, Beloslav On measures and integrals with values in ordered groups. (Russian summary) 84h:28017
 Savel'ev, L. Ya. See Nedogibchenko, G. V., 84d:28016

Weber, Hans Vergleich monotoner Ringtopologien und absolute Stetigkeit von Inhalten. [Comparison of monotone ring topologies and absolute continuity of contents] 84c:28011

secondary classifications:

Alyakin, V. A. Decomposition of multivalued set functions. (Russian) (84i:28009)
 Carlson, T. (with Prikyr, Karel) Ranges of signed measures. (84c:28002)
 Constantinescu, Corneliu Spaces of measures on topological spaces. (84d:28009)
 Günzler, Hans Abstract absolute Riemannian integration. (Italian summary) (84i:26012)
 Prikyr, Karel See Carlson, T., (84c:28002)
 Riečan, Beloslav On regular measures in ordered spaces. (84e:28016)
 Savel'ev, L. Ya. Measures on ortholattices. (Russian) (84k:06005)

28B15 Measures and integrals with values in general ordered systems

Benderskii, O. Ya. See Sarymsakov, T. A., 84b:28010
 Brabec, Jiří On some mappings generating vector L -measures. (Czech summary) 84c:28012
 Maserick, P. H. Applications of differentiation of \mathbb{E}_∞ -functions to semilattices. 84f:28007
 Palled, Shivappa Veerappa See Panchapagesan, T. V., 84g:28012
 Panchapagesan, T. V. (with Palled, Shivappa Veerappa) ★ On vector lattice-valued measures. II. 84g:28012
 Pavlakos, Panagiotis K. On the space of lattice semigroup-valued set functions. 84f:28008
 Riečanová, Zdena (with Rosová, Ivica) On the extension of measures with values in partially ordered semigroups. 84b:28009
 Rosová, Ivica See Riečanová, Zdena, 84b:28009
 Sarymsakov, T. A. (with Benderskii, O. Ya.) Measures with values in semifields. (Russian. English summary) 84b:28010

28B20 Set-valued measures; integration of set-valued functions; measurable selections [See also 54C60, 54C65.]

Alyakin, V. A. Decomposition of multivalued set functions. (Russian) 84i:28009
 Balaban, E. I. A problem in the theory of integration of set-valued mappings arising in connection with applications of the first direct method of L. S. Pontryagin in differential games. (Russian) 84j:28014
 Bourass, A. Comparaison de fonctionnelles intégrales sur les sélections d'une multiapplication mesurable. II. Conditions de croissance et inclusion des domaines et des cônes radiaux. [Comparison of integral functionals on the selections of a measurable multifunction. II. Growth conditions and inclusion of domains and radial cones] 84c:28010b
 Dinh Quang Lu'u A representation theorem for almost surely convergent sequences of multifunctions. 84b:28011
 Representations and regularity of multivalued martingales. 84i:28010b
 See also Hà Lê Anh, 84i:28010a
 Fougères, Alain Comparaison de fonctionnelles intégrales sur les sélections d'une multiapplication mesurable. I. Théorème d'approximation, et condition de croissance liée à l'inclusion des sections. [Comparison of integral functionals on the selections of a measurable multifunction. I. Approximation theorem, and growth condition related to the inclusion of sections] 84c:28010a
 Frankiewicz, Ryszard (with Gutek, Andrzej; Plewik, Szymon; Roczniak, Jan) On the theorem on measurable selectors. (Russian summary) 84b:28012
 Graf, Siegfried Selected results on measurable selections. 84m:28019
 Gutek, Andrzej See Frankiewicz, Ryszard; et al., 84b:28012
 Hà Lê Anh (with Dinh Quang Lu'u) Measurable relations with closed ball values in Banach spaces. 84i:28010a
 Lembecke, Jörn A set function without σ -additive extension having finitely additive extensions arbitrarily close to σ -additivity. 84k:28011
 Mauldin, R. Daniel One-to-one selections—marriage theorems. 84b:28013
 Nelson, Robert R. Pointwise evaluation of Bochner integrals in Marcinkiewicz spaces. 84i:28011
 Orlicz, Władysław (with Urbański, R.) Total variation of a set-valued measure. 84m:28020
 Pakhaev, B. V. Some properties of triangular mappings. (Russian) 84j:28015
 Pallu de la Barrière, R. Introduction à l'étude des multi-mesures. [Introduction to the study of multimeasures] 84c:28013
 Plewik, Szymon See Frankiewicz, Ryszard; et al., 84b:28012
 Ricceri, Biagio Sur l'approximation des sélections mesurables. (English summary) [On the approximation of measurable selections] 84e:28014
 Roczniak, Jan See Frankiewicz, Ryszard; et al., 84b:28012
 Urbański, R. See Orlicz, Władysław, 84m:28020

secondary classifications:

Bourass, A. (with Truffert, A.) Ensembles fermés décomposables dans les espaces intégraux de type Orlicz. [Decomposable closed sets in integral spaces of Orlicz type] (84m:46027)
 Coletti, Giulianella (with Regoli, Giuliana) Continuous selections and multivalued differential equations. (Italian summary) (84a:54035)
 Jarník, Jiří (with Kurzweil, Jaroslav) Integral of multivalued mappings and its connection with differential relations. (Russian) (84m:34016)
 Kurzweil, Jaroslav See Jarník, Jiří, (84m:34016)
 Lipovan, Octavian On the Ω - Γ -submeasurability of multivalued maps. (Romanian. French summary) (84k:49061)
 Regoli, Giuliana See Coletti, Giulianella, (84a:54035)
 Truffert, A. See Bourass, A., (84m:46027)
 Wang, Pei Zhuang The fuzzy meet-grade and fuzzy distributions. (Chinese. English summary) (84k:03133)

28B99 None of the above, but in this section

Vonkomerová, Marta A note on C -lattices. (Russian and Slovak summaries) 84m:28021

secondary classifications:

Itoh, Shigeru Algebraic models for positive operator valued measures. (84a:47050)

28Cxx Measures on spaces with additional structure [See also 46G12, 58C35, 58D20.]

28C05 Integration theory via linear functionals (Radon measures, Daniell integrals, etc.), representing measures

Galé, José E. Unitary representations corresponding to measures with bounded support in infinite dimensions. 84j:28016

Loy, Richard J. On the uniqueness of Riemann integration. 84f:28009

Mattila, Pertti Slicing measures and capacities by planes. 84c:28012

Zholkov, S. Yu. On Radon spaces. (Russian) 84h:28018

secondary classifications:

Adamski, Wolfgang Some characterizations of Daniell lattices. (84i:46051)
 Debiève, C. On a Radon-Nikodým problem for vector-valued measures. (84j:46073)
 Dirolfo, Peter On the existence of convolution for measures. (84h:43002)
 Fidorova, V. P. σ -additive and τ -additive functionals on lattices of uniformly continuous functions. (Russian) (84a:46050)
 Járál, A. Regularity properties of functional equations. (84k:39015)
 Klodt, Axel Radon measures on $\beta\mathbb{N}$ associated with simple Riesz-means. (84c:40010)
 Letta, G. Sur les suites simplement convergentes de mesures de Daniell. (Italian summary) [Pointwise convergent sequences of Daniell measures] (84g:28002)
 Mägerl, G. Bilinear maps from $C(X) \times M(X)$ to $M(X)$. (84d:46064)
 Rása, Ion On a measure-theoretical concept of convexity. (84k:46020)
 Rotar, V. I. Some remarks on existence and properties of the utility function. (Russian) (84d:90016)
 Schachermayer, Walter Measurable and continuous linear functionals on spaces of uniformly continuous functions. (84c:46023)
 Volčič, Aljoša On some counterexamples in measure theory. (84j:28002)
 Zakharov, V. K. On the hyper-Stonean cover of a compact. (84d:54036)

28C10 Measures on topological groups, Haar measures, invariant measures [See also 43A05.]

Gromov, Mikhail L. (with Milman, Vitali D.) A topological application of the isoperimetric inequality. 84c:28012
 Le Gac, Barthélemy Some properties of Borel subgroups of real numbers. 84m:28022
 Miller, Harry I. (with Xenikakis, Polychronis J.) Some properties of Baire sets and sets of positive measure. 84g:28013
 Milman, Vitali D. See Gromov, Mikhail L., 84c:28012
 Wagon, Stanley The use of shears to construct paradoxes in \mathbb{R}^2 . 84d:28017
 Xenikakis, Polychronis J. See Miller, Harry I., 84g:28013

secondary classifications:

Banaszczyk, Wojciech On the existence of exotic Banach-Lie groups. (84k:22030)
 Belley, Jean-Marc (with Prasad, V. S.) A measure invariant under group endomorphisms. (84h:43001)
 (with Morales, Pedro) A generalization of Wiener's criteria for the continuity of a Borel measure. (84j:43001)
 Hawkins, Jane Non-ITPFI diffeomorphisms. (84k:58129)
 Keller, Gerhard Stochastic stability in some chaotic dynamical systems. (84k:58130)
 Khan, M. Ahmad A theorem on power-open LCA groups and its consequences. (84h:22009)
 Masani, Pesi The theory of stationary vector-valued measures over \mathbb{R} . (84m:46047)
 Morales, Pedro See Belley, Jean-Marc, (84j:43001)
 Nougues-Sainte-Beuve, M.-F. Propriétés de mesurabilité dans les espaces de mesures. [Measurability properties in measure spaces] (84c:28004)
 Pelc, Andrzej Semiregular invariant measures on abelian groups. (84a:03061)
 Prasad, V. S. See Belley, Jean-Marc, (84h:43001)
 Promislow, David Nonexistence of invariant measures. (84c:43001)
 Rammal, R. Nature of eigenstates on fractal structures. (84k:82025)
 Sullivan, Dennis Disjoint spheres, approximation by imaginary quadratic numbers, and the logarithm law for geodesics. (84j:58097)

28C15 Measures on topological spaces (regularity of measures, etc.)

Armstrong, Thomas E. When is the algebra of regular sets for a finitely additive Borel measure a σ -algebra? 84f:28010
 Berlanga, R. (with Epstein, D. B. A.) Measures on sigma-compact manifolds and their equivalence under homeomorphisms. 84m:28023
 Cook, C. H. Characterization of certain measures on a completely regular space. 84a:28013
 Epstein, D. B. A. See Berlanga, R., 84m:28023
 Frolík, Z. Measure-fine uniform spaces. II. 84e:28015
 Lignola, Maria Beatrice Extension of a function in the Borel tribe of a perfectly normal space. (Italian. English summary) 84c:28013
 Lotz, Siegfried A survey on hyperdiffuse measures. IV. 84b:28014
 Maeda, Michie Measurable norms and rotationally quasi-invariant cylindrical measures. 84h:28019
 Okazaki, Yoshiaki Continuous approximation of random function. 84i:28014

- Ricceri, Biagio Two characterizations of the Scorza-Dracconi property. (Italian) **84f:28011**
 Riečan, Beloslav On regular measures in ordered spaces. **84e:28016**
 Valadier, Michel Sur le plongement d'un champ mesurable d'espaces métriques dans un champ trivial. (English summary) [Embedding of a measurable field of metric spaces into a trivial field] **84c:28015**
 Živaljević, Rade A Loeb measure approach to the Riesz representation theorem. **84c:28020**

secondary classifications:

- Berezans'kii, Yu. M. (with Kalyuzhnyi, A. A.) Nuclear spaces of functions on the basis of a hypercomplex system. (Russian) **(84c:46034)**
 Gardner, R. J. The regularity of Borel measures. **(84c:28001)**
 Iwanik, A. Representation of operators on L^1 -spaces by nondirect product measures. **(84c:47031)**
 del Junco, Andrés A family of counterexamples in ergodic theory. **(84c:58179)**
 Kalyuzhnyi, A. A. A theorem on the existence of a multiplicative measure. (Russian) **(84c:46035)**
 See also Berezans'kii, Yu. M., **(84c:46034)**
 Koumoudis, G. Perfect, u -additive measures and strict topologies. **(84c:46037)**
 Lane, K. W. Another interesting property concerning the probability measures on the rationals. **(84c:60003)**
 Mañra, Ashok Selectors for Borel sets with large sections. **(84c:54015)**
 Martin, Donald A. The use of set-theoretic hypotheses in the study of measure and topology. **(84c:03001)**
 Mauldin, R. Daniel Measurable representations of preference orders. **(84c:90008)**
 Miller, Arnold W. Some properties of measure and category. **(84c:03058a)**
 Corrections and additions to: "Some properties of measure and category". **(84c:03058b)**
 Morgan, John C., II On equivalent category bases. **(84c:54002)**
 Okada, Susumu The product of pre-Radon measures. **(84d:28010)**
 Ressel, Paul A topological version of Slutsky's theorem. **(84c:60005)**
 Staiger, Ludwig Measure and category in X^* . **(84c:04003)**
 Szeto, Mabel Measure repleteness and mapping preservations. **(84b:28008)**
 Xia, Dao Xing On the representations of the local current algebra and the group of diffeomorphisms. I. **(84j:58040)**

28C20 Measures and integrals in function spaces (Wiener measure, Gauss measure, etc.) [See also 58D20, 60B11.]

- Ahn, Jae Moon See Chang, Kun Soo; et al., **84m:28024**
 Butsan, G. P. See Karataeva, T. V., **84c:28013**
 Chang, Kun Soo (with Chung, Dong M.; Ahn, Jae Moon) Rotations and translations in Yeh-Wiener space. **84m:28024**
 Chung, Dong M. See Chang, Kun Soo; et al., **84m:28024**
 Hertle, Alexander Gaussian plane and spherical means in separable Hilbert spaces. **84j:28017**
 Kallianpur, G. A generalized Cameron-Feynman integral. **84j:28018**
 Kalton, N. J. (with Roberts, James W.) Pathological linear spaces and submeasures. **84d:28018**
 Karataeva, T. V. (with Butsan, G. P.) A class of Gaussian measures on a space of operators. (Russian) **84c:28013**
 Klavánek, I. Operator valued measures and perturbations of semigroups. **84j:28019**
 Koval'chik, I. M. Error estimation for the approximation of an integral with respect to the Wiener measure. (Russian) **84j:28020**
 Li, Yu Chia Integral transforms of analytic functions on abstract Wiener spaces. **84j:28021**
 Maeda, Michie Rotationally invariant cylindrical measures. II. **84m:28025**
 Rotationally invariant cylindrical measures. I. **84b:28021**
 Piech, M. Ann Differentiability of measures associated with parabolic equations on infinite-dimensional spaces. **84c:28014**
 Roberts, James W. See Kalton, N. J., **84d:28018**
 Takahashi, Yasuji A remark on Xia's theorem concerning quasi-invariant measures. **84c:28022**

secondary classifications:

- Ahn, Jae Moon On the conditional Wiener integrals. (Korean summary) **(84b:60101)**
 Bogachev, V. I. Negligible sets and differentiable measures in Banach spaces. (Russian. English summary) **(84b:46046)**
 Borell, Christer Convexity in Gauss space. **(84m:60012)**
 Cassier, Gilles Mesures canoniques dans le problème classique des moments. (English summary) [Canonic measures in classical moment problem] **(84m:44019)**
 Chevet, Simone Kernel associated with a cylindrical measure. **(84b:60012)**
 Daletskii, A. Yu. Representation of the group of shifts of a nuclear space. (Russian. English summary) **(84g:22014)**
 Đặng Hùng Thắng See Nguyễn Duy Tiển, **(84b:60006)**
 Ellis, Richard S. (with Rosen, Jay S.) Asymptotic analysis of Gaussian integrals. II. Manifold of minimum points. **(84b:60074b)**
 (with Rosen, Jay S.) Asymptotic analysis of Gaussian integrals. I. Isolated minimum points. **(84b:60074a)**
 Gierz, Gerhard ★ Bundles of topological vector spaces and their duality. **(84c:46076)**
 Grincėvičius, A. Some transformations that preserve the Wiener measure. (Russian. English and Lithuanian summaries) **(84g:60133)**
 Jain, Naresh C. (with Monrad, Ditlev) Gaussian measures in B_p . **(84c:60060)**
 (Keimel, Klaus) See Gierz, Gerhard, **(84c:46076)**
 Koldobskii, A. L. On isometric operators in vector-valued L^p -spaces. (Russian. English summary) **(84c:47037)**
 A uniqueness theorem for measures in $C(K)$ and its theory of random processes. (Russian. English summary) **(84b:60069)**

- Kondrat'ev, Yu. G. Spaces of entire functions of an infinite number of variables connected with a rigging of Fock space. (Russian) **(84c:46043)**
 Kusuoka, Shigeo The nonlinear transformation of Gaussian measure on Banach space and absolute continuity. I. **(84j:60015a)**
 The nonlinear transformation of Gaussian measure on Banach space and its absolute continuity. II. **(84j:60015b)**
 Li, Yu Chia Fundamental solutions for differential equations associated with the number operator. **(84c:35140a)**
 A correction and some additions to: "Fundamental solutions for differential equations associated with the number operator". **(84c:35140b)**
 Liese, Friedrich Admissible translations of Gaussian cylinder measures. (German and Russian summaries) **(84m:60053)**
 Likhodev, N. A. Formulas with a prescribed degree of accuracy for approximate calculation of continual integrals with respect to measures generated by multidimensional homogeneous processes with independent increments. (Russian. English summary) **(84c:60098)**
 Mackevičius, V. Formula for conditional Wiener integrals. **(84b:60104)**
 McKeague, Ian W. On the capacity of channels with Gaussian and non-Gaussian noise. **(84d:94008)**
 Misiewicz, Jolanta Elliptically contoured measures on R^n . (Russian summary) **(84c:60006)**
 Monrad, Ditlev See Jain, Naresh C., **(84c:60060)**
 Nguyễn Duy Tiển (with Đặng Hùng Thắng) Mappings of stable cylindrical measures in Banach space. (Russian summary) **(84b:60006)**
 Pecora, Louis M. A nonstandard infinite-dimensional vector space approach to Gaussian functional measures. **(84c:60054)**
 Pipiya, G. M. A class of Feynman integrals. (Russian. English and Georgian summaries) **(84c:81037)**
 Pisier, Gilles Quotients of Banach spaces of cotype q . **(84c:46019)**
 Preiss, David (with Tišer, Jaroslav) Differentiation of measures on Hilbert spaces. **(84b:28004)**
 Romanov, V. A. Algebraic dimensions of linear manifolds of continuous and differentiable directions of measures in Hilbert space. (Russian) **(84d:46061)**
 Rosen, Jay S. See Ellis, Richard S., **(84b:60074a)** and **(84b:60074b)**
 Rosinski, Jan On the convolution of cylindrical measures. (Russian summary) **(84c:60011)**
 Samoilenko, Yu. S. (with Us, G. F.) Differential operators with constant coefficients in spaces of functions of a countable number of variables. (Russian) **(84b:47054)**
 Shavgulidze, E. T. The Hahn-Jordan decomposition for smooth measures. (Russian) **(84c:46100)**
 Smolyanov, O. G. The Gross-Sazonov theorem for sign-variable cylindrical measures. (Russian. English summary) **(84j:46075)**
 Takahashi, Yasuji Bochner's theorem and partially admissible shifts of measures on L^p -spaces. **(84f:60007)**
 Tišer, Jaroslav See Preiss, David, **(84b:28004)**
 Us, G. F. See Samoilenko, Yu. S., **(84b:47054)**
 Zhao, Zhong Xin Quasilinear transformation and Gaussian transformation on Gaussian measure spaces. **(84b:60010)**

28C99 None of the above, but in this section

- Chuprunov, A. N. Measurability of linear functionals. (Russian) **84m:28026**
 Feyel, Denis Ensembles singuliers associés aux espaces de Banach réticulés. (English summary) [Singular sets associated with Banach lattices] **84c:28016**
 Fickett, James W. Approximate isometries on bounded sets with an application to measure theory. **84d:28019**
 Kharazishvili, A. B. Absolute negligibility of compacta in infinite-dimensional Banach spaces. (Russian. English and Georgian summaries) **84c:28014**

secondary classifications:

- Argyros, Spiros A. On compact spaces without strictly positive measure. **(84c:54002)**
 Baker, John Walter (with Pym, John S.; Vasudeva, H. L.) Totally ordered measure spaces and their L^p algebras. **(84c:43004)**
 Gudder, Stanley P. Measure and integration in quantum set theory. **(84j:03126)**
 Joshi, S. R. See Shendge, G. R., **(84c:34022)**
 Priák, Pavel (with Rogalewicz, Vladimir) Measures on orthomodular partially ordered sets. **(84f:06015)**
 Pym, John S. See Baker, John Walter; et al., **(84c:43004)**
 Rogalewicz, Vladimir See Priák, Pavel, **(84f:06015)**
 Shendge, G. R. (with Joshi, S. R.) Abstract measure differential inequalities and applications. **(84c:34022)**
 Vasudeva, H. L. See Baker, John Walter; et al., **(84c:43004)**

28Dxx Measure-theoretic ergodic theory [See also 22D40, 47A35, 54H20, 58Fxx, 60Fxx, 60G10.]

- Walters, Peter ★ An introduction to ergodic theory. **84c:28017**

secondary classifications:

- Hamachi, Toshihiro (with Osikawa, Motosige) ★ Ergodic groups of automorphisms and Krieger's theorems. **(84c:46099)**
 Osikawa, Motosige See Hamachi, Toshihiro, **(84c:46099)**

28D05 Measure-preserving transformations

- Bellow, Alexandra Sur la structure des suites "mauvaises universelles" en théorie ergodique. (English summary) [On the structure of "bad universal" sequences in ergodic theory] **84f:28012**

- Blum, J. R. (with Reich, J. I.) Strongly ergodic sequences of integers and the individual ergodic theorem. **84d:28020**
- Bofill, Francesc Ergodic theory and symmetrization. (Spanish. English summary) **84i:28023**
- Boyarsky, Abraham Approximating the absolutely continuous measures invariant under general maps of the interval. **84b:28015**
See also Friedman, Nathan, **84f:28013**
- Brudno, A. A. Dynamic systems and algorithmic theory. (See **84m:58002**)
- Bugiel, Piotr Approximation for the measures of ergodic transformations of the real line. **84i:28017**
- Burton, Robert M. (with Shields, Paul C.) A mixing T for which T^{-1} is Bernoulli. **84c:28013**
- Choksi, J. R. (with Prasad, V. S.) Ergodic theory on homogeneous measure algebras. **84i:28018**
- Clark, Jack (with David, Karl) Finite return times for measure-preserving transformations. **84d:28021**
- Dateyama, Masahito Invariant measures for homeomorphisms with weak specification. **84d:28022**
- David, Karl See Clark, Jack, **84d:28021**
- Davis, Burgess On the integrability of the ergodic maximal function. **84c:28018**
- Derriennic, Yves Un théorème ergodique presque sous-additif. (English summary) [An almost subadditive ergodic theorem] **84f:28022**
- Ferenczi, Sébastien Existence d'un générateur suivant une sous-suite de densité supérieure nulle. (English summary) [Existence of a generator with respect to a subsequence of upper density zero] **84j:28023**
- Friedman, Nathan (with Boyarsky, Abraham) Construction of ergodic transformations. **84i:28013**
- Furstenberg, Harry (with Katznelson, Yitzhak; Ornstein, D.) The ergodic theoretical proof of Szemerédi's theorem. **84b:28016**
- Golodets, V. Ya. Cocycles of dynamical systems with a dense range. (Russian. English summary) **84g:28014**
- Goodson, G. R. Special automorphisms with continuous spectrum. **84b:28024**
- Hamachi, Toshihiro (with Osikawa, Motosige) Anzai transformation and its centralizer. **84c:28025**
- Jones, Roger L. New proofs for the maximal ergodic theorem and the Hardy-Littlewood maximal theorem. **84c:28019**
- del Junco, Andrés (with Keane, M.; Kitchens, B.; Marcus, Brian Harry; Swanson, Laif) Continuous homomorphisms of Bernoulli schemes. **84c:28026**
- Kamae, Teturo A simple proof of the ergodic theorem using nonstandard analysis. **84i:28019**
A characterization of weakly wandering sequences for nonsingular transformations. **84g:28015**
- Katznelson, Yitzhak (with Weiss, Benjamin) A simple proof of some ergodic theorems. **84i:28020**
See also Furstenberg, Harry; et al., **84b:28016**
- Keane, M. See del Junco, Andrés; et al., **84c:28026**
- Kieffer, John C. (with Rahe, Maurice) The pointwise ergodic theorem for transformations whose orbits contain or are contained in the orbits of a measure-preserving transformation. **84m:28027**
(with Rahe, Maurice) Finitely fixed implies loosely Bernoulli, a direct proof. **84c:28020**
- Kitchens, B. See del Junco, Andrés; et al., **84c:28026**
- Kopf, Christoph (n, T)-towers for aperiodic transformations T . **84b:28017**
- Krebs, William B. (with Robertson, James B.) On ergodic extensions of stationary measures with minimal support. **84g:28016**
- Krygin, A. B. Ergodicity of a transformation of the plane. (Russian) **84c:28014**
- Kwiatkowski, J. Nonsingular isomorphism and weak isomorphism on the class of dynamical systems with discrete spectra. **84m:28028**
Isomorphism of regular Morse dynamical systems. **84a:28015**
- Lasota, Andrzej (with Yorke, James A.) Exact dynamical systems and the Frobenius-Perron operator. **84d:28023**
- Lehrer, Ehud (with Weiss, Benjamin) An ϵ -free Rohlin lemma. **84c:28021**
- Lind, D. A. Dynamical properties of quasiperiodic toral automorphisms. **84g:28017**
- Lo Bello, Anthony Strands, stopping times, and induced transformations. (Italian summary) **84i:28021**
- Marcus, Brian Harry See del Junco, Andrés; et al., **84c:28026**
- Misiurewicz, Michał See Ramachandran, D., **84b:28018**
- Nakada, Hitoshi Piecewise linear homeomorphisms of type III and the ergodicity of cylinder flows. **84d:28024**
- Nürnberg, Rolf All generalized Morse-sequences are loosely Bernoulli. **84b:28027**
- Ornstein, D. See Furstenberg, Harry; et al., **84b:28016**
- Osikawa, Motosige See Hamachi, Toshihiro, **84c:28025**
- Park, Kyewon Koh A special family of ergodic flows and their \bar{d} -limits. **84c:28022**
- Petersen, Karl Another proof of the existence of the ergodic Hilbert transform. **84i:28022**
- Prasad, V. S. See Choksi, J. R., **84g:28018**
- Rahe, Maurice See Kieffer, John C., **84c:28020** and **84m:28027**
- Ramachandran, D. (with Misiurewicz, Michał) Hopf's theorem on invariant measures for a group of transformations. **84b:28018**
- Reich, J. I. See Blum, J. R., **84d:28020**
- Robertson, James B. Spectral radius of ergodic transformations. **84j:28024**
See also Krebs, William B., **84g:28016**
- Rudolph, Daniel J. A mixing Markov chain with exponentially decaying return times is finitarily Bernoulli. **84f:28014**
- Series, Caroline A problem in ergodic theory. **84c:28015**
- Sharapov, V. G. A class of measurable partitions, and exact endomorphisms. (Russian) **84m:28029**
- Shelah, Saharon (with Weiss, Benjamin) Measurable recurrence and quasi-invariant measures. **84d:28025**
- Shields, Paul C. See Burton, Robert M., **84c:28013**
- Shimano, Takashi Helix-representation in ergodic theory. **84c:28016**
- Shimomura, Hiroaki Remark to the previous paper: "Ergodic decomposition of quasi-invariant measures" [Publ. Res. Inst. Math. Sci. **14** (1978), no. 2, 359-381; MR **80f:28023**]. **84b:28028**
- Swanson, Laif See del Junco, Andrés; et al., **84c:28026**
- Veech, William A. A criterion for a process to be prime. **84d:28026**
- Vershik, A. M. A theorem on Markov periodic approximation in ergodic theory. (Russian) **84m:28030**
- Weihert, Edwin Ein Kriterium für die Einbettbarkeit vollergodischer Automorphismen mit quasisdiskrettem Spektrum in Strömungen mit diskrettem Zeitparameter. [A criterion for the embeddability of totally ergodic automorphisms with quasisdiscrete spectrum in a flow with discrete time parameter] **84g:28018**
- Weiss, Benjamin See Shelah, Saharon, **84d:28025**; Lehrer, Ehud, **84c:28021** and Katznelson, Yitzhak, **84i:28020**
- Yang, Ya Li On the ergodic quasi-invariant measures. **84c:28017**
- Yorke, James A. See Lasota, Andrzej, **84d:28023**
- secondary classifications:
- Akcoglu, M. A. (with Sucheston, Louis) A superadditive version of Brunel's maximal ergodic lemma. **(84f:60043)**
- Couot, Jacques (with Gillot, Christian) Équations fonctionnelles des densités de mesures invariantes par un endomorphisme de $[0, 1]$ et simulation numérique. [Functional equations of the densities of invariant measures under an endomorphism of $[0, 1]$ and computer simulation] **(84i:58066)**
- Dawidowicz, Antoni L. On the existence of an invariant measure for a quasilinear partial differential equation. **(84h:35173)**
- Gillot, Christian See Couot, Jacques, **(84i:58066)**
- Gologan, Radu-Nicolae An extension of Chacon-Ornstein ergodic theorem. **(84m:47014)**
- Handel, Michael A pathological area preserving C^∞ diffeomorphism of the plane. **(84f:58040)**
- Hawkins, Jane (with Schmidt, Klaus D.) On C^1 -diffeomorphisms of the circle which are of type III₁. **(84g:58069)**
- Krzyżewski, Karol On the convergence of certain series related to Axiom A diffeomorphisms. (Russian summary) **(84b:58066)**
On analytic invariant measures for expanding mappings. **(84c:58083)**
- Lambert, Alan Decompositions of weighted composition isometries. **(84m:47042)**
- Lin, Michael (with Sine, Robert C.) Ergodic theory and the functional equation $(I-T)x=y$. **(84m:47015)**
- Oren, Ishai Ergodicity of cylinder flows arising from irregularities of distribution. **(84i:10055)**
- Parry, William The classification of topological Markov chains: adapted shift equivalence. **(84i:58070)**
- von Plato, Jan The significance of the ergodic decomposition of stationary measures for the interpretation of probability. **(84i:03021)**
- Quinn, Joseph Conservative and dissipative parts of non-measure preserving weighted composition operators. **(84g:47009)**
- Rousseau-Egele, Jacques Un théorème de la limite locale pour une classe de transformations dilatantes et monotones par morceaux. (English summary) [A local limit theorem for a class of piecewise monotone and expansive transformations] **(84m:60032)**
- Schmidt, Klaus D. See Hawkins, Jane, **(84g:58069)**
- Schweiger, Fritz Ergodische Eigenschaften der Algorithmen von Brun und Selmer. [Ergodic properties of the algorithms of Brun and Selmer] **(84m:10046)**
- Sine, Robert C. See Lin, Michael, **(84m:47015)**
- Sucheston, Louis See Akcoglu, M. A., **(84f:60043)**
- Szlenk, Wiesław Some dynamical properties of certain differentiable mappings of an interval II. **(84b:58066)**
- Winkelkemper, H. E. Twist maps, coverings and Brouwer's translation theorem. **(84c:58069)**
- Woś, Janusz Random ergodic theorems for sub-Markovian operators. **(84j:47011)**
- 28D10 One-parameter continuous families of measure-preserving transformations
- Aarnes, Johan F. An ergodic problem for R -polygons. **84g:28019**
- Courbage, M. Nonequilibrium entropy for Kolmogorov dynamical systems. (See **84a:58006**)
- Feldman, Jacob (with Nadler, D.) A correction and some additions to: "Reparametrization of n -flows of zero entropy" [Trans. Amer. Math. Soc. **256** (1979), 289-304; MR **81h:28012**]. **84a:28016**
- Nadler, D. See Feldman, Jacob, **84a:28016**
- Tanaka, Jun-ichi Quasi-invariant measures and maximal algebras on minimal flows. **84f:28015**
- secondary classifications:
- Aarnes, Johan F. An ergodic problem for R -polygons. **(84g:28019)**
- Couot, Jacques (with Mira, Christian) Densités de mesures invariantes non classiques. (English summary) [Nonclassical densities of invariant measures] **(84b:58082)**
- Dani, S. G. On uniformly distributed orbits of certain horocycle flows. **(84g:58068)**
- Grassberger, Peter Generalized dimensions of strange attractors. **(84i:58075)**
- Katok, Anatole Smooth non-Bernoulli K -automorphisms. **(84c:58063a)**
Errata: "Smooth non-Bernoulli K -automorphisms". **(84c:58063b)**
- Mañé, Ricardo An ergodic closing lemma. **(84f:58070)**
- Mira, Christian See Couot, Jacques, **(84b:58082)**
- Ratner, Marina Rigidity of horocycle flows. **(84c:58062)**
- Scarpellini, Bruno Stability properties of flows with pure point spectrum. **(84g:58094)**
- Shimano, Takashi Multiplicity of helices of a special flow. **(84g:60072)**

28D15 General groups of measure-preserving transformations

- Alpern, Steve Nonstable ergodic homeomorphisms of \mathbb{R}^d . **84d:28027**
- Bezuglyi, S. I. (with Golodets, V. Ya.) Nonamenable groups and their ergodic actions in spaces with a measure. (Russian) **84d:28028**
- Blum, J. R. Exchangeability and quasi-exchangeability. **84b:28019**
- Dubins, Lester E. Towards characterizing the set of ergodic probabilities. **84e:28023**
- Fedorov, A. I. Polymorphisms and partitionings of Lebesgue spaces. (Russian) **84g:28020**
- Fozilov, A. N. See Vinokurov, V. G., **84e:28024**
- Ganikhodzhaev, N. N. Trajectory decompositions of a Lebesgue space. (Russian) **84d:28029**
- Golodets, V. Ya. See Bezuglyi, S. I., **84d:28028**
- Häßer, K. Obere und untere Schranken vollergodischer dynamischer Systeme mit quasiskretem Spektrum. (English and Russian summaries) [Upper and lower bounds of totally ergodic dynamical systems with quasiscrete spectrum] **84f:28016**
- Safonov, A. V. Information pasts in groups. (Russian) **84m:28031**
- Schmidt, Klaus D. (with Walters, Peter) Mildly mixing actions of locally compact groups. **84g:28021**
- Šujan, Stefan Generators for amenable group actions. **84g:28022**
- Vinokurov, V. G. (with Fozilov, A. N.) Pairs of discrete measurable decompositions of a Lebesgue space. (Russian) **84e:28024**
- Walters, Peter See Schmidt, Klaus D., **84g:28021**

secondary classifications:

- Aldous, David J. Partial exchangeability and \bar{d} -topologies. **(84b:60074)**
- Dauethaev, T. E. Stationary processes in probabilistic semifields. (Russian) **(84g:60070)**
- Hurder, Steven Exotic classes for measured foliations. **(84a:57027)**
- Misiurewicz, Michał See Ramachandran, D., **(84b:28018)**
- Moore, Calvin C. Ergodic theory and von Neumann algebras. **(84f:22013)**
- Ramachandran, D. (with Misiurewicz, Michał) Hopf's theorem on invariant measures for a group of transformations. **(84b:28018)**
- Rychlik, Marek Mesures invariantes et principe variationnel pour les applications de Lozi. (English summary) [Invariant measures and variational principle for Lozi mappings] **(84b:58065)**
- Zimmer, Robert J. Ergodic theory, semisimple Lie groups, and foliations by manifolds of negative curvature. **(84h:22022)**

28D20 Entropy and other invariants

- Chersi, Franco Convergence of averages and invariant measures on noncompact metrizable spaces. (Italian summary) **84e:28025**
- Fieldsteel, Adam The relative isomorphism theorem for Bernoulli flows. **84b:28018**
- Kieffer, John C. A direct proof that VWB processes are closed in the \bar{d} -metric. **84i:28023**
- Komornik, Jozef See Komorniková, Magda, **84e:28026** and **84g:28023**
- Komorniková, Magda (with Komornik, Jozef) Comparing measure theoretic entropy for α -finite measures with topological entropy. (Russian summary) **84e:28026**
- (with Komornik, Jozef) Goodwyn's theorem for sequential entropy on pseudocompact spaces. (Russian summary) **84g:28023**
- Markley, Nelson G. (with Paul, Michael E.) Equilibrium states of grid functions. **84e:28027**
- Parry, William (with Tuncel, Selim) ★Classification problems in ergodic theory. **84g:28024**
- (with Tuncel, Selim) On the stochastic and topological structure of Markov chains. **84i:28024**
- Paul, Michael E. See Markley, Nelson G., **84e:28027**
- Petit, B. Deux schémas de Bernoulli d'alphabet dénombrable et d'entropie infinie sont finitairement isomorphes. [Two Bernoulli schemes of enumerable alphabet and infinite entropy are finitarily isomorphic] **84i:28019**
- Tuncel, Selim See Parry, William, **84g:28024** and **84i:28024**
- Ziemian, Krystyna Natural definition of entropy of semigroups. **84i:28020**

secondary classifications:

- Bernhardt, Chris Periodic points and topological entropy of maps of the circle. **(84h:58119)**
- Brudno, A. A. Entropy and the complexity of the trajectories of a dynamic system. (Russian) **(84g:58067)**
- Cajar, Helmut ★Billingsley dimension in probability spaces. **(84a:10055)**
- Chernov, N. I. Construction of transverse layers in multidimensional semidispersed billiards. (Russian) **(84m:58103)**
- See also Sinai, Ya. G., **(84j:82022)**
- Crutchfield, James P. (with Packard, Norman H.) Symbolic dynamics of noisy chaos. **(84m:58073)**
- de Cuhna, Adilina Maria Silva (with Guimaraes, Ibere; Gurdial) On axiomatic characterization of weighted entropy. **(84h:94015)**
- Czogala, Ernest (with Gottwald, Siegfried; Pedrycz, Witold) Aspects for the evaluation of decision situations. **(84j:90012)**
- Feldman, Jacob (with Nadler, D.) A correction and some additions to: "Reparametrization of n -flows of zero entropy" [Trans. Amer. Math. Soc. 256 (1979), 289–304; MR 81h:28012]. **(84a:28016)**
- Gottwald, Siegfried See Czogala, Ernest; et al., **(84j:90012)**
- Guimaraes, Ibere See de Cuhna, Adilina Maria Silva; et al., **(84h:94015)**
- Gurdial See de Cuhna, Adilina Maria Silva; et al., **(84h:94015)**
- Handel, Michael The entropy of orientation reversing homeomorphisms of surfaces. **(84f:58097)**
- Helmberg, Gilbert Entropy of simple broken linear functions. (See **84m:58002**)
- Keller, J. U. A general antisymmetry property of the constitutive equations of nonequilibrium thermodynamics. **(84a:80003)**

- Ledrappier, François Une relation entre entropie, dimension et exposant pour certaines marches aléatoires. (English summary) [A relationship between entropy, dimension and exponent for some random walks] **(84e:60106)**
- Lind, D. A. Entropies and factorizations of topological Markov shifts. **(84j:54010)**
- Manning, Anthony More topological entropy for geodesic flows. **(84j:58096)**
- Martin, N. F. G. On finite Blaschke products whose restrictions to the unit circle are exact endomorphisms. **(84b:30045)**
- Nadler, D. See Feldman, Jacob, **(84e:28016)**
- Oren, Ishai Admissible functions with multiple discontinuities. **(84g:54052)**
- Packard, Norman H. See Crutchfield, James P., **(84m:58073)**
- Pedrycz, Witold See Czogala, Ernest; et al., **(84j:90012)**
- Rudolph, Daniel J. A mixing Markov chain with exponentially decaying return times is finitarily Bernoulli. **(84f:28014)**
- Sinai, Ya. G. (with Chernov, N. I.) Entropy of a gas of hard spheres with respect to the group of space-time shifts. (Russian. English summary) **(84j:82022)**

28D99 None of the above, but in this section

- Alufahai, Imohimi C. A note on the ergodic theory of a class of number theoretical endomorphisms with α -finite invariant measure. (See **84d:47002**)
- Goodson, G. R. On the ergodicity of a class of real skew product extensions of approximations. **84d:28030**
- von Plato, Jan The method of arbitrary functions. **84h:28029**
- Tuncel, Selim A dimension, dimension modules, and Markov chains. **84m:28032**

secondary classifications:

- Allouche, Jean-Paul (with Cosnard, Michel) Une propriété extrême de la suite de Thue-Morse en rapport avec les cascades de Feigenbaum. [An extremal property of the Thue-Morse sequence with respect to Feigenbaum cascades] **(84f:10084)**
- Cosnard, Michel See Allouche, Jean-Paul, **(84f:10084)**
- Điđng Ngoc Nghiem A random ergodic theorem in von Neumann algebras. **(84b:46076)**
- Dekking, F. M. On transience and recurrence of generalized random walks. **(84c:60099)**
- Flytzanis, E. Banach valued eigenfunctions of stationary sequences. **(84m:60047)**
- Hawkins, Jane Smooth type III diffeomorphisms of manifolds. **(84i:58067)**
- Jabłoński, Marian (with Malczak, Jan) A central limit theorem for piecewise convex mappings of the unit interval. **(84i:58068)**
- Kastler, Daniel On A. Connes' noncommutative integration theory. **(84e:46077)**
- Lyubich, M. Yu. Typical behavior of trajectories of the rational mapping of a sphere. (Russian) **(84f:30036)**
- Malczak, Jan See Jabłoński, Marian, **(84i:58068)**
- Misiurewicz, Michał Perturbations and transitivity for certain maps of an interval. **(84j:58107)**
- Oishi, Naohiro Homeomorphisms of separable single-peaked functions on the unit interval. **(84a:58062)**
- Rees, Mary An alternative approach to the ergodic theory of measured foliations on surfaces. **(84c:58065)**
- Rousseau-Egele, Jacques Un théorème de la limite locale pour une classe de transformations dilatantes. (English summary) [A local limit theorem for a class of expansive transformations] **(84b:60033)**
- Taylor, Alan D. A note on van der Waerden's theorem. **(84c:10052)**
- Zimmer, Robert J. Orbit equivalence and rigidity of ergodic actions of Lie groups. **(84a:22019)**

30-XX FUNCTIONS OF A COMPLEX VARIABLE {For analysis on manifolds, see 58-XX.}

30-01 Elementary exposition, textbooks

- Bak, Joseph (with Newman, Donald J.) ★Complex analysis. **84b:30001**
- Berresford, Geoffrey C. Cauchy's theorem. **84a:30001**
- Brown, James Ward See Churchill, Ruel V., **84c:30002**
- Choudhary, B. ★The elements of complex analysis. **84c:30001**
- Churchill, Ruel V. (with Brown, James Ward) ★Complex variables and applications. **84c:30002**
- Fedoryuk, M. V. See Sidorov, Yu. V.; et al., **84a:30002**
- Gaede, Karl-Walter See Heinhold, Josef, **84j:30001**
- Heinhold, Josef (with Gaede, Karl-Walter) ★Einführung in die höhere Mathematik. Teil 4. (German) [Introduction to higher mathematics. Part 4] **84j:30001**
- Hervé, Michel ★Les fonctions analytiques. (French) [Analytic functions] **84b:30001**
- Markushevich, A. I. ★The theory of analytic functions: a brief course. **84c:30003**
- Newman, Donald J. See Bak, Joseph, **84b:30001**
- Shabunin, M. I. See Sidorov, Yu. V.; et al., **84a:30002**
- Sidorov, Yu. V. (with Fedoryuk, M. V.; Shabunin, M. I.) ★Лекции по теории функций комплексного переменного. (Russian) [Lectures in the theory of functions of a complex variable] **84a:30002**
- Stewart, I. N. (with Tall, David) ★Complex analysis. **84c:30001**
- Sveshnikov, A. G. (with Tikhonov, A. N.) ★The theory of functions of a complex variable. **84c:30004**
- Tall, David See Stewart, I. N., **84c:30001**
- Tikhonov, A. N. See Sveshnikov, A. G., **84c:30004**
- Wunsch, A. David ★Complex variables with applications. **84c:30005**
- (Yankovskii, G.) See Sveshnikov, A. G.; et al., **84c:30004**
- (Yankovsky, Eugene) See Markushevich, A. I., **84c:30003**

secondary classifications:

- Jänich, Klaus ★Analysis für Physiker und Ingenieure. (German) [Analysis for physicists and engineers] **(84c:00002)**

30-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

- Ahlfors, Lars Valerian ★ Möbius transformations in several dimensions. (84m:30028)
 Apanasov, B. N. See Krushkal', S. L.; et al., (84m:30074)
 Gusevskii, N. A. See Krushkal', S. L.; et al., (84m:30074)
 Krushkal', S. L. (with Apanasov, B. N.; Gusevskii, N. A.) ★ Униформизация и Клейновы группы. (Russian) [Uniformization and Kleinian groups] (84m:30074)
 Liu, Shu Qin A survey of developments in some problems concerning univalent functions. (Chinese) (84j:30033)
 Reshetnyak, Yu. G. ★ Пространственные отображения с ограниченным искажением. (Russian) [Spatial mappings with bounded distortion] (84d:30033)
 Ruscheweyh, Stephan ★ Convolutions in geometric function theory. (84a:30029)
 Shen, Xie Chang A survey of recent results on approximation theory in China. (84k:41001)
 Sons, L. R. Unbounded functions in the unit disc. (84g:30030)

30-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (Abel, Niels Henrik) See Pieper, H., (84a:01028)
 Ahlfors, Lars Valerian ★ Collected papers. Vol. 1. (84k:01066a)
 ★ Collected papers. Vol. 2. (84k:01066b)
 Riemann surfaces and small point sets. (84a:01040)
 See also Teichmüller, Oswald, (84a:01062)
 Aubert, Karl Egil It happened 100 years ago. II. (Norwegian. English summary) (84h:01043a)
 It happened 100 years ago. III. (Norwegian. English summary) (84h:01043b)
 It happened 100 years ago. IV. (Norwegian. English summary) (84h:01043c)
 Bottazzini, Umberto ★ Il calcolo sublime: storia dell'analisi matematica da Euler a Weierstrass. (Italian) [The sublime calculus: the history of mathematical analysis from Euler to Weierstrass] (84k:01003)
 Chernikov, V. V. (with Kuvaev, M. R.; Kan, V. I.) Some results of studies in the theory of functions of a complex variable at Tomsk University (on the occasion of the hundredth anniversary of the University's founding). (Russian) (84k:01044)
 Dieudonné, Jean La découverte des fonctions fuchsienues. [The discovery of Fuchsian functions] (84c:01030)
 Fuchs, W. H. J. The development of the theory of deficient values since Nevanlinna. (84h:01064)
 Gehring, Frederick W. See Teichmüller, Oswald, (84a:01062)
 Hayman, Walter K. Some achievements of Nevanlinna theory. (84d:30052)
 (Jacobi, Carl Gustav Jacob) See Pieper, H., (84a:01028)
 Kan, V. I. See Chernikov, V. V.; et al., (84k:01044)
 Kuvaev, M. R. See Chernikov, V. V.; et al., (84k:01044)
 Pfluger, Albert Über konforme Abbildungen des Einheitskreises. [On conformal mappings of the unit circle] (84c:01045)
 Pieper, H. Abel and Jacobi gehören in der Geschichte der Mathematik zusammen wie Leibniz und Newton. [Abel and Jacobi belong together in the history of mathematics as Leibniz and Newton] (84a:01028)
 (Shortt, Rae Michael) See Ahlfors, Lars Valerian, (84k:01066a) and (84k:01066b)
 Teichmüller, Oswald ★ Gesammelte Abhandlungen. (German) [Collected papers] (84a:01062)
 Väisälä, Jussi Centenary of Picard's theorem. (Finnish. English summary) (84a:01030)
 Anniversary:
 Birth of Jacobi, Carl Gustav Jacob See Pieper, H., (84a:01028)
 Bibliography:
 Ahlfors, Lars V. See Ahlfors, Lars Valerian, (84k:01066a) and (84k:01066b)
 Biography:
 Ahlfors, Lars V. See Ahlfors, Lars Valerian, (84k:01066a) and (84k:01066b)

30-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Bisshopp, Frederic Numerical conformal mapping and analytic continuation. (84i:30009)
 Hough, D. M. See Papamichael, N.; et al., (84i:30011)
 Papamichael, N. (with Warby, M. K.; Hough, D. M.) The determination of the poles of the mapping function and their use in numerical conformal mapping. (84i:30011)
 Warby, M. K. See Papamichael, N.; et al., (84i:30011)

30-06 Proceedings, conferences, etc.

- (Chernikov, V. V.) See Extremal problems of the theory of functions. 84j:30002
 (Fomenko, O. M.) See Analytic number theory and the theory of functions. 84d:30001
 (Gallo, Daniel M.) See Kleinian groups and related topics. 84h:30003
 (Jones, William B.) See Analytic theory of continued fractions. 84b:30002
 (Kuz'mina, G. V.) See Analytic number theory and the theory of functions. 84d:30001
 (Laine, Ilpo) See Value distribution theory. 84c:30003
 (Metzger, Thomas A.) See Modular functions in analysis and number theory. 84m:30001
 (Nikol'skii, N. K.) See Investigations on linear operators and function theory. 84a:30004
 and Investigations on linear operators and the theory of functions. 84c:30002
 (Porter, R. Michael) See Kleinian groups and related topics. 84h:30003
 (Rickman, Seppo) See Value distribution theory. 84c:30003
 (Suvorov, G. D.) See Constructive theory of functions and the theory of mappings. 84a:30003; Theory of mappings, its generalizations and applications. 84f:30001 and Theory of mappings and approximation of functions. 84m:30002

(Thron, W. J.) See Analytic theory of continued fractions. 84b:30002

(Waadeland, Haakon) See Analytic theory of continued fractions. 84b:30002

(Yang, Chung Chun) See Value distribution theory and its applications. 84m:30003

Analytic number theory and the theory of functions ★ Аналитическая теория чисел и теория функций. 5. (Russian) [Analytic number theory and the theory of functions. 5] 84d:30001

Analytic theory of continued fractions ★ Analytic theory of continued fractions.

84b:30002

Constructive theory of functions and the theory of mappings ★ Конструктивная теория функций и теория отображений. (Russian) [Constructive theory of functions and the theory of mappings] 84c:30003

Extremal problems of the theory of functions ★ Экстремальные задачи теории функций. (Russian) [Extremal problems of the theory of functions] 84j:30002

Investigations on linear operators and function theory ★ Исследования по линейным операторам и теории функций. X. (Russian) [Investigations on linear operators and the theory of functions. X] 84a:30004

Investigations on linear operators and the theory of functions ★ Исследования по линейным операторам и теории функций. XII. (Russian) [Investigations on linear operators and the theory of functions. XII] 84c:30002

Joensuu ★ Value distribution theory. 84c:30003

Kleinian groups and related topics ★ Kleinian groups and related topics. 84h:30003

Loen ★ Analytic theory of continued fractions. 84b:30002

Meeting:

American Mathematical Society ★ Value distribution theory and its applications. 84m:30003

Modular functions in analysis and number theory ★ Modular functions in analysis and number theory. 84m:30001

New York ★ Value distribution theory and its applications. 84m:30003

Oaxtepec ★ Kleinian groups and related topics. 84h:30003

Seminar:

Analytic Theory of Continued Fractions ★ Analytic theory of continued fractions. 84b:30002

Session:

Value distribution theory and its applications ★ Value distribution theory and its applications. 84m:30003

Summer School:

Nordic, Mathematics ★ Value distribution theory. 84c:30003

Theory of mappings and approximation of functions ★ Теория отображений и приближение функций. (Russian) [Theory of mappings and approximation of functions] 84m:30002

Theory of mappings, its generalizations and applications ★ Теория отображений, ее обобщения и приложения. (Russian) [Theory of mappings, its generalizations and applications] 84f:30001

Value distribution theory ★ Value distribution theory. 84c:30003

Value distribution theory and its applications ★ Value distribution theory and its applications. 84m:30003

Workshop:

Kleinian Groups and Related Topics ★ Kleinian groups and related topics. 84h:30003

secondary classifications:

(Bünger, H. J.) See Computational aspects of complex analysis. (84h:65004)

(Dzyalovskii, V. K.) See Methods of approximation theory and their applications. (84h:41001)

(Ng, Esmond) See Computational aspects of complex analysis. (84h:65004)

(Werner, Helmut) See Computational aspects of complex analysis. (84h:65004)

(Wuytack, L.) See Computational aspects of complex analysis. (84h:65004)

Braunlage ★ Computational aspects of complex analysis. (84h:65004)

Computational aspects of complex analysis ★ Computational aspects of complex analysis. (84h:65004)

Methods of approximation theory and their applications ★ Методы теории приближения и их приложения. (Russian) [Methods of approximation theory and their applications] (84h:41001)

NATO Advanced Study Institute:

Computational Aspects of Complex Analysis ★ Computational aspects of complex analysis. (84h:65004)

30Axx General properties

30A05 Monogenic properties of complex functions (including polygenic and areolar monogenic functions)

Atabaei, M. See Zelinskii, Yu. B., 84a:30005

Čanak, Miloš Über Existenz und Einzigkeit der Lösung areolaren Differentialgleichung erster Ordnung. [On existence and uniqueness of the solution to the areolar differential equation of the first order] 84m:30004

Johnson, Donald E. Some recent results in the theory of polygenic functions of a complex variable. 84k:30006

Sommen, Fransiscus Some connections between Clifford analysis and complex analysis. 84c:30004

Tar, M. M. Sets of F_σ -monogeneity of functions of a complex variable. (Russian) 84h:30002

Zelinskii, Yu. B. (with Atabaei, M.) Monogeneity sets of Lipschitz functions. (Russian) 84a:30005

30A10 Inequalities in the complex domain

Andrievskii, V. V. On integral estimates for the derivatives of rational functions. (Russian summary) 84f:30002

Armitage, David H. Deformation theorems for analytic functions in annuli and discs. 84d:30002

- Aziz, Abdul On a property of rational functions. **84j:30003**
- Cowen, Carl C. (with Pommerenke, Christian) Inequalities for the angular derivative of an analytic function in the unit disk. **84a:30006**
- Dewan, K. K. (with Govil, N. K.) An inequality for self-inversive polynomials. **84c:30001**
- Frappier, C. (with Rahman, Qazi Ibadur) On an inequality of S. Bernstein. **84c:30005**
- Goldstein, Myron (with Hall, R. R.; Sheil-Smith, T.; Smith, H. L.) Convexity preservation of inverse Euler operators and a problem of S. Miller. **84h:30003**
- Govil, N. K. See Dewan, K. K., **84c:30001**
- Hall, R. R. See Goldstein, Myron; et al., **84h:30003**
- Pommerenke, Christian See Cowen, Carl C., **84a:30006**
- Rahman, Qazi Ibadur See Frappier, C., **84c:30005**
- Shapiro, Harold S. Some inequalities for analytic functions integrable over a plane domain. **84c:30002**
- Sheil-Smith, T. See Goldstein, Myron; et al., **84h:30003**
- Smith, H. L. See Goldstein, Myron; et al., **84h:30003**
- Theodoroviciu, Cornel Some differential inequalities in the complex plane. I. **84c:30001**

secondary classifications:

- Govil, N. K. (with Jain, Vinay Kumar) Inequalities for functions of exponential type not vanishing in a half-plane. **(84f:30038)**
- Jain, Vinay Kumar See Govil, N. K., **(84f:30038)**
- Mateljević, Miodrag (with Pavlović, Miroslav) An extension of the Hardy-Littlewood inequality. **(84c:30049)**
- Nurmagaomedov, M. S. Lower bound for a polynomial from the values of some class of analytic functions related by algebraic equations of a special type. (Russian) **(84c:10042)**
- Pavlović, Miroslav See Mateljević, Miodrag. **(84c:30049)**

30A99 None of the above, but in this section

- Johnston, Elgin H. The mean value theorem and analytic functions. **84h:30007**

30Bxx Series expansions

30B10 Power series (including lacunary series)

- Berkson, Earl The Taylor series and growth of means. **84d:30003**
- Izralova, M. M. Some theorems of Fatou type for multiple power series. (Russian. Tajiki summary) **84d:30004**
- Kapoor, G. P. (with Nautiyal, A.) On the coefficients of a function analytic in the unit disc having slow rate of growth. **84c:30006**
- Mishra, A. K. See Nautiyal, A., **84d:30005**
- Mortini, Raymond Die Potenzreihe $\sum n^m z^n$, $m \in \mathbb{N}$. [The power series $\sum n^m z^n$, $m \in \mathbb{N}$] **84j:30004**
- Nautiyal, A. (with Mishra, A. K.) On the growth of a function analytic in the unit disc. **84d:30005**
- See also Kapoor, G. P., **84c:30006**
- Selberg, Henrik L. Über die Fortsetzung analytischer Funktionen. [On the continuation of analytic functions] **84c:30007**
- Sheremeta, M. M. A theorem of Pólya. (Russian) **84c:30007**
- Shirokov, N. A. Some properties of weakly lacunary power series. (Russian) **84c:30003**
- Stallknecht, Kurt Über das Wachstum der Taylorkoeffizienten einer Klasse analytischer Funktionen. (English and Russian summaries) [On the growth of the Taylor coefficients of a class of analytic functions] **84d:30006**
- Stepanyan, S. S. Best estimate of Taylor coefficients of functions of the class A_n . (Russian. Armenian summary) **84c:30002**
- Szűcs, Péter On power series with gaps. **84m:30005**

secondary classifications:

- Bokcharev, S. V. Construction of bases in finite-dimensional spaces of functions analytic in the disc. (Russian) **(84e:46017)**
- de Branges, Louis Grunsky spaces of analytic functions. (French summary) **(84c:30070)**
- Cordas, George (with Lohwater, Arthur J.; Ramsey, Thomas) Lacunary series and the boundary behavior of Bloch functions. **(84h:30035)**
- Dagiénié, E. See Kirjackis, E., **(84f:30046)**
- Kataoka, Haruo On the local conservation laws in the von Neumann model. (See **84c:30002**)
- Kirjackis, E. (with Dagiénié, E.) The disk of membership of a family in a class of functions with positive real part of the n th derivative. (Russian. English and Lithuanian summaries) **(84f:30046)**
- Lohwater, Arthur J. See Cordas, George; et al., **(84h:30035)**
- Odlyzko, Andrew M. Periodic oscillations of coefficients of power series that satisfy functional equations. **(84a:30042)**
- Ramsey, Thomas See Cordas, George; et al., **(84h:30035)**
- Sheremeta, M. M. See Skaskiv, O. B., **(84h:30057)**
- Shiokawa, Iekata Algebraic independence of certain gap series. **(84i:10036)**
- Skaskiv, O. B. (with Sheremeta, M. M.) The Abel-Goncharov problem for entire functions specified by lacunary power series. (Ukrainian. Russian summary) **(84h:30057)**
- Todorov, Pavel G. New explicit formulas for the n th derivative of a composite function. (Russian) **(84h:30033)**
- Verbitskii, I. É. On Taylor coefficients and L_p -moduli of continuity of Blaschke products. (Russian. English summary) **(84d:30059)**

30B20 Random power series

30B30 Boundary behavior of power series, over-convergence

- Körner, T. W. The behavior of power series on their circle of convergence. **84j:30005**
- Murai, Takafumi The boundary behaviour of Hadamard lacunary series. **84g:30001**
- Tomm, Ludwig A summability approximation theorem for Taylor series of meromorphic functions. **84d:30007**

secondary classifications:

- Zayed, Ahmed I. Recoverability of some classes of analytic functions from their boundary values. **(84c:30050)**
- Recoverability of some classes of analytic functions from their boundary values. **(84c:30062)**

30B40 Analytic continuation

- Gawronski, Wolfgang (with Trautner, R.) Analytic continuation of power series with meromorphic coefficients. **84j:30006**
- Kaufman, Robert P. Two problems on removable sets for analytic functions. **84d:30008**
- Null sets and analytic continuation. **84f:30003**
- Li, Jia Chun Singularity criteria for perturbation series. **84j:30007**
- Takase, Masahito Sur les systèmes locaux des fonctions holomorphes. [On local systems of holomorphic functions] **84m:30006**
- Trautner, R. See Gawronski, Wolfgang. **84j:30006**

secondary classifications:

- Avkhadiev, F. G. Sufficient conditions for pseudoanalytic continuability. (Russian) **(84c:30019)**
- Bisshopp, Frederic Numerical conformal mapping and analytic continuation. **(84i:30009)**
- Ciulli, S. (with Spearman, T. D.) Analytic continuation from data points with unequal errors. **(84j:30078)**
- Martirosyan, V. A. Uniform complex approximation by polynomials with gaps. (Russian) **(84c:30059)**
- Mortini, Raymond Die Potenzreihe $\sum n^m z^n$, $m \in \mathbb{N}$. [The power series $\sum n^m z^n$, $m \in \mathbb{N}$] **(84j:30004)**
- Selberg, Henrik L. Über die Fortsetzung analytischer Funktionen. [On the continuation of analytic functions] **(84a:30007)**
- Spearman, T. D. See Ciulli, S., **(84j:30078)**
- Tomm, Ludwig A regular summability method which sums the geometric series to its proper value in the whole complex plane. **(84e:40009)**
- A summability approximation theorem for Taylor series of meromorphic functions. **(84d:30007)**

30B50 Dirichlet series and other series expansions, exponential series [See also 40-XX, 41-XX, 42-XX.]

- Adepoju, J. A. (with Nassif, M.) Effectiveness of transposed inverse sets in Faber regions. **84f:30004**
- Awasthi, K. N. (with Dixit, K. K.) On the λ^* -logarithmic type of analytic functions represented by Dirichlet series. **84g:30002**
- Bozhinov, Nikolai S. (with Dimovski, Ivan Kh.) Convolutions, multipliers and commutants related to double complex Dirichlet expansions. **84b:30004**
- Dimovski, Ivan Kh. See Bozhinov, Nikolai S., **84b:30004**
- Dixit, K. K. On the logarithmic H -proximate order of analytic functions represented by Dirichlet series. II. **84j:30010**
- See also Awasthi, K. N., **84g:30002**
- Leont'ev, A. F. Representation of functions in convex domains by generalized exponential series. (Russian) **84c:30004**
- Mefnik, Yu. I. Expansion of functions of classes E into a series of exponents in convex domains of the complex plane. (Russian) **84j:30008**
- Nandan, Krishna On the lower type of analytic functions represented by Dirichlet series. **84j:30009**
- On the growth of an entire Dirichlet series and its derivatives. **84j:30011**
- Nassif, M. See Adepoju, J. A., **84f:30004**
- Nautiyal, A. On the coefficients of an analytic function defined by Dirichlet series having slow rate of growth. **84b:30005**
- Sargos, Patrick Séries de Dirichlet associées à des fractions rationnelles de plusieurs variables. [Dirichlet series associated to rational fractions in several variables] (See **84c:10004**)
- Sheremeta, M. M. Growth on the real axis of an entire function represented by a Dirichlet series. (Russian) **84c:30008**
- Vaish, Satendra Kumar Mean values of entire Dirichlet series of fast growth. **84d:30009**
- Generalized logarithmic means of an entire Dirichlet series of order zero. I. **84f:30005**
- On the logarithmic proximate type of an entire Dirichlet series. **84m:30007**
- Vasin, A. P. Estimates for the coefficients of biorthogonal series of exponentials on certain nonconvex sets. (Russian) **84f:30006**
- Yu, Jia Rong Sur la croissance de certaines séries de Dirichlet sur des demi-droites horizontales. (English summary) [On the growth of certain Dirichlet series on horizontal straight half lines] **84c:30003**
- Yu, Jiu Man The proximate zero-order (R) of the functions analytic in the right half plane. (Chinese. English summary) **84m:30008**

secondary classifications:

- Abanin, A. V. Distribution of effective sets and inward-continuity of Mittag-Leffler representing systems. (Russian) **(84m:30009)**
- Azpeitia, A. G. On the growth of entire functions defined by Dirichlet series. **(84h:30034)**

- Bajpai, Shyam K.** Entire functions represented by Dirichlet series of alpha-beta growth. (Italian summary) (84b:30029)
- Boese, G.** Einschlüsse und Trennung der Nullstellen von Exponentialtrinomien mit konstanten Koeffizienten. (English and Russian summaries) [Inclusions and separation of the zeros of exponential trinomials with constant coefficients] (84g:30006)
- Bozhinov, Nikolai S.** (with Dimovski, I. H.) A convolutional approach to multiplier problem for multiple complex Dirichlet expansions. (84m:32009)
- Campbell, Douglas M.** (with Ferguson, Helaman R. P.; Forcade, Rodney W.) Newman polynomials on $|z|=1$. (84f:30011)
- Dimovski, I. H.** See **Bozhinov, Nikolai S.** (84m:32009)
- Doherey, Ram Prakash** See **Nautiyal, A.** (84c:30046)
- Ellacott, S. W.** Computation of Faber series with application to numerical polynomial approximation in the complex plane. (84c:65021)
- Ferguson, Helaman R. P.** See **Campbell, Douglas M.**; et al. (84f:30011)
- Forcade, Rodney W.** See **Campbell, Douglas M.**; et al. (84f:30011)
- Gromov, V. P.** Series of the type of Dirichlet series in locally convex spaces. (Russian) (84g:46016)
- He, Long Zhen** On the $(p, q)(R)$ order and lower $(p, q)(R)$ order of entire functions defined by Dirichlet series. (Chinese. English summary) (84j:30042)
- Janišauskas, Algimantas** Summation of double Dirichlet series. (Russian. English and Lithuanian summaries) (84c:40011)
- Juneja, O. P.** (with Srivastava, G. S.) On regularly varying functions with applications to functions theory. (Spanish summary) (84c:26005)
- Khom'yak, M. M.** Asymptotic properties of entire functions defined by Dirichlet series. (Ukrainian. Russian summary) (84d:30044)
- The maximum term of a Dirichlet series specifying an entire function. (Russian) (84d:30045)
- The Wiman-Valiron method for entire functions, defined by Dirichlet series, with a condition for growth on some sequence. (Russian) (84j:30043)
- Khrushchëv, S. V.** (with Nikol'skii, N. K.; Pavlov, B. S.) Unconditional bases of exponentials and of reproducing kernels. (84k:46019)
- Leont'ev, A. F.** Representation of entire functions by series of Mittag-Leffler functions. (Russian) (84c:30042)
- Mao, Chao Lin** Properties of singular points of random Dirichlet series of two variables. (Chinese. English summary) (84k:60075)
- Nautiyal, A.** (with Doherey, Ram Prakash) On the proximate order of an analytic function represented by Dirichlet series. (84c:30046)
- Nikol'skii, N. K.** See **Khrushchëv, S. V.**; et al. (84k:46019)
- Parvatham, R.** (with Thangamani, J.) On the Ritt order of a certain class of functions. (84c:30047)
- Pavlov, B. S.** See **Khrushchëv, S. V.**; et al. (84k:46019)
- Prather, C. L.** (with Shaw, J. K.) On the oscillation of differential transforms of eigenfunction expansions. (84m:42036)
- Shaw, J. K.** See **Prather, C. L.** (84m:42036)
- Srivastava, B. B.** On the lower ψ -order of the function defined by the series $\sum_{n=0}^{\infty} a_n e^{\lambda_n z}$. (84c:30045)
- Srivastava, G. S.** See **Juneja, O. P.** (84c:26005)
- Thangamani, J.** See **Parvatham, R.** (84c:30047)
- Vaish, Satendra Kumar** Geometric means of an entire Dirichlet series. (84m:30039)
- Growth of the mean values of entire functions represented by Dirichlet series. (84m:30040)

30B60 Completeness problems, closure of a system of functions

- Abanin, A. V.** Distribution of effective sets and inward-continuity of Mittag-Leffler representing systems. (Russian) (84m:30009)
- Baillette, A.** (with Siddiqi, J. A.) Approximation de fonctions par des sommes d'exponentielles sur un arc rectifiable. [Approximation of functions by exponential sums on a rectifiable arc] (84c:30008)
- Filippova, N. M.** See **Mirolyubov, A. A.** (84c:30009)
- Gorgula, V. I.** (with Nagnibida, N. I.) Completeness of some systems of analytic vector functions. (Ukrainian. Russian summary) (84h:30004)
- Grigoryan, Sh. A.** (with Martirosyan, V. M.) On the closure, minimality and property of being a basis of some general systems of functions. (Russian. English and Armenian summaries) (84g:30003)
- Gromov, V. P.** On the question of cyclic elements of the differentiation operator in spaces of analytic functions. (Russian) (84h:30005)
- Ibragimova, S. Z.** Completeness of a system of functions analytic in an annulus. (Russian. English and Azerbaijani summaries) (84d:30010)
- Israfilov, D. M.** Completeness of a system of rational Faber-Dzhrbashyan functions in domains with a quasiconformal boundary. (Russian. English and Azerbaijani summaries) (84j:30012)
- Kalinin, S. I.** On approximation of the solution of a homogeneous convolution equation by elementary solutions. (Russian) (84c:30004)
- Martirosyan, V. M.** Closure, minimality and basis property of systems of functions of Mittag-Leffler type on a system of rays. (Russian. English and Armenian summaries) (84f:30007)
- See also **Grigoryan, Sh. A.** (84g:30003)
- Mirolyubov, A. A.** (with Filippova, N. M.) Construction of complete systems of functions by means of Newton's interpolation formula. (Russian) (84c:30009)
- Nagnibida, N. I.** See **Gorgula, V. I.** (84h:30004)
- Siddiqi, J. A.** See **Baillette, A.** (84c:30008)
- Tumarkin, A. G.** Completeness of the real and imaginary parts of powers of complex-valued functions. (Russian) (84c:30005)
- Completeness and minimality of some systems of functions. (Russian) (84h:30006)

secondary classifications:

- Dodunova, L. K.** See **Seleznev, A. I.** (84j:30061)
- Gromov, V. P.** Series of the type of Dirichlet series in locally convex spaces. (Russian) (84g:46016)

- Khrushchëv, S. V.** Perturbation theorems for bases consisting of exponentials and the Muckenhoupt condition. (Russian) (84j:42043)
- Martirosyan, V. A.** Uniform complex approximation by polynomials with gaps. (Russian) (84c:30059)
- Pavlov, B. S.** The basis property of a system of exponentials and the condition of Muckenhoupt. (Russian) (84j:42042)
- Sedletskaia, A. M.** Bases of exponentials in L^p spaces. (Russian. English summary) (84d:42015)
- Seleznev, A. I.** (with Dodunova, L. K.) On two theorems of A. F. Leont'ev on the completeness of subsystems of Faber and Jacobi polynomials. (Russian) (84j:30061)
- Sheremeta, M. M.** Coefficient quasidensity and completeness of the system of derivatives of an entire function of exponential type. (Russian) (84d:30046)

30B70 Continued fractions [See also 10A32, 40A15.]

- Čížek, Jiří** (with Vrsay, E. R.) Asymptotic estimation of the coefficients of the continued fraction representing the Binet function. (84c:30009)
- Gardner, R. J.** (with Mauldin, R. Daniel) On the Hausdorff dimension of a set of complex continued fractions. (84f:30008)
- Lange, L. J.** δ -fraction expansions of analytic functions. (84c:30010)
- δ -fraction expansions of analytic functions. (84d:30011)
- Mauldin, R. Daniel** See **Gardner, R. J.** (84f:30008)
- McCabe, J. H.** The quotient-difference algorithm and the Padé table: an alternative form and a general continued fraction. (84c:30008)
- Overholt, Marius** A class of element and value regions for continued fractions. (84c:30011)
- Reid, Walter M.** Parameterizations and factorizations of element regions for continued fractions $K(a_n/1)$. (84c:30012)
- Thron, W. J.** (with Waadeland, Haakon) On a certain transformation of continued fractions. (84c:30012)
- (with Waadeland, Haakon) Modifications of continued fractions, a survey. (84j:30013)
- (with Waadeland, Haakon) Truncation error bounds for limit periodic continued fractions. (84f:30009)
- Vrsay, E. R.** See **Čížek, Jiří** (84c:30009)
- Waadeland, Haakon** See **Thron, W. J.** (84c:30012; 84f:30009 and 84j:30013)

secondary classifications:

- Boese, G.** An a priori estimate for the truncation error of a continued fraction expansion to the Gaussian error function. (German summary) (84f:33002)
- Flajolet, Philippe** On congruences and continued fractions for some classical combinatorial quantities. (84f:05005)
- Gill, John** Convergence acceleration for continued fractions $K(a_n/1)$ with $\lim a_n = 0$. (84c:40001)
- Gragg, William B.** (with Lindquist, Anders) On the partial realization problem. (84h:93020)
- Jacobsen, Lisa** A method for convergence acceleration of continued fractions $K(a_n/1)$. (84c:40002)
- Some periodic sequences of circular convergence regions. (84c:40003)
- (with Waadeland, Haakon) Some useful formulas involving tails of continued fractions. (Russian summary) (84c:40004)
- Convergence acceleration for continued fractions $K(a_n/1)$. (84c:40002)
- Jones, William B.** (with Reid, Walter M.) Uniform twin-convergence regions for continued fractions $K(a_n/1)$. (84c:40005)
- (with Steinhart, Allan) Digital filters and continued fractions. (84c:94005)
- (with Thron, W. J.) Survey of continued fraction methods of solving moment problems and related topics. (84d:44015)
- (with Njåstad, Olav; Thron, W. J.) Continued fractions and strong Hamburger moment problems. (84j:44009)
- See also **Analytic theory of continued fractions**. (84h:30002)
- Lindquist, Anders** See **Gragg, William B.** (84h:93020)
- Masson, D.** The rotating harmonic oscillator eigenvalue problem. I. Continued fractions and analytic continuation. (84m:81051a)
- The rotating harmonic oscillator eigenvalue problem. II. Analytic perturbation theory. (84m:81051b)
- Njåstad, Olav** See **Jones, William B.**; et al. (84j:44009)
- Reid, Walter M.** See **Jones, William B.** (84c:40005)
- Runckel, Hans-J.** Zero-free parabolic regions for polynomials with complex coefficients. (84g:30007)
- Steinhart, Allan** See **Jones, William B.** (84c:94005)
- Thron, W. J.** See **Jones, William B.**; et al. (84j:44009); (84c:44015) and **Analytic theory of continued fractions**. (84h:30002)
- Waadeland, Haakon** See **Jacobsen, Lisa**. (84c:40004) and **Analytic theory of continued fractions**. (84h:30002)
- Znojil, M.** Comment on the Green's function for the anharmonic oscillators. (84i:81015)
- Analytic theory of continued fractions** ★ **Analytic theory of continued fractions**. (84h:30002)
- Loen** ★ **Analytic theory of continued fractions**. (84h:30002)

Seminar:

- Analytic Theory of Continued Fractions** ★ **Analytic theory of continued fractions**. (84h:30002)

30B99 None of the above, but in this section

- de Bruijn, N. G.** The Lagrange-Good inversion formula and its application to integral equations. (84g:30004)

secondary classifications:

- Johnston, Elgin H.** An extension of a theorem of Abian. (84a:30064)

30Cxx Geometric function theory

30C10 Polynomials

- Abi-Khuzam, Faruk F.** An inequality for derivatives of polynomials whose zeros are in a half-plane. **84f:30010**
- Andrievskii, V. V.** Uniform convergence of Bieberbach polynomials in domains with zero angles. (Russian. English summary) **84c:30013**
Convergence of Bieberbach polynomials in domains with a quasiconformal boundary. (Russian) **84b:30007**
- Biales, Stanislaw** On certain properties of Hurwitz determinants for interval polynomials. **84c:30006**
- Campbell, Douglas M.** (with Ferguson, Helaman R. P.; Forcade, Rodney W.) Newman polynomials on $|z|=1$. **84f:30011**
- Craven, Thomas C.** (with Csordas, George) An inequality for the distribution of zeros of polynomials and entire functions. **84b:30007**
(with Csordas, George) On the number of real roots of polynomials. **84b:30006**
- Csordas, George** See Craven, Thomas C., **84b:30006** and **84b:30007**
- Ferguson, Helaman R. P.** See Campbell, Douglas M.; et al., **84f:30011**
- Forcade, Rodney W.** See Campbell, Douglas M.; et al., **84f:30011**
- Malik, Mohammad Abdul** Some remarks on the derivative of a polynomial. **84b:30008**
- Marden, Morris** Conjectures on the critical points of a polynomial. **84c:30007**
- Mo, Guo Duan** An improvement upon Cartan's theorem. (Chinese) **84b:30009**
- Rassias, John Michael** On the derivative of a polynomial. **84b:30010**
- Roitman, Moshe** On roots of polynomials and of their derivatives. **84c:30005**
- Shih, Mou Hsiang** (with Wang, Hann Tzong) Unit lemniscates contained in the unit ball. **84c:30014**
- Wang, Hann Tzong** See Shih, Mou Hsiang, **84c:30014**

secondary classifications:

- Abhyankar, Shreeram S.** (with Rubel, Lee A.) Every difference polynomial has a connected zero-set. **(84a:12028)**
- Arumaj, Y. E.** See Bhattacharyya, P., **(84b:30027)**
- Barnett, Stephen** See Smart, Nancy M., **(84b:65058)**
- Bhattacharyya, P.** (with Arumaj, Y. E.) On the Fatou set of monic polynomials. **(84b:30027)**
- Cooke, Charlie H.** (with Smith, Philip W.) Eigenvalue localization for the Tikhonova model of crystal growth. **(84c:82080)**
- Kemperman, J. H. B.** A Hurwitz matrix is totally positive. **(84i:15012)**
- Rubel, Lee A.** See Abhyankar, Shreeram S., **(84a:12028)**
- Rubinstein, Zalman** Characteristic functional equation of polynomials and the Morera-Carleman theorem. **(84a:30076)**
- Smart, Nancy M.** (with Barnett, Stephen) Bilinear transformation of multivariable polynomials using the Horner method. **(84b:65058)**
- Smith, Philip W.** See Cooke, Charlie H., **(84c:82080)**

30C15 Zeros of polynomials, rational functions, and other analytic functions (e.g. zeros of functions with bounded Dirichlet integral) (For algebraic theory, see 12D10; for real methods, see 26C10.)

- Abian, Alexander** A family of analytic functions whose members have equal number of zeros. **84g:30005**
On the difference of the number of zeros and poles of the members of convergent sequences of meromorphic functions. **84c:30006**
The precise annulus containing all the zeros of a polynomial. **84c:30013**
- Aziz, Abdul** On the zeros of composite polynomials. **84b:30008**
- Boese, G.** Einschlüsse und Trennung der Nullstellen von Exponentialtrinomien mit konstanten Koeffizienten. (English and Russian summaries) [Inclusions and separation of the zeros of exponential trinomials with constant coefficients] **84g:30006**
- Fiddy, M. A.** See Wood, John W.; et al., **84i:30007**
- Górecki, Henryk** (with Szymkat, Maciej) Application of an elimination method to the study of the geometry of zeros of real polynomials. **84j:30014**
- Hall, T. J.** See Wood, John W.; et al., **84i:30007**
- Linden, C. N.** Regular functions of restricted growth and their zeros in tangential regions. **84a:30010**
- Prather, C. L.** See Shaw, J. K., **84a:30011**
- Runkel, Hans-J.** Zero-free parabolic regions for polynomials with complex coefficients. **84g:30007**
- Schelin, Charles W.** Counting zeros of real polynomials within the unit disk. **84b:30011**
- Shaw, J. K.** (with Prather, C. L.) A Polya "shire" theorem for functions with algebraic singularities. **84a:30011**
- Shirokov, N. A.** Zero sets for functions from Λ_∞ . (Russian. English summary) **84a:30012**
- Simeunović, D. M.** Sur les limites des zéros du polynôme $1+z/1!+z^2/2!+\dots+z^n/n!$. [On the limits of the zeros of the polynomial $1+z/1!+z^2/2!+\dots+z^n/n!$] **84c:30013**
- Stolarsky, Kenneth B.** Zeros of smallest modulus of functions resembling $\exp(z)$. **84c:30008**
A family of polynomials with concyclic zeros. **84m:30010**
- Szymkat, Maciej** See Górecki, Henryk, **84j:30014**
- Tomić, Miodrag** Sur la borne supérieure des modules des zéros des polynômes. [On the upper bound of the moduli of the zeros of polynomials] **84j:30015**
- Werner, Wilhelm** A-posteriori-Fehlerschränken für Polynomnullstellen. [A posteriori error bounds for polynomial zeros] **84m:30011**
- Wood, John W.** (with Hall, T. J.; Fiddy, M. A.) A comparison study of some computational methods for locating the zeros of entire functions. **84i:30007**
- Zaheer, Neyamat** On Lucas-sets for vector-valued abstract polynomials in K -inner product spaces. **84d:30014**

secondary classifications:

- Aziz, Abdul** On a property of rational functions. **(84j:30003)**
- Azoff, E.** (with Clancey, Kevin F.; Gohberg, Israel) On line integrals of rational functions of two complex variables. **(84a:32002)**
- Barnett, Stephen** (with Scraton, R. E.) Location of matrix eigenvalues in the complex plane. **(84j:15005)**
- Berman, D. L.** On the question of the distribution of roots of an algebraic polynomial with real coefficients. (Russian) **(84c:12013)**
- Bridges, Douglas S.** Correction to: "On the isolation of zeroes of an analytic function" [Pacific J. Math. **96** (1981), no. 1, 13-22; MR **82k:03095**]. **(84c:03103)**
- Clancey, Kevin F.** See Azoff, E.; et al., **(84a:32002)**
- Fisher, Michael Ellis** Yang-Lee edge behavior in one-dimensional systems. **(84c:82009)**
- Gohberg, Israel** See Azoff, E.; et al., **(84a:32002)**
- Jevtić, Mirosljub** Zeros of functions in $D^{p,\alpha}$ spaces. **(84a:30063)**
- Korenblum, Boris** Some problems in potential theory and the notion of harmonic entropy. **(84f:31001)**
- Logan, B. F.** Extremal problems for positive-definite bandlimited functions. I. Eventually positive functions with zero integral. **(84c:30034a)**
Extremal problems for positive-definite bandlimited functions. II. Eventually negative functions. **(84c:30034b)**
Extremal problems for positive-definite bandlimited functions. III. The maximum number of zeros in an interval $[0, T]$. **(84c:30034c)**
- Marden, Morris** Conjectures on the critical points of a polynomial. **(84c:30007)**
- Milovanović, G. V.** See Petković, M. S., **(84b:65054)**
- Mishra, M. N.** (with Nayak, N. N.; Pattanayak, S.) Lower bound for the number of real roots of a random algebraic polynomial. **(84i:60071)**
- Nayak, N. N.** See Mishra, M. N.; et al., **(84i:60071)**
- Nesterenko, Yu. V.** Estimates of orders of zeros of functions of a certain class. (Russian) **(84b:10048)**
- Pattanayak, S.** See Mishra, M. N.; et al., **(84i:60071)**
- Petković, M. S.** (with Milovanović, G. V.) A note on some improvements of the simultaneous methods for determination of polynomial zeros. **(84b:65054)**
- Plák, Vlastimil** (with Young, Nicholas J.) Zero location by Hermitian forms: the singular case. **(84c:12014)**
- Roitman, Moshe** On roots of polynomials and of their derivatives. **(84i:30005)**
- Scraton, R. E.** See Barnett, Stephen, **(84j:15005)**
- Shih, Mou Hsiang** (with Wang, Hann Tzong) Unit lemniscates contained in the unit ball. **(84c:30014)**
- Walach, Eugene** (with Zeheb, Ezra) Root distribution for the ellipse. **(84j:15010)**
- Wang, Hann Tzong** See Shih, Mou Hsiang, **(84c:30014)**
- Wu, Hua Mo** Elementary proof of the Schur-Cohn-Miller theorem. (Chinese. English summary) **(84i:12018)**
- Young, Nicholas J.** See Plák, Vlastimil, **(84c:12014)**
- Zeheb, Ezra** See Walach, Eugene, **(84j:15010)**

30C20 Conformal mappings of special domains

- Becker, Jochen** (with Pommerenke, Christian) Hölder continuity of conformal mappings and nonquasiconformal Jordan curves. **84a:30014**
- Charzyński, Zygmunt** (with Ślaskowska, Janina) Application de la méthode des fonctions algébriques à la représentation conforme. [Application of the method of algebraic functions to conformal representation] **84c:30009**
- Goncharenko, S. V.** Construction of a function that maps an n -connected circular domain onto a disc with cuts along arcs of concentric circles. (Russian) **84b:30012**
- Hoidn, Hans-Peter** Osculation methods for the conformal mapping of doubly connected regions. (German summary) **84i:30008**
- Homentovskiĭ, Dorel** Conformal mappings of multiply connected domains exterior to thin regions. **84j:30016**
- Lesley, F. David** (with Warschawski, Stefan E.) Oscillation on vertical crosscuts in the conformal mapping of infinite strips. **84c:30015**
- Peschl, Ernst** ★ Die konforme Abbildung von Kreisbogenpolygongebieten einer besonderen Klasse, bei denen sich das Problem der akzessorischen Parameter lösen läßt. (German) [The conformal mapping of arc polygon domains of a special class, for which the problem of accessory parameters can be solved] **84j:30017**
- Pommerenke, Christian** See Becker, Jochen, **84a:30014**
- Rodin, Burton** (with Warschawski, Stefan E.) A necessary and sufficient condition for the asymptotic version of Ahlfors' distortion property. **84b:30009**
- Ślaskowska, Janina** See Charzyński, Zygmunt, **84c:30009**
- Warschawski, Stefan E.** See Rodin, Burton, **84b:30009** and Lesley, F. David, **84c:30015**
- Zvirovich, E. I.** The Carleman problem on a Riemann surface with an edge and a mapping of circular polygons. (Russian) **84c:30016**

secondary classifications:

- Fox, David W.** (with Kuttler, James R.) Sloshing frequencies. (German summary) **(84c:76027)**
- Grushevskii, S. P.** A generalization of the Kolmogorov inequality. (Russian. English and Georgian summaries) **(84b:42020)**
- Kuttler, James R.** See Fox, David W., **(84c:76027)**
- Kuz'mina, G. V.** On the maximum of some conformal invariant associated with capacity. (Russian) **(84b:30030)**
- Simonenko, I. B.** An exponentially converging linear method for determining the Christoffel-Schwarz constant and A. A. Markov type estimates for harmonic power quasipolynomials. (Russian) **(84j:30075)**

30C25 Covering theorems in conformal mapping theory

- Bogucki, Z.** (with Zderkiewicz, J.) Sur les ensembles de solutions des équations $f(z)=p(f(a))$, $|f(z)|=|p(f(a))|$ dans certaines classes de fonctions analytiques. [On the sets of solutions of the equations $f(z)=p(f(a))$, $|f(z)|=|p(f(a))|$ in certain classes of analytic functions] **84b:30013**

Goryainov, V. V. Distortion and covering theorems in some classes of univalent functions. (Russian) **84b:30010**

Zderkiewicz, J. See Bogucki, Z., **84b:30013**

secondary classifications:

Hwang, Jun Shung On an estimate for Bloch and Doob norm and covering problem in Doob's class. (**84d:30058**)

Minda, C. David Bloch constants for meromorphic functions. (**84b:30033**)

Lower bounds for the hyperbolic metric in convex regions. (**84j:30039**)

Oshkin, I. B. Univalence discs of meromorphic functions. (Russian. English summary) (**84b:30039**)

30C30 Numerical methods in conformal mapping theory [See also 65E05.]

Askerov, A. R. Numerical solution of problems of conformal mapping by the method of generalized Fourier series. (Russian) **84k:30009**

Bischoff, Frederic Numerical conformal mapping and analytic continuation. **84i:30009**

Chen, Han Lin (with Hvaring, Tron) Approximation of complex harmonic functions by complex harmonic splines. **84m:30012**

Gaier, Dieter Numerical methods in conformal mapping. **84i:30010**

Hough, D. M. See Papamichael, N.; et al., **84i:30011**

Hvaring, Tron See Chen, Han Lin, **84m:30012**

Papamichael, N. (with Warby, M. K.; Hough, D. M.) The determination of the poles of the mapping function and their use in numerical conformal mapping. **84i:30011**

Rabinovich, B. I. (with Tyurin, Yu. V.) Recurrent numerical method of conformal mapping of doubly connected domains on a circular ring. (Russian) **84k:30010**

Tyurin, Yu. V. See Rabinovich, B. I., **84k:30010**

Vlášek, Zdeněk A numerical calculation of a conformal mapping of any bounded curvilinear strip onto a rectangle. **84j:30018**

Warby, M. K. See Papamichael, N.; et al., **84i:30011**

secondary classifications:

Abd-el-Malek, M. B. See Smith, A. C., (**84e:76020**)

Goedbloed, J. P. Free-boundary high-beta tokamaks. II. Mathematical intermezzo:

Hilbert transforms and conformal mapping. (**84c:76081a**)

Free-boundary high-beta tokamaks. III. Free-boundary stability. (**84c:76081b**)

Goncharenko, S. V. Construction of a function that maps an n -connected circular domain onto a disc with cuts along arcs of concentric circles. (Russian) (**84b:30012**)

Gutknecht, Martin H. Numerical experiments on solving Theodorsen's integral equation for conformal maps with the fast Fourier transform and various nonlinear iterative methods. (**84c:65054**)

Harrington, Andrew N. Conformal mappings onto domains with arbitrarily specified boundary shapes. (**84a:30015**)

Koshkina, T. N. (with Sidorov, A. F.) A geometric approach for constructing three-dimensional difference grids. (Russian) (**84a:65099**)

Leal, L. G. See Ryskin, G., (**84i:65032**)

Ryskin, G. (with Leal, L. G.) Orthogonal mapping. (**84i:65032**)

Sidorov, A. F. See Koshkina, T. N., (**84a:65099**)

Smith, A. C. (with Abd-el-Malek, M. B.) Hilbert's method for numerical solution of flow from a uniform channel over a shelf. (**84e:76020**)

30C35 General theory of conformal mappings

Černý, Ilja (with Prokšová, Marie) On boundary elements of the fourth kind. (Czech summary) **84m:30013**

Galyarskii, E. I. Two-dimensional groups of conformal symmetry and their generalizations. (Russian) **84d:30015**

Harrington, Andrew N. Conformal mappings onto domains with arbitrarily specified boundary shapes. **84a:30015**

Heins, Maurice Semigroups of holomorphic maps of a Riemann surface into itself which are homomorphisms of the set of positive reals considered additively. **84f:30012**

Ivanov, O. V. Some properties of complete lattices of conformally invariant bicomplex extensions. (Russian) **84c:30010**

A property of conformally invariant compact extensions of plane domains.

(Russian) **84b:30014**

Boundary properties of conformal mappings and compactifications of planar simply connected domains. (Russian) **84g:30008**

Topological properties of a conformally invariant compact extension with the first axiom of countability. (Russian) **84j:30019**

Jones, Peter Wilcox (with Zinsmeister, Michel) Sur la transformation conforme des domaines de Lavrentiev. (English summary) [Conformal mapping on Lavrentiev domains] **84g:30009**

Krantz, Steven G. Characterization of smooth domains in \mathbb{C} by their biholomorphic self-maps. **84m:30014**

Kuz'mina, G. V. On the problem of the maximum product of conformal radii of nonoverlapping domains in a disk. (Russian) **84c:30011**

Maskus, Renate Über die geometrische Gestalt eines Kontinuums minimalen elliptischen transfiniten Durchmessers. [On the geometric form of a continuum with minimal elliptic transfinite diameter] **84b:30015**

Murgulescu, Elena Sur la détermination des points d'inflexion de certaines courbes remarquables. [On the determination of the inflection points of certain notable curves] **84a:30016**

Prokšová, Marie See Černý, Ilja, **84m:30013**

Shcherbakov, A. A. Density of the orbit of a pseudogroup of conformal mappings and generalization of the Hudaï-Verenov theorem. (Russian. English summary) **84m:30015**

Volynets, I. A. Plane domains with a discrete group of conformal automorphisms. (Russian) **84m:30016**

Zinsmeister, Michel See Jones, Peter Wilcox, **84g:30009**

secondary classifications:

Adepoju, J. A. (with Nassif, M.) Effectiveness of transposed inverse sets in Faber regions. (**84f:30004**)

Becker, Jochen (with Pommerenke, Christian) Hölder continuity of conformal mappings and nonquasiconformal Jordan curves. (**84a:30014**)

de Bruin, R. ★ A semi-infinite trumpet-shaped model of the cochlea. (**84e:92010**)

Goryainov, V. V. Distortion and covering theorems in some classes of univalent functions. (Russian) (**84b:30010**)

Harmelin, Reuven Bergman kernel function and univalence criteria. (**84b:30012**)

Ivanov, O. V. (with Suvorov, G. D.) Stable conformally invariant compact extensions. (Russian. English summary) (**84b:30051**)

Janušauskas, Algimantas ★ Трёхмерные аналоги конформных отображений. (Russian) [Three-dimensional analogues of conformal mappings] (**84k:30021**)

Karunakaran, V. Length of ray-images under conformal maps. (**84i:30016**)

Kruglikov, V. I. (with Selyakova, N. I.) Remarks on conformally invariant compact extensions of plane domains. (Russian) (**84c:30066**)

Kühnau, Reiner Einige Extremalprobleme bei konformen Abbildungen mit geometrischen Funktionalen. [Some extremal problems in conformal mappings with geometric functionals] (**84c:30038**)

Lebedev, N. A. Methods and results of the theory of univalent functions. (Russian) (**84k:30018**)

Nassif, M. See Adepoju, J. A., (**84f:30004**)

Pommerenke, Christian See Becker, Jochen, (**84a:30014**)

Rodin, Burton (with Warschawski, Stefan E.) A necessary and sufficient condition for the asymptotic version of Ahlfors' distortion property. (**84b:30009**)

Selyakova, N. I. See Kruglikov, V. I., (**84c:30066**)

Shcherbakov, A. A. Topological classification of germs of conformal mappings with an identical linear part. (Russian. English summary) (**84f:58014**)

Suvorov, G. D. See Ivanov, O. V., (**84b:30051**)

Thomas, Edward Two examples of sets of range uniqueness. (**84b:30032**)

Warschawski, Stefan E. See Rodin, Burton, (**84b:30009**)

Zinsmeister, Michel Courbes de Jordan vérifiant une condition corde-arc. (English summary) [Jordan curves satisfying a chord-arc condition] (**84j:30052**)

Transformation conforme et courbes presque lipschitziennes. (English summary)

[Conformal mapping and almost Lipschitzian curves] (**84m:42030**)

30C40 Kernel functions and applications

Burbea, Jacob The modular function and the modulus of a doubly-connected region. **84k:30011**

The Cauchy and the Szegő kernels on multiply connected regions. **84b:30011**

Inequalities for reproducing kernel spaces. **84a:30017**

Harmelin, Reuven Bergman kernel function and univalence criteria. **84b:30012**

On the derivatives of the Schwarzian derivative of a univalent function and their

symmetric generating function. **84d:30016**

Mozharovskii, V. V. A description of the kernel of creeping and relaxation by a function of Mittag-Leffler type. (Russian. English summary) **84j:30020**

Szapiel, Maria (with Szapiel, Wojciech) Extreme points of convex sets. IV. Bounded typically real functions. (Russian summary) **84c:30017c**

Szapiel, Wojciech Extreme points of convex sets. II. Influence of normalization on integral representations. (Russian summary) **84c:30017a**

Extreme points of convex sets. III. Montel's normalization. (Russian summary)

84c:30017b

See also Szapiel, Maria, **84c:30017c**

secondary classifications:

Hough, D. M. See Papamichael, N.; et al., (**84i:30011**)

Papamichael, N. (with Warby, M. K.; Hough, D. M.) The determination of the poles of the mapping function and their use in numerical conformal mapping. (**84i:30011**)

Saitoh, Saburo Hilbert spaces induced by Hilbert space valued functions. (**84b:44001**)

Warby, M. K. See Papamichael, N.; et al., (**84i:30011**)

30C45 Special classes of univalent and multivalent functions (starlike, convex, bounded rotation, etc.)

Aharonov, Dov Bazilevič's theorem for areally mean p -valent functions. **84i:30012**

Ahuja, O. P. (with Silverman, Herb) Convolutions of prestarlike functions. **84f:30013**

See also Mogra, M. L., **84a:30026**

Aldihan, Naeela See Noor, K. Inayat; et al., **84m:30019**

Alboudi, Fatima M. See Noor, K. Inayat; et al., **84m:30019**

Aouf, M. K. See Nasr, M. A., **84b:30019**

Bajpai, Shyam K. On the coefficients of functions whose real part is bounded. **84c:30012**

Starlikeness of certain functions. **84g:30010**

On the class preserving integrals of certain univalent functions. **84i:30013**

Bakhtin, A. K. A class of univalent functions. (Russian) **84g:30011**

Barnard, R. W. (with Suffridge, T. J.) On the simultaneous univalence of f and f' . **84f:30014**

Bhargava, G. P. (with Shukla, S. L.) On some classes of regular univalent functions. **84a:30018**

A note on certain classes of analytic functions. **84a:30019**

Blezu, Dorin (with Pascu, Nicolae N.) Integral of univalent functions. **84i:30014**

(with Pascu, Nicolae N.) Functions alpha-close-to-convex of order γ . (Romanian summary) **84g:30012**

Bogowski, Franciszek (with Bucka, Czesława) Sur une classe de fonctions étoilées bornées. (Russian and Polish summaries) [A class of bounded starlike functions] **84f:30015**

- Bogucki, Z. (with Zderkiewicz, J.) Sur la courbure des lignes de niveau et de leurs trajectoires orthogonales dans certaines familles de fonctions convexes. [The curvature of the level lines and of their orthogonal trajectories in certain families of convex functions] **84g:30013**
- Brown, R. K. Univalence of normalized solutions of $H''(z) + p(z)W(z) = 0$. **84g:30014**
- Bucka, Czesława. See Bogowski, Franciszek, **84f:30015**
- Bulboacă, Teodor. On some new classes of analytic functions. (Romanian. English summary) **84j:30021**
- Case, B. A. (with Quine, J. R.) Conditions for some polygonal functions to be Bazilevič. **84c:30016**
- Causey, W. M. On the univalence of functions defined by certain integral transforms. II. **84c:30012**
- Cerebiez-Tarabicka, Krystyna (with Godula, Janusz; Zlotkiewicz, Eligiusz J.) On a class of Bazilevič functions. (Russian and Polish summaries) **84c:30013**
- Chatterjea, S. K. On starlike functions. **84c:30014**
- Ch'én, Ming Po. A class of p -valent analytic functions. **84f:30016**
- Chernikov, V. V. The curvature of level lines in a class of typically real functions. (Russian) **84c:30015**
- See also Sizhuk, P. I.; et al., **84m:30023**
- Ciozda, Krystyna (with Lewandowski, Zdzisław; Pituch, Józef) Sur les représentations conformes du cercle unité sur des domaines balayés par certaines familles de demi-droites. (Russian and Polish summaries) [Conformal representations of the unit circle on domains swept out by certain families of half lines] **84c:30015**
- Dashrath (with Shukla, S. L.) Coefficient estimates for a subclass of spiral-like functions. **84g:30015**
- See also Shukla, S. L., **84f:30024**
- Davessar, Amrit. A coefficient inequality for a subclass of univalent analytic functions. **84d:30017**
- Fournier, Richard. A note on neighbourhoods of univalent functions. **84a:30020**
- Ganesan, M. S. On linear combinations of functions in $S^*(A, B)$. (Serbo-Croatian summary) **84c:30021**
- Godula, Janusz. See Cerebiez-Tarabicka, Krystyna; et al., **84c:30013**
- Goel, R. M. (with Mehrook, Beant Singh) On the partial sums of a subclass of close-to-convex functions. **84j:30022**
- (with Mehrook, Beant Singh) A subclass of univalent functions. **84a:30022**
- (with Mehrook, Beant Singh) A subclass of starlike functions with respect to symmetric points. **84b:30013**
- (with Sohi, N. S.) Convolution theorems for a class of bounded convex functions. **84c:30018**
- (with Mehrook, Beant Singh) A subclass of univalent functions. **84d:30018**
- Haario, Heikki. On the extreme points of classes of univalent functions. **84d:30019**
- Hallenbeck, D. J. (with MacGregor, T. H.) Support points of families of analytic functions described by subordination. **84j:30023**
- Hollingsworth, M. B. (with Wright, Donald J.) Typically-real functions of order p . **84f:30017**
- Hu, Ke. Distortion and coefficient estimation of schlicht functions. **84c:30019**
- Janowski, Jerzy (with Stankiewicz, Jan) A relative growth of modulus of derivatives for majorized functions. (Russian and Polish summaries) **84c:30016**
- Jevtić, Miroslav (with Mateljević, Miodrag) Some inequalities for regular and univalent functions. **84c:30020**
- (with Mateljević, Miodrag) D^p -class of derivatives of some areally mean p -valent functions. **84j:30024**
- Kapoor, G. P. (with Khanna, G.) On λ -areally mean p -valent functions. **84a:30023**
- Karumakaran, V. Length of ray-images under conformal maps. **84c:30016**
- Khanna, G. See Kapoor, G. P., **84a:30023**
- Kulkarni, S. R. (with Thakare, Nimbakrishna K.) The radius of convexity for a certain class of analytic functions. **84c:30021**
- Lebedev, I. A. Structural formulas of Bazilevič type. (Russian. English summary) **84d:30020**
- On structural formulas for univalent functions. (Russian) **84k:30013**
- Lewandowski, Zdzisław. See Ciozda, Krystyna; et al., **84c:30015**
- Lewis, John L. Convexity of a certain series. **84c:30021**
- Libera, Richard J. (with Zlotkiewicz, Eligiusz J.) Coefficient bounds for the inverse of a function with derivative in \mathcal{P} . **84c:30024**
- Livingston, Albert E. A class of meromorphic starlike functions. **84g:30016**
- MacGregor, T. H. See Hallenbeck, D. J., **84j:30023**
- Mateljević, Miodrag. See Jevtić, Miroslav, **84c:30020** and **84j:30024**
- Mazur, Ryszard (with Sieczko, Anna) On certain classes of β -starlike and quasi- β -starlike k -symmetrical holomorphic functions. **84c:30022**
- Mehrook, Beant Singh. A subclass of close-to-convex functions. **84m:30017**
- A class of univalent functions. **84j:30025**
- See also Goel, R. M., **84a:30022**; **84b:30013**; **84d:30018** and **84j:30022**
- Miazga, Józef. On a subclass of bounded typically-real functions. (Russian and Polish summaries) **84c:30023**
- Mocanu, Petru T. (with Ripeanu, Dumitru; Şerb, Ioan) On the order of starlikeness of the Libera transform of the class of starlike functions of order α . **84j:30026**
- Sufficient conditions of univalence for complex functions in the class C^1 . **84a:30025**
- (with Ripeanu, Dumitru; Şerb, Ioan) On the order of starlikeness of convex functions of order α . **84d:30022**
- (with Ripeanu, Dumitru) The order of starlikeness of the Libera transform of the class of starlike functions of order $\frac{1}{2}$. **84d:30023**
- Mogra, M. L. On coefficient estimates for λ -spirallike and Robertson functions. **84g:30017**
- (with Ahuja, O. P.) On a subclass of close-to-convex functions. **84a:30026**
- On a subclass of starlike univalent mappings. **84b:30018**
- Nasr, M. A. (with Aouf, M. K.) Characterizations for convex functions and starlike functions of complex order in $U = \{z: |z| < 1\}$. (Arabic summary) **84b:30019**
- Alpha-close-to-convex functions of order beta. **84f:30018**
- Nikitin, S. V. See Sizhuk, P. I.; et al., **84m:30023**
- Nishimoto, Katsuyuki. See Owa, Shigeyoshi, **84m:30021**
- Noor, K. Inayat. On a generalization of close-to-convexity. **84b:30017**
- Some radius of convexity problems. **84a:30027**
- On a generalization of close-to-convexity. **84m:30018**
- (with Aloboudi, Fatima M.; Aldihan, Naela) On the radius of univalence of convex combinations of analytic functions. **84m:30019**
- Owa, Shigeyoshi. On new criteria for p -valent functions. **84c:30017a**
- A remark on the special classes of analytic functions. II. **84c:30014b**
- A remark on the classes $D(K)$ and $R(K)$. **84m:30020**
- On the starlike functions of order α and type β . **84f:30019a**
- On new criteria for analytic functions. **84i:30017**
- On the starlike functions of order α and type β . II. **84f:30019b**
- (with Nishimoto, Katsuyuki) On a fractional differintegral equation. **84m:30021**
- A remark on the special classes of analytic functions. **84c:30014a**
- On Hadamard products for certain classes of univalent functions with negative coefficients. **84m:30022**
- On new criteria for p -valent functions. II. **84c:30017b**
- A remark on certain classes of analytic functions. **84c:30018**
- On the subclasses of univalent functions. **84c:30019**
- A class of analytic p -valent functions. **84f:30020**
- On the Hadamard products of univalent functions. **84f:30021**
- Padmanabhan, K. S. See Reddy, G. Lakshma, **84b:30014** and **84f:30022**
- Pascu, Nicolae N. See Blezu, Dorin, **84g:30012** and **84i:30014**
- Patil, D. A. (with Thakare, Nimbakrishna K.) Radii of p -valent β -spirallikeness of certain holomorphic functions. **84c:30024**
- (with Thakare, Nimbakrishna K.) Convex sets in the space of univalent functions. **84c:30020**
- See also Shukla, S. L.; et al., **84c:30027**
- Pituch, Józef. Sur une classe de fonctions convexes vers l'axe réel. [A class of functions convex in the direction of the real axis] **84c:30025**
- See also Ciozda, Krystyna; et al., **84c:30015**
- Pokhilevich, V. O. See Zmorovich, V. A., **84f:30026** and **84j:30028**
- Pronin, P. N. Some univalent integral operators. (Russian) **84j:30027**
- Quine, J. R. See Case, B. A., **84c:30016**
- Rahman, Qazi Ibadur (with Stankiewicz, Jan) On the Hadamard products of schlicht functions. **84a:30028**
- Reddy, G. Lakshma (with Padmanabhan, K. S.) On analytic functions with reference to the Bernardi integral operator. **84b:30014**
- (with Padmanabhan, K. S.) p -valent regular functions with negative coefficients. **84f:30022**
- Ren, Fu Yao. Another necessary and sufficient condition and distortion theorems for Bieberbach and Grunsky families of functions. **84d:30024**
- Ripeanu, Dumitru. Sur la fonctionnelle $f(z_1)/f'(z_2)$ au cas des fonctions typiquement réelles. III. [On the functional $f(z_1)/f'(z_2)$ in the case of typically real functions. III] **84f:30023**
- See also Mocanu, Petru T.; et al., **84d:30022**; **84d:30023** and **84j:30026**
- Ruscheweyh, Stephan. ★ Convolutions in geometric function theory. **84a:30029**
- Şerb, Ioan. See Mocanu, Petru T.; et al., **84d:30022** and **84j:30026**
- Sheil-Small, T. (with Silverman, Herb; Silvia, E. M.) Convolution multipliers and starlike functions. **84c:30026**
- Shukla, S. L. (with Vinodkumar) Remarks on a paper: "On univalence of certain integrals" [Indian J. Pure Appl. Math. 11 (1980), no. 12, 1626–1642; MR 82f:30011] by D. A. Patil and N. K. Thakare. **84c:30027**
- (with Dashrath) On certain classes of multivalent functions with negative coefficients. **84f:30024**
- See also Bhargava, G. P., **84a:30018** and Dashrath, **84g:30015**
- Sieczko, Anna. See Mazur, Ryszard, **84c:30022**
- Silverman, Herb. See Sheil-Small, T.; et al., **84c:30026** and Ahuja, O. P., **84f:30013**
- Silvia, E. M. Subclasses of close-to-convex functions. **84i:30018**
- See also Sheil-Small, T.; et al., **84c:30026**
- Singh, Ram. See Singh, Sunder, **84c:30030**
- Singh, Sunder (with Singh, Ram) New subclasses of univalent functions. **84a:30030**
- Sizhuk, P. I. (with Chernikov, V. V.; Nikitin, S. V.) The radius of generalized convexity for starlike mappings. (Russian) **84m:30023**
- Sohi, N. S. See Goel, R. M., **84c:30018**
- Stankiewicz, Jan. See Rahman, Qazi Ibadur, **84a:30028** and Janowski, Jerzy, **84c:30016**
- Suffridge, T. J. See Barnard, R. W., **84f:30014**
- Thakare, Nimbakrishna K. See Kulkarni, S. R., **84c:30021**; Patil, D. A., **84c:30024**; **84c:30020** and Shukla, S. L.; et al., **84c:30027**
- Todorov, Pavel G. The radius of starlikeness of rational functions with two real simple poles and positive residues. (Bulgarian. English and Russian summaries) **84b:30020**
- Radius of starlikeness of rational functions with real simple poles and positive residues. (Bulgarian. English and Russian summaries) **84b:30021**
- The radius of starlikeness of order alpha of the totally monotonic functions. **84a:30031**
- The radii of starlikeness and convexity of order alpha of typically real functions. **84f:30025**
- Tsvetkov, B. G. Estimates of the modulus of the derivative on a class of functions that are univalent in a strip. (Russian) **84k:30015**
- Tul'chii, V. V. Functions symmetrizationally subordinate in the disc. (Russian. English summary) **84b:30015**
- Vinodkumar. See Shukla, S. L., **84c:30027**
- Włodarczyk, Kazimierz. Applications of inequalities of Garabedian-Schiffer type for pairs and bounded functions not assuming certain values. **84c:30028**
- Wright, Donald J. See Hollingsworth, M. B., **84f:30017**
- Yamashita, Shinji. Radii of univalence, starlikeness, and convexity. **84c:30021**
- Zderkiewicz, J. See Bogucki, Z., **84g:30013**
- Zlotkiewicz, Eligiusz J. See Libera, Richard J., **84a:30024** and Cerebiez-Tarabicka, Krystyna; et al., **84c:30013**

- Zmorovich, V. A. (with Pokhilevich, V. O.) On α -almost convex functions. (Russian) **84j:30028**
(with Pokhilevich, V. O.) The order of starlikeness of a class of α -convex functions of order γ . (Russian. English summary) **84f:30026**

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- Burniak, Czesław (with Stankiewicz, Jan; Stankiewicz, Zofia) The estimations of coefficients for some subclasses of spirallike functions. **(84c:30031)**
Cowen, Carl C. (with Pommerenke, Christian) Inequalities for the angular derivative of an analytic function in the unit disk. **(84a:30006)**
Dimkov, G. M. Sur les coefficients des fonctions de Mocanu. [On the coefficients of the Mocanu functions] **(84i:30022)**
Hoy, Erich See Kühnau, Reiner, **(84c:30022)**
Hwang, Jun Shung On the operator ranges of analytic functions. **(84g:47017)**
Komatu, Yūsaku Über die Verzerrung des Integrals gebrochener Ordnung der schlichten Funktionen. [On the distortion of the integral of fractional order of univalent functions] **(84c:47032a)**
Über die Verzerrung bei konvexer Abbildung des Einheitskreises. [On the distortion in a convex mapping of the unit disc] **(84c:47032b)**
Krzyż, Jan G. (with Libera, Richard J.; Zlotkiewicz, Eligiusz J.) Coefficients of inverses of regular starlike functions. (Russian and Polish summaries) **(84d:30027)**
Kühnau, Reiner (with Hoy, Erich) Bemerkungen über quasikonform fortsetzbare schlichte konforme Abbildungen. [Comments on quasiconformally continuable univalent conformal mappings] **(84i:30022)**
Libera, Richard J. See Krzyż, Jan G.; et al., **(84d:30027)**
Mal, Dingur Radius of starlikeness, convexity, and linear functionals and operators on space of meromorphic functions. **(84a:30091)**
Ortel, Marvin (with Schneider, Walter J.) Curvature of level curves of harmonic functions. **(84m:31003)**
Platynowicz, Barbara On some extremal problems in classes of holomorphic functions $S_p^*(p)$, $S_p^*(p)$, $S_p^*(p)$, $MC(p)$ at additional condition. **(84c:30038)**
Pommerenke, Christian See Cowen, Carl C., **(84a:30006)**
Prokhorov, D. V. (with Szyal, Jan) On the radius of univalence for the integral of $f'(z)^p$. (Russian and Polish summaries) **(84c:30034)**
Sălăgean, Grigore Ștefan Admissible functions method for operator functions. **(84c:30076)**
(with Wiesler, H.) Jack's lemma for holomorphic vector-valued functions. **(84i:30061)**
Schneider, Walter J. See Ortel, Marvin, **(84m:31003)**
Stankiewicz, Jan See Burniak, Czesław; et al., **(84c:30031)**
Stankiewicz, Zofia See Burniak, Czesław; et al., **(84c:30031)**
Szapiel, Maria (with Szapiel, Wojciech) Extreme points of convex sets. IV. Bounded typically real functions. (Russian summary) **(84c:30017c)**
Szapiel, Wojciech Extreme points of convex sets. II. Influence of normalization on integral representations. (Russian summary) **(84c:30017a)**
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Szyal, Jan See Prokhorov, D. V., **(84c:30034)**
Wiesler, H. See Sălăgean, Grigore Ștefan, **(84c:30061)**
Zlotkiewicz, Eligiusz J. See Krzyż, Jan G.; et al., **(84d:30027)**

30C50 Coefficient problems for univalent and multivalent functions

- Alves, Mauriso Successive coefficients of univalent functions. **84i:30019**
On the Bieberbach conjecture for univalent functions and related results. **84i:30020**
Asim, Mohammed Hakim (with Wirths, Karl Joachim) Koeffizientenabschätzungen für typisch-reelle Funktionen. (Russian and Polish summaries) [Coefficient estimates for typically real functions] **84c:30029**
Bakhtin, A. K. Extrema of coefficients of univalent functions. (Russian) **84d:30025**
Bazilevich, I. E. On the orthogonal systems of functions associated with the solutions of the Loewner differential equation. (Russian) **84c:30016**
de Branges, Louis Coefficient estimates. **84i:30021**
Bshouty, Daoud The Bieberbach conjecture for restricted initial coefficients. **84c:30030**
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Fedorov, S. I. On estimates of initial coefficients in classes of univalent functions. (Russian) **84g:30018**
Grinshpan, A. Z. Mutual growth of adjacent coefficients of powers of univalent functions. (Russian) **84j:30029**
Hamilton, David H. The equivalence of two weak Bieberbach conjectures. **84d:30026**
The dispersion of the coefficients of univalent functions. **84i:30023**
Krzyż, Jan G. (with Libera, Richard J.; Zlotkiewicz, Eligiusz J.) Coefficients of inverses of regular starlike functions. (Russian and Polish summaries) **84d:30027**
Kuvaev, M. R. Estimates of the coefficients of automorphic functions. (Russian) **84i:30017**
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Nikul'shina, M. N. See Mandik, V. P., **84j:30030**
Pell, Richard A new proof of the Bieberbach conjecture for the third coefficient. **84c:30022**

- Pietrasik, Longin On some property of bounded symmetric univalent functions. (Polish summary) **84c:30022**
Rahman, Qazi Ibadur (with Waniurski, Józef) Coefficient regions for univalent trinomials. II. (Russian and Polish summaries) **84g:30019**
Ren, Fu Yao An improvement on Hayman regularity theorems and FitzGerald inequalities. (Chinese. English summary) **84b:30016**
Reshetnikov, Yu. A. Sufficient conditions for univalence of regular functions in a circular annulus. (Russian) **84c:30024**
Reza, F. M. Restrictions of the derivatives of positive real functions. **84g:30020**
Siejka, Henryka On estimation of the functional $\mu_3 - \alpha \alpha_2^2$, $\alpha \in \mathbb{C}$, in the classes of bounded univalent functions. **84m:30025**
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Stankiewicz, Zofia See Burniak, Czesław; et al., **84c:30031**
Tammi, Olli ★Extremum problems for bounded univalent functions. II. **84a:30032**
Tan, De Lin (with Chen, Ji Xiu) Coefficient estimates for the inverse of univalent functions in the unit disk. (Chinese. English summary) **84i:30025**
On the asymptotic Bieberbach conjecture for univalent functions with restricted second coefficient. (Chinese) **84i:30026**
On the coefficients of inverses of functions in Σ_k . (Chinese) **84j:30031**
Tsao, Anna Disproof of a coefficient conjecture for meromorphic univalent functions. **84c:30032**
Waniurski, Józef See Rahman, Qazi Ibadur, **84g:30019**
Wirths, Karl Joachim See Asim, Mohammed Hakim, **84c:30029**
Yamashita, Shinji Length and area estimates of the derivatives of bounded holomorphic functions. **84j:30032**
Zlotkiewicz, Eligiusz J. See Krzyż, Jan G.; et al., **84d:30027**

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- Bakhtin, A. K. A class of univalent functions. (Russian) **(84g:30011)**
Chang, Sun-Yung Alice (with Schiffer, M. M.; Schober, Glenn) On the second variation for univalent functions. **(84b:30022)**
Chatterjee, S. K. On starlike functions. **(84c:30014)**
Ch'en, Ming Po A class of p -valent analytic functions. **(84f:30016)**
Duren, P. L. (with Leung, Y. J.; Schiffer, M. M.) Support points with maximum radial angle. **(84f:30028)**
Goel, R. M. (with Mehrook, Beant Singh) A subclass of starlike functions with respect to symmetric points. **(84b:30013)**
Hu, Ke Distortion and coefficient estimation of schlicht functions. **(84c:30019)**
Kapoor, G. P. (with Khanna, G.) On λ -areally mean p -valent functions. **(84a:30023)**
Khanna, G. See Kapoor, G. P., **(84a:30023)**
Leung, Y. J. See Duren, P. L.; et al., **(84f:30028)**
Liu, Shu Qin A survey of developments in some problems concerning univalent functions. (Chinese) **(84j:30033)**
Mehrook, Beant Singh A subclass of close-to-convex functions. **(84m:30017)**
See also Goel, R. M., **(84b:30013)**
Miazga, Józef On a subclass of bounded typically-real functions. (Russian and Polish summaries) **(84c:30023)**
Owa, Shigeyoshi On the starlike functions of order α and type β . **(84f:30019a)**
On the starlike functions of order α and type β . II. **(84f:30019b)**
Popova, G. A. A variational lemma of I. E. Bazilevich. (Russian) **(84b:30023)**
Rost, Aleksandra (with Śadkowska-Zahorska, Janina) La forme nouvelle de l'inégalité de Grunsky pour les couples d'Aharonov. [A new version of the Grunsky inequality for Aharonov pairs] **(84j:30037)**
Śadkowska-Zahorska, Janina See Rost, Aleksandra, **(84j:30037)**
Schiffer, M. M. See Chang, Sun-Yung Alice; et al., **(84b:30022)** and Duren, P. L.; et al., **(84f:30028)**
Schober, Glenn See Chang, Sun-Yung Alice; et al., **(84b:30022)**
Sheil-Smith, T. (with Silverman, Herb; Silvia, E. M.) Convolution multipliers and starlike functions. **(84c:30026)**
Silverman, Herb See Sheil-Smith, T.; et al., **(84c:30026)**
Silvia, E. M. See Sheil-Smith, T.; et al., **(84c:30026)**

30C55 General theory of univalent and multivalent functions

- Aksent'ev, L. A. (with Shabalin, P. L.) Conditions for univalence with a quasiconformal extension and its application. (Russian) **84b:30023**
Anderson, James Milne (with Hinkkanen, Aimo) Correction to: "Univalent functions and domains bounded by quasircles" [J. London Math. Soc. (2) **25** (1982), no. 2, 253-260; MR **83f:30011**]. **84a:30033**
Aveli, Yusuf On meromorphic functions whose images contain a given disc. **84f:30027**
Bazilevich, I. E. Criterion for the univalence of regular functions with a positive Hayman constant. (Russian) **84b:30017**
Bshouty, Daoud (with Hengartner, Walter) On analytic injective matrix functions. **84m:30027**
Chae, Gyu Ihn On the boundedness of the set containing univalent functions. (Korean summary) **84d:30028**
Duren, P. L. (with Leung, Y. J.; Schiffer, M. M.) Support points with maximum radial angle. **84f:30028**
Godula, Janusz On univalence of a certain integral. (Russian and Polish summaries) **84c:30033**
Goryainov, V. V. Boundary functions of a system of functionals composed of values of a univalent function and its derivative. (Russian) **84a:30034**
Gubaidullina, N. A. Univalence of an integral representation. (Russian) **84i:30027**
Hengartner, Walter See Bshouty, Daoud, **84m:30027**
Hinkkanen, Aimo See Anderson, James Milne, **84a:30033**
Hu, Ke Distortion theorems for univalent functions. (Chinese. English summary) **84a:30035**

- Lebedev, N. A. Methods and results of the theory of univalent functions. (Russian) **84c:30018**
- Leung, Y. J. See Duren, P. L.; et al. **84f:30028**
- Liu, Shu Qin A survey of developments in some problems concerning univalent functions. (Chinese) **84j:30033**
- Minda, C. David (with Wright, Donald J.) Univalence criteria and the hyperbolic metric. **84c:30023**
- Prokhorov, D. V. (with Szyml, Jan) On the radius of univalence for the integral of $f'(z)^n$. (Russian and Polish summaries) **84c:30034**
- Schiffer, M. M. See Duren, P. L.; et al. **84f:30028**
- Schwarz, Binyamin On two univalence criteria of Nehari. **84g:30021**
- Shahalin, P. L. See Akseñev, L. A. **84h:30023**
- Silverman, Herb On the quotient of an analytic function and its partial sums. **84g:30022**
- Szyml, Jan See Prokhorov, D. V. **84c:30034**
- Tul'chit, V. V. Estimates of integral means for some classes of weakly univalent functions. (Russian. English summary) **84c:30035**
- Wright, Donald J. See Minda, C. David, **84c:30023**

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- Bernardi, S. D. ★Bibliography of schlicht functions. (**84k:00014**)
- Charzyński, Zygmunt (with Ślaskowska, Janina) Application de la méthode des fonctions algébriques à la représentation conforme. [Application of the method of algebraic functions to conformal representation] (**84c:30009**)
- Kuz'mina, G. V. Moduli of families of curves and quadratic differentials. (Russian) (**84j:30038a**)
- Moduli of families of curves and quadratic differentials. (**84j:30038b**)
- Mandlik, V. P. (with Nikul'shina, M. N.) Regular functions that do not take certain values. (Russian) (**84j:30030**)
- Nikul'shina, M. N. See Mandlik, V. P. (**84j:30030**)
- Owa, Shigeyoshi A remark on certain classes of analytic functions. (**84c:30018**)
- On the subclasses of univalent functions. (**84c:30019**)
- Ren, Fu Yao An improvement on Hayman regularity theorems and FitzGerald inequalities. (Chinese. English summary) (**84h:30016**)
- Sevodin, M. A. Some sufficient conditions for univalence of the general solution of an inverse boundary value problem. (Russian) (**84c:30065**)
- Ślaskowska, Janina See Charzyński, Zygmunt. (**84c:30009**)
- Bibliography:
- Schlicht functions See Bernardi, S. D., (**84k:00014**)

30C60 Quasiconformal mappings

- Aharonov, Dov (with Srebro, Uri) Boundary behavior of conformal and quasiconformal mappings. **84d:30029**
- Ahlfors, Lars Valerian ★Möbius transformations in several dimensions. **84m:30028**
- Akhmedov, Saidamir Akhmedovich The modulus of a doubly connected domain for a linear quasiconformal mapping with two pairs of characteristics. (Russian) **84d:30030**
- Aseev, V. V. Homeomorphisms that boundedly distort moduli in an enveloping space. (Russian) **84m:30029**
- A characterization of quasispheres in terms of quasiconformal homogeneity. (Russian) **84h:30024**
- Avkhadiev, F. G. Sufficient conditions for pseudoanalytic continuability. (Russian) **84c:30019**
- Boyarski, Bogdan (with Iwaniec, Tadeusz) Problems of the analytic theory of quasiconformal mappings. (Polish) **84d:30031**
- (with Iwaniec, Tadeusz) Another approach to Liouville theorem. **84c:30024**
- Buttu, Anna (with Porru, Giovanni) Singular quasiregular mappings. **84c:30025**
- Chang, Sun-Yung Alice On the coefficients of quasiconformality of cylinder and starlike domains. **84m:30030**
- Gehring, Frederick W. ★Characteristic properties of quasidisks. **84a:30036**
- Injectivity of local quasi-isometries. **84b:30018**
- (with Martio, O.) Quasidisks and the Hardy-Littlewood property. **84k:30020**
- Geineman, V. È. An extremal problem in the class of mappings that are quasiconformal in the mean. (Russian) **84h:30025**
- Gol'dshtein, V. M. The degree of summability of generalized derivatives of quasiconformal homeomorphisms. (Russian) **84j:30034**
- He, Cheng Qi A parametric representation of quasiconformal extensions. **84c:30036**
- Hoy, Erich See Kühnau, Reiner, **84k:30022**
- Hung, Wan Sheng Space affine mappings and quasiconformal coefficients. **84j:30035**
- Iwaniec, Tadeusz Systems of partial differential equations in the theory of quasiconformal mapping in \mathbb{R}^n . **84m:30031**
- On L^p -integrability in PDEs and quasiregular mappings for large exponents. **84h:30026**
- Regularity theorems for solutions of partial differential equations for quasiconformal mappings in several dimensions. **84d:30032**
- See also Boyarski, Bogdan, **84d:30031** and **84c:30024**
- Januškauskas, Algimantas ★Трёхмерные аналоги конформных отображений. (Russian) [Three-dimensional analogues of conformal mappings] **84k:30021**
- Karmazin, A. P. Continuous extension of quasimetric mappings to the boundary. (Russian) **84m:30032**
- (Krzyż, Jan G.) See Lawrynowicz, Julian, **84h:30027**
- Kud'yarin, V. S. Some estimates of distance distortion in mappings that are quasiconformal in the mean. (Russian) **84g:30023**
- Kufner, B. P. A method for studying the boundary behavior of ACL-functions. (Russian) **84c:30029**
- Kühnau, Reiner Identitäten für schlichte Lösungen der Beltramschen Gleichung. [Identities for univalent solutions of the Beltrami equation] **84i:30028**
- (with Hoy, Erich) Bemerkungen über quasikonform fortsetzbare schlichte konforme Abbildungen. [Comments on quasiconformally continuable univalent conformal mappings] **84k:30022**

- Latfullin, T. G. Continuation of quasi-isometric mappings. (Russian) **84j:30036**
- Lawrynowicz, Julian ★Quasiconformal mappings in the plane. **84h:30027**
- Lehtinen, Matti The dilatation of Beurling-Ahlfors extensions of quasimetric functions. **84c:30026**
- Luferenko, V. P. The Hausdorff dimension and mappings with a bounded Dirichlet integral. (Russian) **84b:30019**
- Martio, O. See Gehring, Frederick W., **84k:30020**
- Nasyrov, S. R. Quasiconformal continuation for a class of univalent functions. (Russian) **84m:30033**
- Peshkichev, Yu. A. Numerical characteristics of tori. (Russian) **84h:30020**
- Porru, Giovanni See Buttu, Anna, **84c:30025**
- Ren, Fu Yao On the Bieberbach functions with quasiconformal mapping. (Chinese) **84g:30024**
- The conformal mapping of nonoverlapping domain with quasiconformal extension. (Chinese. English summary) **84c:30037**
- Reshetnyak, Yu. G. ★Пространственные отображения с ограниченным искажением. (Russian) [Spatial mappings with bounded distortion] **84d:30033**
- Ryazanov, V. I. A variational method for general classes of quasiconformal mappings. (Russian. English summary) **84c:30027**
- Some questions of convergence and compactness for quasiconformal mappings. (Russian. English summary) **84i:30029**
- Sarvas, Jukka Quasiconformal semiflows. **84c:30028**
- Semenov, V. I. Quasiconformal flows in Möbius spaces. (Russian) **84c:30037**
- Srebro, Uri See Aharonov, Dov, **84d:30029**
- Tan, De Lin On distortion estimates for general families of quasiconformal mappings. (Chinese. English summary) **84d:30034**
- Tukia, P. (with Väisälä, Jussi) Quasiconformal extension from dimension n to $n+1$. **84i:30030**
- Väisälä, Jussi See Tukia, P., **84i:30030**
- Vuorinen, Matti On the uniqueness of sequential limits of quasiconformal mappings. **84c:30029**
- Zajac, József The Ahlfors class N and its connection with Teichmüller quasiconformal mappings of an annulus. (Russian and Polish summaries) **84k:30023**
- Zorich, V. A. The Carathéodory class and a spatial analogue of Koebe's theorem. (Russian) **84k:30024**
- On the theory of quasiconformal mappings in space. (Russian) **84k:30025**

secondary classifications:

- Abdushukurov, A. M. A system of Beltrami equations with degeneration. (Russian. Tajiki summary) (**84c:35044**)
- Anderson, James Milne (with Hinkkanen, Aimo) Correction to: "Univalent functions and domains bounded by quasicircles" [J. London Math. Soc. (2) **25** (1982), no. 2, 253-260; MR **83f:30011**]. (**84a:30033**)
- Andrievskii, V. V. Approximation of functions on continua with a piecewise quasiconformal boundary. (Russian) (**84h:30042**)
- Uniform convergence of Bieberbach polynomials in domains with zero angles. (Russian. English summary) (**84c:30013**)
- Convergence of Bieberbach polynomials in domains with a quasiconformal boundary. (Russian) (**84h:30007**)
- Barsegyan, G. A. The property of closeness of α -points of meromorphic functions. (Russian) (**84f:30042**)
- Becker, Jochen (with Pommerenke, Christian) Hölder continuity of conformal mappings and nonquasiconformal Jordan curves. (**84a:30014**)
- Chai, Gen Xiang On extremal problems in space and a modular inequality. (Chinese. English summary) (**84b:30021**)
- Godula, Janusz On univalence of a certain integral. (Russian and Polish summaries) (**84c:30033**)
- Gol'dshtein, V. M. See Vodop'yanov, S. K., (**84c:46037**)
- Harmelin, Reuven On the derivatives of the Schwarzian derivative of a univalent function and their symmetric generating function. (**84d:30016**)
- Hinkkanen, Aimo See Anderson, James Milne, (**84a:30033**)
- Jerison, David S. (with Kenig, Carlos E.) Hardy spaces, A_∞ , and singular integrals on chord-arc domains. (**84c:30037**)
- Kenig, Carlos E. See Jerison, David S., (**84c:30037**)
- Nikolaev, I. G. (with Šefel', S. Z.) Smoothness of convex surfaces on the basis of differential properties of quasiconformal mappings. (Russian) (**84g:53091**)
- Pommerenke, Christian See Becker, Jochen, (**84a:30014**)
- Reich, Edgar A criterion for unique extremality of Teichmüller mappings. (**84c:30032**)
- Nonuniqueness of Teichmüller extremal mappings. (**84g:30025**)
- Reimann, H. M. Invariant differential operators in hyperbolic space. (**84i:58133**)
- Renelt, Heinrich ★Quasikonforme Abbildungen und elliptische Systeme erster Ordnung in der Ebene. (German) [Quasiconformal mappings and first-order elliptic systems in the plane] (**84b:35040**)
- Šefel', S. Z. See Nikolaev, I. G., (**84g:53091**)
- Shiga, Hiroshige On the quasiconformal deformation of open Riemann surfaces and variations of some conformal invariants. (**84j:30082**)
- Trotenko, D. A. Mappings that quasipreserve cones. (Russian) (**84j:51025**)
- Tukia, P. (with Väisälä, Jussi) Lipschitz and quasiconformal approximation and extension. (**84i:57016**)
- Väisälä, Jussi See Tukia, P., (**84i:57016**)
- Vodop'yanov, S. K. (with Gol'dshtein, V. M.) ★Пространства Соболева и специальные классы отображений. (Russian) [Sobolev spaces and special classes of mappings] (**84c:46037**)
- Vorob'ev, A. G. (with Miklyukov, V. M.) Some asymptotic properties of subsolutions of equations of minimal surface type. (Russian) (**84d:35052**)

- Wohlhauser, Alfred Die Dreiecksungleichung für topologische Winkel. [The triangle inequality for topological angles] (84c:51028)
 Zakhirov, M. On a problem of M. A. Lavrent'ev. (Russian) (84d:76045)

30C70 Extremal problems for conformal and quasiconformal mappings, variational methods

- Chai, Gen Xiang On extremal problems in space and a modular inequality. (Chinese. English summary) 84b:30021
 Chang, Sun-Yung Alice (with Schiffer, M. M.; Schober, Glenn) On the second variation for univalent functions. 84b:30022
 Granlund, Seppo (with Lindqvist, Peter; Martio, O.) F -harmonic measure in space. 84f:30031
 (with Lindqvist, Peter; Martio, O.) Conformally invariant variational integrals. 84f:30030
 Gutlyans'kii, V. Ya. Linear extremal problems for univalent analytic functions with quasiconformal extension. (Russian) 84c:30030
 (with Shchepetev, V. A.) Sharp estimates for the modulus of a univalent analytic function with quasiconformal extension. (Russian) 84m:30034
 Kirwan, William E. (with Schober, Glenn) New inequalities from old ones. 84f:30032
 (Kuz'mina, G. V.) See Lebedev, N. A., 84b:30028
 Lebedev, N. A. Supplement to: "On the problem of the maximum of the product of conformal radii of nonoverlapping domains" [Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 100 (1980), 131-145; MR 82c:30033] by G. V. Kuz'mina. (Russian) 84b:30028
 Lindqvist, Peter See Granlund, Seppo; et al., 84f:30030 and 84f:30031
 Martio, O. See Granlund, Seppo; et al., 84f:30030 and 84f:30031
 Miranashvili, M. G. A variational method for construction of quasiconformal mappings. (Russian) 84d:30035
 Platynowicz, Barbara On some extremal problems in classes of holomorphic functions $S_p^*(\rho)$, $S_p^0(\rho)$, $\Sigma_p^*(\rho)$, $MC(\rho)$ at additional condition. 84c:30038
 Popova, G. A. A variational lemma of I. E. Bazilevich. (Russian) 84b:30023
 Rost, Aleksandra (with Śadkowska-Zahorska, Janina) La forme nouvelle de l'inégalité de Grunsky pour les couples d'Aharonov. [A new version of the Grunsky inequality for Aharonov pairs] 84j:30037
 Śadkowska-Zahorska, Janina See Rost, Aleksandra, 84j:30037
 Schiffer, M. M. See Chang, Sun-Yung Alice; et al., 84b:30022
 Schober, Glenn See Chang, Sun-Yung Alice; et al., 84b:30022 and Kirwan, William E., 84f:30032
 Shchepetev, V. A. See Gutlyans'kii, V. Ya., 84m:30034

secondary classifications:

- Blezu, Dorin (with Pascu, Nicolae N.) Functions alpha-close-to-convex of order γ . (Romanian summary) (84g:30012)
 Bogucki, Z. (with Zderkiewicz, J.) Sur les ensembles de solutions des équations $f(z) = p(f(a))$, $|f(z)| = |p(f(a))|$ dans certaines classes de fonctions analytiques. [On the sets of solutions of the equations $f(z) = p(f(a))$, $|f(z)| = |p(f(a))|$ in certain classes of analytic functions] (84b:30013)
 Duren, P. L. (with Leung, Y. J.; Schiffer, M. M.) Support points with maximum radial angle. (84f:30028)
 Haario, Heikki On the extreme points of classes of univalent functions. (84d:30019)
 Leung, Y. J. See Duren, P. L.; et al., (84f:30028)
 Pascu, Nicolae N. See Blezu, Dorin, (84g:30012)
 Pietrasik, Longin On some property of bounded symmetric univalent functions. (Polish summary) (84b:30022)
 Ryazanov, V. I. A variational method for general classes of quasiconformal mappings. (Russian. English summary) (84c:30027)
 Schiffer, M. M. See Duren, P. L.; et al., (84f:30028)
 Tsao, Anna Disproof of a coefficient conjecture for meromorphic univalent functions. (84c:30032)
 Zajac, Jozef The Ahlfors class N and its connection with Teichmüller quasiconformal mappings of an annulus. (Russian and Polish summaries) (84c:30023)
 Zderkiewicz, J. See Bogucki, Z., (84b:30013)

30C75 Extremal problems for conformal and quasiconformal mappings, other methods

- Astakhov, V. N. A problem for a relative extremum. (Russian) 84b:30024
 Chernikov, V. V. Estimation of the curvature of level lines in the classes Σ , Σ^p . (Russian) 84m:30035
 Hayman, Walter K. (with Reich, Edgar) On Teichmüller mappings of the disk. 84c:30031
 Kühnau, Reiner Einige Extremalprobleme bei konformen Abbildungen mit geometrischen Funktionalen. [Some extremal problems in conformal mappings with geometric functionals] 84a:30038
 Kuz'mina, G. V. Moduli of families of curves and quadratic differentials. (Russian) 84j:30038a
 Moduli of families of curves and quadratic differentials. 84j:30038b
 Reich, Edgar A criterion for unique extremality of Teichmüller mappings. 84c:30032
 Nonuniqueness of Teichmüller extremal mappings. 84g:30025
 See also Hayman, Walter K., 84c:30031
 Shlyk, V. A. On the theory of nonunivalent mappings of multiply connected domains. (Russian) 84f:30033
 Tammi, Olli On maximizing $a_2 + \mu a_3$ for real bounded univalent functions. 84b:30029
 Vasil'chik, M. Yu. A symmetric mapping of spatial domains that are infinitely near a ball, with an asymptotically minimal coefficient of quasiconformality. (Russian) 84c:30033
 Zielinska, Alicja On some extremal problem in classes of bounded univalent functions. 84d:30036
 Zyskowski, Janusz A convex hull and extreme points of some family of holomorphic functions. 84i:30031

secondary classifications:

- Bogucki, Z. (with Zderkiewicz, J.) Sur la courbure des lignes de niveau et de leurs trajectoires orthogonales dans certaines familles de fonctions convexes. [The curvature of the level lines and of their orthogonal trajectories in certain families of convex functions] (84g:30013)
 Kuz'mina, G. V. On the problem of the maximum product of conformal radii of nonoverlapping domains in a disk. (Russian) (84c:30011)
 Ohtake, Hiromi Lifts of extremal quasiconformal mappings of arbitrary Riemann surfaces. (84c:30071)
 Todorov, Pavel G. The radius of starlikeness of order α of the totally monotonic functions. (84c:30031)
 Tul'chil, V. V. Estimates of integral means for some classes of weakly univalent functions. (Russian. English summary) (84c:30035)
 Yamashita, Shinji Radii of univalence, starlikeness, and convexity. (84c:30021)
 Zderkiewicz, J. See Bogucki, Z., (84g:30013)

30C80 Maximum principle; Schwarz's lemma, Lindelöf principle, analogues and generalizations; subordination

- Abu-Muhanna, Yusuf On extreme points of subordination families. 84c:30039
 Hwang, Jun Shung On the generalized Seidel class U . 84f:30034
 Minda, C. David Lower bounds for the hyperbolic metric in convex regions. 84j:30039
 Stankiewicz, Jan Subordination and majorization for some classes of holomorphic functions. (Russian and Polish summaries) (84c:30037)

secondary classifications:

- Ciulli, S. (with Spearman, T. D.) Analytic continuation from data points with unequal errors. (84j:30078)
 De Canière, Jean Analytic generators and the KMS condition. (84d:46098)
 Hallenbeck, D. J. (with MacGregor, T. H.) Support points of families of analytic functions described by subordination. (84j:30023)
 Janowski, Jerzy (with Stankiewicz, Jan) A relative growth of modulus of derivatives for majorized functions. (Russian and Polish summaries) (84c:30016)
 (Kuz'mina, G. V.) See Lebedev, N. A., (84b:30028)
 Lebedev, N. A. Supplement to: "On the problem of the maximum of the product of conformal radii of nonoverlapping domains" [Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 100 (1980), 131-145; MR 82c:30033] by G. V. Kuz'mina. (Russian) (84b:30028)
 MacGregor, T. H. See Hallenbeck, D. J., (84j:30023)
 Rahman, Qazi Ibadur (with Stankiewicz, Jan) On the Hadamard products of schlicht functions. (84c:30028)
 Reza, F. M. Schwarz's lemma for n -ports. (See 84g:93005d)
 Spearman, T. D. See Ciulli, S., (84j:30078)
 Stankiewicz, Jan See Rahman, Qazi Ibadur, (84c:30028) and Janowski, Jerzy, (84c:30016)
 Tul'chil, V. V. Functions symmetrizationally subordinate in the disc. (Russian. English summary) (84b:30015)

30C85 Capacity and harmonic measure in the complex plane [See also 31A15.]

- Beller, Eliyahu (with Fisher, Stephen D.; Pinchuk, Bernard) Minimal interpolation for harmonic functions. 84a:30039
 Carleson, Lemart Estimates of harmonic measures. 84c:30032
 Fisher, Stephen D. See Beller, Eliyahu; et al., 84a:30039
 Ganelius, Tord Rational functions, capacities and approximation. 84a:30040
 Karmazin, A. P. See Kufarev, B. P., 84m:30036
 Kufarev, B. P. (with Karmazin, A. P.) Boundary behavior and metric properties of mappings. (Russian) 84m:30036
 Kuz'mina, G. V. On the maximum of some conformal invariant associated with capacity. (Russian) 84b:30030
 Mo, Guo Duan A connection between the logarithmic capacity and sequences of analytic functions. (Chinese. English summary) 84c:30033
 Nakai, Mitsuru (with Sario, Leo) Parabolicity and the Riemann theorem. 84b:30025
 Pinchuk, Bernard See Beller, Eliyahu; et al., 84a:30039
 Sario, Leo See Nakai, Mitsuru, 84b:30025

secondary classifications:

- Caraman, Petru Module and p -module in an abstract Wiener space. (84b:46059)
 Davie, Alexander M. (with Øksendal, Bernt) Analytic capacity and differentiability properties of finely harmonic functions. (84b:31001)
 Essén, Mats On analytic functions which are in H^p for some positive p . (84c:30052)
 Jerison, David S. (with Kenig, Carlos E.) Hardy spaces, A_∞ , and singular integrals on chord-arc domains. (84c:30037)
 Kaufman, Robert P. (with Wu, Jang Mei) Distortion of the boundary under conformal mapping. (84b:31003)
 Kenig, Carlos E. See Jerison, David S., (84c:30037)
 Øksendal, Bernt See Davie, Alexander M., (84b:31001)
 Preobrazhenskii, S. P. A boundary uniqueness theorem for regular functions with a bounded integral of "Dirichlet type". (Russian. English summary) (84b:30044)
 Sokolov, B. V. Boundary behavior of mappings from weight classes. (Russian) (84c:30072)
 Tanaka, Hiroshi A generalization of Koebe's theorem to a Riemann surface. (84j:30085)
 Wu, Jang Mei See Kaufman, Robert P., (84b:31003)

30C99 None of the above, but in this section

- Gogonea, Sorin An extension of the semicircle theorem and its application in filtration theory. (Romanian. French summary) **84f:30035**
- Kirjackis, E. (with Mišauskas, J.) Conditions for certain rational functions to belong to the class $K_p(D)$. (Russian. English and Lithuanian summaries) **84d:30038**
- Kobayashi, Shōji On analytic centers of compact sets. **84c:30040**
- Lappan, Peter A sufficient condition for the Bloch ordering. **84b:30026**
- McConnell, Alan A simple proof of Radó's theorem. **84c:30034a**
Erratum to: "A simple proof of Radó's theorem". **84c:30034b**
- Mišauskas, J. See Kirjackis, E., **84d:30038**
- Prather, C. L. (with Shaw, J. K.) Zeros of successive iterates of multiplier-sequence operators. **84a:30041**
- Shaw, J. K. See Prather, C. L., **84a:30041**

secondary classifications:

- Atabaei, M. A holomorphy criterion for functions of several complex variables. (Russian) **(84k:32005)**
- Latfullin, T. G. Geometric characterization of the quasi-isometric image of a half plane. (Russian) **(84k:30036)**

30Dxx Entire and meromorphic functions, and related topics

30D05 Functional equations in the complex domain, iteration and composition of analytic functions [See also 34A20, 39-XX.]

- Arumairaj, V. E. See Bhattacharyya, P., **84b:30027**
- Baker, I. N. (with Rubinstein, Zalman) Simultaneous iteration by entire or rational functions and their inverses. **84d:30039**
- Barnsley, M. F. (with Geronimo, Jeffrey S.; Harrington, Andrew N.; Dager, L. D.) Approximation theory on a snowflake. **84k:30026**
- Bhattacharyya, P. (with Arumairaj, V. E.) On the Fatou set of monic polynomials. **84b:30027**
- Cowen, Carl C. Analytic solutions of Böttcher's functional equation in the unit disk. **84b:30031**
- Dager, L. D. See Barnsley, M. F.; et al., **84k:30026**
- Geronimo, Jeffrey S. See Barnsley, M. F.; et al., **84k:30026**
- Gross, Fred (with Osgood, Charles F.) On the functional equation $f^n + g^n = h^n$ and a new approach to a certain class of more general functional equations. **84k:30027**
- Harrington, Andrew N. See Barnsley, M. F.; et al., **84k:30026**
- Lyubich, M. Yu. Typical behavior of trajectories of the rational mapping of a sphere. (Russian) **84f:30036**
- Matkowski, Janusz (with Oginska, Wanda) Note on iterations of some entire functions. (Russian and Polish summaries) **84c:30041**
- Odlyzko, Andrew M. Periodic oscillations of coefficients of power series that satisfy functional equations. **84a:30042**
- Oginska, Wanda See Matkowski, Janusz, **84c:30041**
- Osgood, Charles F. See Gross, Fred, **84k:30027**
- Rippon, P. J. Infinite exponentials. **84b:30028**
- Rubinstein, Zalman See Baker, I. N., **84d:30039**
- Sad, Paulo Fixed points of analytic diffeomorphisms. (Portuguese) (See **84b:00011**)
- Sonnenschein, J. Un tamis pour les fonctions périodiques de période 1. [A sieve for periodic functions of period 1] **84b:30032**
- Todorov, Pavel G. New explicit formulas for the n th derivative of a composite function. (Russian) **84b:30033**
- Yanagihara, Niro Meromorphic solutions of some functional equations. (French summary) **84j:30040**
- Yang, Chung Chun Progress in factorization theory of entire and meromorphic functions. **84a:30043**
Further results on the fix-points of composite transcendental entire functions. **84a:30044**

secondary classifications:

- Borelli Forti, C. (with Fenyő, István) On a generalization of gamma functional equation. **(84c:33001)**
- Braun, Amiram (with Weit, Yitzhak) On invariant subspaces of continuous vector valued functions. **(84b:42022)**
- Cowen, Carl C. (with Pommerenke, Christian) Inequalities for the angular derivative of an analytic function in the unit disk. **(84a:30006)**
- Cvitanović, Predrag (with Myrheim, Jan) Universality for period n -tuplings in complex mappings. **(84j:58084)**
- Fan, Ky Iteration of analytic functions of operators. II. **(84c:47018)**
- Fenyő, István See Borelli Forti, C., **(84c:33001)**
- Gross, Fred (with Osgood, Charles F.) On fixed points of composite entire functions. **(84c:30037)**
- Levin, Genadii Mironovich Sequences of bifurcations of a one-parameter family of mappings. (Russian) **(84f:58098)**
- Liverpool, L. S. O. Value distribution and related questions in iteration theory. **(84m:30045)**
- Myrheim, Jan See Cvitanović, Predrag, **(84j:58084)**
- Osgood, Charles F. See Gross, Fred, **(84c:30037)**
- Pommerenke, Christian See Cowen, Carl C., **(84a:30006)**
- Shevchik, V. V. Functional equations with shift in spaces of analytic functions in a half plane. (Russian) **(84b:30038)**

Steinmetz, Norbert On the primeness of the Painlevé transcendents. **(84b:34009)**Über die eindeutigen Lösungen einer homogenen algebraischen Differentialgleichung zweiter Ordnung. [On the unique solutions of a homogeneous algebraic second-order differential equation] **(84f:34009)**
Über eine Klasse von Painlevéschen Differentialgleichungen. [On a class of differential equations of Painlevé type] **(84k:34015)**Weit, Yitzhak See Braun, Amiram, **(84b:42022)**

30D10 Representations of entire functions by series and integrals

- Bajpai, Shyam K. Entire functions represented by Dirichlet series of alpha-beta growth. (Italian summary) **84b:30029**
- Leon'ev, A. F. Representation of entire functions by series of Mittag-Leffler functions. (Russian) **84c:30042**
- Logan, B. F. Extremal problems for positive-definite bandlimited functions. I. Eventually positive functions with zero integral. **84i:30034a**
Extremal problems for positive-definite bandlimited functions. II. Eventually negative functions. **84i:30034b**
Extremal problems for positive-definite bandlimited functions. III. The maximum number of zeros in an interval $[0, T]$. **84i:30034c**
- Lokhin, I. F. Solution of an integral equation. (Russian) **84j:30041**
- Massa, Silvio On the lower (p, q) type of an entire function. (Italian summary) **84d:30040**
- Rakhimkulov, N. I. On the question of the expansion of functions in Dirichlet series. (Russian) **84k:30028**
- Srivastava, B. B. On the lower ψ -order of the function defined by the series $\sum a_n e^{\lambda_n z}$. **84a:30045**
- Vinnits'kii, B. V. Representation of entire functions by series $\sum_{n=1}^{\infty} f(\lambda_n z)$. (Ukrainian. Russian summary) **84c:30043**
- Zayed, Ahmed I. On Laguerre series expansions of entire functions. **84k:30029**

secondary classifications:

- Dewess, Monika Über ganze charakteristische Funktionen mit vorgegebenem Wachstum. [On entire characteristic functions with given growth] **(84d:60024)**
- Schnabl, R. Über Bruijnsche Reihen mit nicht negativen Koeffizienten. (English summary) [Brujins series with nonnegative coefficients] **(84d:30089)**
- Vaish, Satendra Kumar Generalized logarithmic means of an entire Dirichlet series of order zero. I. **(84f:30005)**

30D15 Special classes of entire functions and growth estimates

- Azpeitia, A. G. On the growth of entire functions defined by Dirichlet series. **84b:30034**
- Barry, P. D. On integral functions which grow little more rapidly than do polynomials. **84i:30035**
- Braicher, G. G. Some singularities of the growth of the maximal term, central index and Taylor coefficients of an entire function. (Russian) **84d:30041**
- Bratishevich, A. V. On a problem of A. F. Leon'ev. (Russian) **84m:30037**
- Doherey, Ram Prakash (with Srivastava, R. S. L.) On the geometric means of an entire function and its derivatives. **84c:30044**
See also Nautiyal, A., **84c:30046**
- Dzhafarli, G. A. Decrease of analytic functions in the half plane. (Russian) **84b:30035**
- Ephron, Mark S. Indicators of products and surjective convolution maps. **84f:30037**
- Giner, V. B. (with Podoshev, L. R.; Sodin, M. L.) Addition of lower indicators. (Russian) **84m:30038**
- Gol'dberg, A. A. (with Ostrov'skii, I. V.) Indicators of entire Hermitian-positive functions of finite order. (Russian) **84d:30042**
- Govil, N. K. (with Jain, Vinay Kumar) Some integral inequalities for entire functions of exponential type. (Russian and Polish summaries) **84d:30043**
(with Jain, Vinay Kumar) Inequalities for functions of exponential type not vanishing in a half-plane. **84f:30038**
- Gupta, Sharat Chand See Vaish, Satendra Kumar, **84c:30048**
- He, Long Zhen On the $(p, q)(R)$ order and lower $(p, q)(R)$ order of entire functions defined by Dirichlet series. (Chinese. English summary) **84j:30042**
- Jain, Vinay Kumar See Govil, N. K., **84d:30043** and **84f:30038**
- Jin, Yi Dan On the proximate order of an entire function of zero order. (Chinese. English summary) **84c:30045**
- Kapoor, G. P. See Nautiyal, A., **84b:30030**
- Kats, I. S. Relations between integral characteristics of the growth of entire functions and the distribution of their zeros. (Russian) **84a:30046**
- Khom'yak, M. M. Asymptotic properties of entire functions defined by Dirichlet series. (Ukrainian. Russian summary) **84d:30044**
The maximum term of a Dirichlet series specifying an entire function. (Russian) **84d:30045**
- The Wiman-Valiron method for entire functions, defined by Dirichlet series, with a condition for growth on some sequence. (Russian) **84j:30043**
- Kumar, Kuldeep A note on entire functions of irregular growth. **84c:30035**
- Massa, Silvio Remarks on the growth of an entire function and the degree of approximation. (Italian summary) **84a:30047**
- Nandan, Krishna (with Srivastava, R. S. L.) On the growth of an integral function and its derivatives. **84f:30039**
- Nautiyal, A. (with Kapoor, G. P.) On the generalized orders of an entire function of slow growth. **84b:30030**
(with Doherey, Ram Prakash) On the proximate order of an analytic function represented by Dirichlet series. **84c:30046**
- Ostrov'skii, I. V. The growth of entire functions and ridge functions that are analytic on the half plane. (Russian) **84k:30030**
See also Gol'dberg, A. A., **84d:30042**
- Parvatham, R. (with Thangamani, J.) On the Ritt order of a certain class of functions. **84c:30047**

- Podoshev, L. R. See Giner, V. B.; et al., 84m:30038
- Schneider, Gerald On entire functions with nearly prescribed growth. 84a:30048
- Sheremeta, M. M. Coefficient quasidensity and completeness of the system of derivatives of an entire function of exponential type. (Russian) 84d:30046
- Sodin, M. L. See Giner, V. B.; et al., 84m:30038
- Somasundaram, D. (with Thamizharasi, R.) On entire functions of L -bounded index. 84i:30036
- Srivastava, G. S. See Vaish, Satendra Kumar, 84j:30044 and 84i:30031
- Srivastava, R. S. L. See Dohery, Ram Prakash, 84c:30044 and Nandan, Krishna, 84i:30039
- Steinmetz, Norbert On the order and lower order of entire functions with radially distributed zeros. 84e:30036
- Thamizharasi, R. See Somasundaram, D., 84i:30036
- Thangamani, J. See Parvatham, R., 84c:30047
- Ueda, Hideharu On the growth of subharmonic functions. 84e:30037a
On the growth of entire functions of order less than $\frac{1}{2}$. 84e:30037b
On entire functions extremal for the cos πp theorem having prescribed asymptotic growth. 84e:30038
- Vaish, Satendra Kumar (with Srivastava, G. S.) A note on the logarithmic proximate orders. 84j:30044
Geometric means of an entire Dirichlet series. 84m:30039
Growth of the mean values of entire functions represented by Dirichlet series. 84m:30040
(with Srivastava, G. S.) On the geometric means of an entire function of slow growth. 84k:30031
(with Gupta, Sharat Chand) On the logarithmic mean of an entire function represented by Dirichlet series. (Arabic summary) 84c:30048
A note on the geometric means of an entire function of order zero. 84h:30031
Mean values of an entire Dirichlet series. II. (Italian summary) 84h:30036

secondary classifications:

- Dixit, K. K. On the logarithmic H -proximate order of analytic functions represented by Dirichlet series. II. (84j:30010)
- Eiderman, V. Ya. Decrease of a function analytic in the half plane over a sequence of points. (Russian) (84d:30048)
- Kapoor, G. P. (with Nautiyal, A.) On the coefficients of a function analytic in the unit disc having slow rate of growth. (84c:30006)
- Kondratyuk, A. A. Asymptotic behavior of meromorphic functions of completely regular growth. (Russian) (84c:30033)
- Linden, C. N. Regular functions of restricted growth and their zeros in tangential regions. (84a:30010)
- Massa, Silvio On the lower (p, q) type of an entire function. (Italian summary) (84d:30040)
- Nandan, Krishna On the growth of an entire Dirichlet series and its derivatives. (84j:30011)
- Nautiyal, A. See Kapoor, G. P., (84c:30006)
- Ostrovskii, I. V. Zero sets of entire periodic Hermitian-positive functions. (Russian) (84m:32006)
- Sheremeta, M. M. Growth on the real axis of an entire function represented by a Dirichlet series. (Russian) (84c:30008)
A theorem of Polya. (Russian) (84c:30007)
- Squires, William A. Geometric condition for universal interpolation in \mathbb{C}^n . (84h:30058)
- Toda, Nobushige On some asymptotic properties of systems of entire functions of smooth growth. (84d:30056)
- Vaish, Satendra Kumar Mean values of entire Dirichlet series of fast growth. (84d:30009)
On the logarithmic proximate type of an entire Dirichlet series. (84m:30007)

30D20 Entire functions, general theory

- Duyos Ruiz, Sarah Maria On the existence of universal functions. (Russian) 84d:30047
- Eiderman, V. Ya. Decrease of a function analytic in the half plane over a sequence of points. (Russian) 84d:30048
- Epifanov, O. V. A theorem on division of entire functions of finite order. (Russian) 84a:30049
- Gross, Fred (with Osgood, Charles F.) On fixed points of composite entire functions. 84i:30037
- Hellerstein, Simon (with Shen, Li Chien; Williamson, Jack) Reality of the zeros of an entire function and its derivatives. 84a:30050
- Jank, Gerhard (with Volkmann, Lutz) Abschätzungen eines Weierstraßproduktes und Anwendungen auf meromorphe Funktionen endlicher iterierter Ordnung. (English summary) [Estimates of a Weierstrass product and applications to meromorphic functions of finite iterated order] 84c:30039a
(with Volkmann, Lutz) On the type of entire functions of finite iterated order. 84c:30039b
- Juneja, O. P. (with Srivastava, G. S.) A lower type theorem for $\int^x (f(t)/t) dt$ and its application to entire functions. (See 84b:00011)
- Koosis, Paul La plus petite majorante surharmonique et son rapport avec l'existence des fonctions entières de type exponentiel jouant le rôle de multiplicateurs. [The smallest superharmonic majorant and its relation to the existence of entire functions of exponential type playing the role of multipliers] 84k:30032
- Mishra, A. K. See Nautiyal, A., 84a:30051
- Nautiyal, A. (with Mishra, A. K.) On the coefficients of an entire function. 84a:30051
- Osgood, Charles F. See Gross, Fred, 84i:30037
- Prokopovich, G. S. Distribution of zeros of primitives of certain entire functions. (Russian) 84m:30041
- Shchuchinskaya, E. F. Exceptional values in Wiman inequalities for entire functions of finite order. (Russian) 84h:30037

- Shen, Li Chien See Hellerstein, Simon; et al., 84a:30050
- Srivastava, G. S. See Juneja, O. P., (See 84b:00011)
- Thomas, Edward Two examples of sets of range uniqueness. 84h:30032
- Volkmann, Lutz See Jank, Gerhard, 84c:30039a and 84c:30039b
- Williamson, Jack See Hellerstein, Simon; et al., 84a:30050
- Yulmukhametov, R. S. Sufficient sets in a space of entire functions. (Russian) 84d:30049

secondary classifications:

- Abi-Khuzam, Faruk F. An inequality for derivatives of polynomials whose zeros are in a half-plane. (84f:30010)
- Amemiya, Ichiro (with Ozawa, Mitsuru) Nonexistence of finite order solutions of $w'' + e^{-z} w' + Q(z)w = 0$. (84b:34007)
- Azarin, V. S. (with Giner, V. B.) The structure of cluster sets of entire and subharmonic functions. (Russian) (84i:31003)
- Epifanov, O. V. Criterion for the surjectivity of a convolution in arbitrary domains of the complex plane. (Russian) (84h:30082)
- Fiddy, M. A. See Wood, John W.; et al., (84i:30007)
- Giner, V. B. See Azarin, V. S., (84i:31003)
- Hall, T. J. See Wood, John W.; et al., (84i:30007)
- Kapoor, G. P. See Nautiyal, A., (84c:30030)
- Kovalevskii, M. A. The asymptotic behavior of a certain class of entire functions. (Russian. English summary) (84i:30048)
- Nautiyal, A. (with Kapoor, G. P.) On the generalized orders of an entire function of slow growth. (84h:30030)
(with Rizvi, S. R. H.) On the approximation of an entire function in L^∞ -norm. (84h:30060)
- Ozawa, Mitsuru See Amemiya, Ichiro, (84b:34007)
- Parthasarathy, R. (with Subba Rao, S.) The growth of entire and meromorphic functions of nonintegral order. (84g:30026b)
- Rahman, Qazi Ibadur See Unni, K. R.; et al., (84e:41004)
- Rizvi, S. R. H. See Nautiyal, A., (84c:30060)
- Shkallikov, A. A. Theorems of Tauberian type on the distribution of zeros of holomorphic functions. (Russian) (84c:30034)
- Sivasubramanian, K. See Unni, K. R.; et al., (84e:41004)
- Subba Rao, S. A theorem on meromorphic function of order 1. (84g:30026a)
See also Parthasarathy, R., (84g:30026b)
- Unni, K. R. (with Rahman, Qazi Ibadur; Sivasubramanian, K.) Lacunary interpolation for entire functions. (84e:41004)
- Wiener, Joseph Distributional and entire solutions of linear functional-differential equations. (84b:34095)
- Wood, John W. (with Hall, T. J.; Fiddy, M. A.) A comparison study of some computational methods for locating the zeros of entire functions. (84i:30007)
- Yang, Le (with Zhang, Guang Hou) A general theorem on the numbers of deficient values of entire functions. (Chinese) (84a:30058)
- Zhang, Guang Hou See Yang, Le, (84a:30058)

30D30 Meromorphic functions, general theory

- Bagdasaryan, D. T. A factorization of meromorphic functions in the unit disk. (Russian. Armenian summary) 84d:30050
- Fridman, O. N. See Gol'dberg, A. A., 84f:30040
- Goel, R. M. (with Sohi, N. S.) On a class of meromorphic functions. (Serbo-Croatian summary) 84c:30052
- Gol'dberg, A. A. (with Fridman, O. N.) Regular growth of meromorphic functions with positive zeros and negative poles. (Ukrainian. Russian summary) 84f:30040
- Heins, Maurice Meromorphic functions on \mathbb{C} whose moduli have a level set in common. 84i:30038
- Kondratyuk, A. A. The method of Fourier series for entire and meromorphic functions of completely regular growth. III. (Russian) 84f:30041
Asymptotic behavior of meromorphic functions of completely regular growth. (Russian) 84c:30033
- Li, Jian Shun Meromorphic functions which are solutions of algebraic differential equations. (Chinese. English summary) 84h:30038
- Minda, C. David Bloch constants for meromorphic functions. 84h:30033
- Mokhon'ko, A. Z. Estimates of Nevanlinna characteristics of algebroidal functions and their applications to differential equations. (Russian) 84c:30040
- Oshkin, I. B. Univalence discs of meromorphic functions. (Russian. English summary) 84h:30039
- Ozawa, Mitsuru On the growth of meromorphic functions. 84h:30040
- Parthasarathy, R. (with Subba Rao, S.) The growth of entire and meromorphic functions of nonintegral order. 84g:30026b
- Salmassi, Mohammad A note on an extension of Lindelöf's theorem to meromorphic functions. 84m:30042
- Singh, Anand Prakash On Nevanlinna characteristics function. 84m:30043
- Sohi, N. S. See Goel, R. M., 84c:30052
- Subba Rao, S. A theorem on meromorphic function of order 1. 84g:30026a
See also Parthasarathy, R., 84g:30026b
- Toda, Nobushige On the minimum modulus of meromorphic functions of lower order $\frac{1}{2}$. 84d:30051
- Topplia, Sakari On the growth of the spherical derivative of a meromorphic function. 84c:30041
- Ueda, Hideharu On the growth of meromorphic functions of order less than $\frac{1}{2}$. 84j:30045a
On the growth of meromorphic functions of order less than $\frac{1}{2}$. II. 84j:30045b
- Xiao, Xiu Zhi A generalization of an inequality of Hayman. (Chinese. English summary) 84h:30041
- Zhang, Guang Hou Direct transcendental singularities for inverse functions of meromorphic functions and of their derivatives. 84a:30053

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- Abian, Alexander On the difference of the number of zeros and poles of the members of convergent sequences of meromorphic functions. (84i:30006)
- Aveli, Yusuf On meromorphic functions whose images contain a given disc. (84f:30027)
- Bank, Steven B. (with Gundersen, Gary G.; Laine, Ilpo) Meromorphic solutions of the Riccati differential equation. (84b:34008)
- On certain properties of solutions of second-order linear differential equations. (84i:34007)
- Chen, Chi Cheng Total curvature and topological structure of complete minimal surfaces. (84i:53008)
- Constantinescu, Tiberiu (with Gheondea, Aurelian) Algebraic aspects of the functional calculus for meromorphic functions. (84d:47016)
- Fujimoto, Hirotsuka On meromorphic maps into a compact complex manifold. (84a:32043)
- Gheondea, Aurelian See Constantinescu, Tiberiu, (84d:47016)
- Gundersen, Gary G. See Bank, Steven B.; et al., (84b:34008)
- Hayman, Walter K. Some achievements of Nevanlinna theory. (84d:30052)
- Hellerstein, Simon (with Shen, Li Chien; Williamson, Jack) Reality of the zeros of an entire function and its derivatives. (84a:30050)
- Jank, Gerhard (with Volkmann, Lutz) Untersuchungen ganzer und meromorpher Funktionen unendlicher Ordnung. [Investigations of entire and meromorphic functions of infinite order] (84d:30053)
- (with Volkmann, Lutz) Abschätzungen eines Weierstraßproduktes und Anwendungen auf meromorphe Funktionen endlicher iterierter Ordnung. (English summary) [Estimates of a Weierstrass product and applications to meromorphic functions of finite iterated order] (84e:30039a)
- (with Volkmann, Lutz) On the type of entire functions of finite iterated order. (84e:30039b)
- Laine, Ilpo See Bank, Steven B.; et al., (84b:34008)
- Prather, C. L. See Shaw, J. K., (84a:30011)
- Seewald, Wolfgang Quotient-Differenzen-Algorithmus: Beweis der Regeln von Rutishauser. (English summary) [Quotient-difference algorithm: proof of Rutishauser's rule] (84i:65033)
- Sharshanova, G. A. Meromorphic characteristic functions with one pole. (Russian) (84a:60030)
- Shaw, J. K. (with Prather, C. L.) A Pólya "shire" theorem for functions with algebraic singularities. (84a:30011)
- Shen, Li Chien See Hellerstein, Simon; et al., (84a:30050)
- Singh, Anand Prakash Relative defects corresponding to the common roots of two meromorphic functions. (84j:30047)
- Sons, L. R. Unbounded functions in the unit disc. (84g:30030)
- Volkmann, Lutz See Jank, Gerhard, (84d:30053); and (84e:30039b)
- Williamson, Jack See Hellerstein, Simon; et al., (84a:30050)
- Yanagihara, Niro Meromorphic solutions of some difference equations of higher order. II. (84c:39002)

30D35 Distribution of values, Nevanlinna theory

- Anderson, James Milne (with Toppila, Sakari) The growth of the spherical derivative of a meromorphic function of finite lower order. (84b:30042)
- Barsegian, G. A. The property of closeness of α -points of meromorphic functions. (Russian) (84f:30042)
- Chen, Ding Xing On Valiron deficient functions. (84m:30044)
- Essén, Mats (with Shea, D. F.) Applications of Denjoy integral inequalities and differential inequalities to growth problems for subharmonic and meromorphic functions. (84g:30027)
- Gu, Yong Xing Argument distribution of entire functions and their derivatives. (Chinese) (84c:30049)
- Gundersen, Gary G. Meromorphic functions that share four values. (84g:30028)
- Harke, Otto Untersuchungen zum Picardschen Satz für verallgemeinerte analytische Funktionen. [Investigations on Picard's theorem for generalized analytic functions] (84a:30054)
- Hayman, Walter K. (with Yang, Dong) Distribution of values of a holomorphic function in an angular region. (Chinese) (84b:30034)
- Some achievements of Nevanlinna theory. (84d:30052)
- Jank, Gerhard (with Volkmann, Lutz) Untersuchungen ganzer und meromorpher Funktionen unendlicher Ordnung. [Investigations of entire and meromorphic functions of infinite order] (84d:30053)
- Kaufman, Robert P. Some remarks on the interpolation of analytic functions and logarithmic derivatives. (Russian) (84c:30042)
- Li, Guo Ping (with Liu, Huai Jun) On the inverse functions of meromorphic functions. (Chinese. French summary) (84b:30043)
- Liu, Huai Jun See Li, Guo Ping, (84b:30043)
- Liverpool, L. S. O. Value distribution and related questions in iteration theory. (84m:30045)
- Lü, Yi Nian On Borel direction of an algebroidal function. (84a:30055)
- Marchenko, I. I. Growth of meromorphic functions of finite lower order. (Russian) (84d:30054)
- Matevosyan, G. U. Defect values of functions holomorphic in an annulus. (Russian. Armenian summary) (84g:30029)
- Murai, Takafumi The deficiency of entire functions with Fejér gaps. (French summary) (84m:30046)
- Osgood, Charles F. Extending Nevanlinna's ramification results. (84i:30039)
- A fully general Nevanlinna n -small function theorem and a sometimes effective Thue-Siegel-Roth-Schmidt theorem for solutions to linear differential equation. (See 84m:30003)
- Ozawa, Mitsuru On a conjecture of Gackstatter and Laine. (84f:30043)
- Pesonen, Martti I. A path family approach to Ahlfors's value distribution theory. (84a:30056)

- Rossi, John (with Weitsman, Allen) A unified approach to certain questions in value distribution theory. (84j:30046)
- Shankar, Hari Proximate order and distribution of distinct roots of a meromorphic function. (84a:30057a)
- Genus and lower order of roots of a meromorphic function. (84a:30057b)
- Shea, D. F. See Essén, Mats, (84g:30027)
- Shkalikov, A. A. Theorems of Tauberian type on the distribution of zeros of holomorphic functions. (Russian) (84c:30034)
- Singh, Anand Prakash Relative defects corresponding to the common roots of two meromorphic functions. (84j:30047)
- Sons, L. R. Unbounded functions in the unit disc. (84g:30030)
- Toda, Nobushige Some notes on asymptotic values of meromorphic functions of smooth growth. (84d:30055)
- On some asymptotic properties of systems of entire functions of smooth growth. (84d:30056)
- Toppila, Sakari (with Winkler, Jörg) On the spherical derivative of a meromorphic function with a Valiron deficient value. (84c:30035)
- An introduction to Nevanlinna theory. (84m:30047)
- See also Anderson, James Milne, (84c:30042)
- Ueda, Hideharu A theorem on the spread relation. (84f:30044)
- Volkmann, Lutz See Jank, Gerhard, (84d:30053)
- Weitsman, Allen See Rossi, John, (84j:30046)
- Winkler, Jörg See Toppila, Sakari, (84c:30035)
- Yang, Dong See Hayman, Walter K., (84b:30034)
- Yang, Le (with Zhang, Guang Hou) A general theorem on the numbers of deficient values of entire functions. (Chinese) (84a:30058)
- (with Zhang, Guang Hou) Deficient values of meromorphic functions and their derivatives. (Chinese) (84i:30040)
- Value distribution of meromorphic functions and their derivatives. (84a:30059)
- (with Zhang, Guang Hou) Distribution of zeros and poles of meromorphic functions and their filling disks. (84c:30043)
- Zhang, Guang Hou See Yang, Le, (84a:30058); (84c:30043) and (84i:30040)
- Ziegler, Hans J. W. ★ Vector valued Nevanlinna theory. (84d:30057)

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- Bagdasaryan, D. T. A factorization of meromorphic functions in the unit disk. (Russian. Armenian summary) (84d:30050)
- Erëmenko, A. E. Meromorphic solutions of equations of Briot-Bouquet type. (Russian) (84b:34013)
- Fuchs, W. H. J. The development of the theory of deficient values since Nevanlinna. (84b:01064)
- Gleizer, E. V. Estimation of the Fourier coefficients of subharmonic functions. (Russian) (84c:31002)
- He, Yu Zan (with Xiao, Xiu Zhi) The applications of value distribution theory to ordinary differential equations. (Chinese) (84g:34012)
- Hellerstein, Simon (with Shen, Li Chien; Williamson, Jack) Reality of the zeros of an entire function and its derivatives. (84a:30050)
- Kondratyuk, A. A. Asymptotic behavior of meromorphic functions of completely regular growth. (Russian) (84c:30033)
- Lehto, Olli On the birth of the Nevanlinna theory. (84c:01047)
- Makarov, N. G. Invariant subspaces of the space C^∞ . (Russian) (84d:30088)
- Nochka, E. I. Defect relations for meromorphic curves. (Russian) (84g:32039)
- Rickman, Seppo Value distribution of quasimeromorphic mappings. (84f:30048)
- Savchuk, Ya. I. The set of deficient vectors of integral curves. (Russian) (84j:32031)
- Shen, Li Chien See Hellerstein, Simon; et al., (84a:30050)
- Steinmetz, Norbert On the order and lower order of entire functions with radially distributed zeros. (84c:30036)
- Toda, Nobushige On the minimum modulus of meromorphic functions of lower order $\frac{1}{2}$. (84d:30051)
- Toppila, Sakari On the growth of the spherical derivative of a meromorphic function. (84c:30041)
- Williamson, Jack See Hellerstein, Simon; et al., (84a:30050)
- Wittich, H. Anwendungen der Wertverteilungslehre auf gewöhnliche Differentialgleichungen. [Applications of the theory of value distribution to ordinary differential equations] (84g:34014)
- Xiao, Xiu Zhi See He, Yu Zan, (84g:34012)
- Yanagihara, Niro Meromorphic solutions of some functional equations. (French summary) (84j:30040)
- Yang, Chung Chun Progress in factorization theory of entire and meromorphic functions. (84a:30043)
- Further results on the fix-points of composite transcendental entire functions. (84a:30044)
- Yu, Jia Rong On the growth and the distribution of values of exponential series convergent only in the right half-plane. (Chinese summary) (84d:30061)

30D40 Cluster sets, prime ends, boundary behavior

- Abdu Af-Rakhman Khasan Cluster sets along arbitrary boundary paths. (Russian) (84c:30044)
- Belna, C. L. (with Carroll, F. W.; Piranian, G.) The Fatou points of strongly annular functions. (84g:30031)
- Berman, Robert D. A converse to the Lusin-Privalov radial uniqueness theorem. (84m:30048)
- Brauer, George Boundary behavior of spaces of analytic functions. (84m:30049)
- Carroll, F. W. See Belna, C. L.; et al., (84g:30031)
- Csordas, George (with Lohwater, Arthur J.; Ramsey, Thomas) Lacunary series and the boundary behavior of Bloch functions. (84b:30035)
- Doss, Raouf Une démonstration élémentaire du théorème de Rudin-Carleson et de ceux de F. et M. Riesz. [An elementary proof of the Rudin-Carleson theorem and of the theorems of F. and M. Riesz] (84c:30045)

- Gorbaichuk, V. I. The Fatou theorem on the boundary behavior of derivatives in a class of biharmonic functions. (Russian) **84m:30050**
- Hwang, Jun Shung On the Schwarz reflection principle. **84c:30050**
- Ivanov, O. V. Normal functions and natural extension of a plane domain. (Russian) **84j:30048**
- Latfullin, T. G. Geometric characterization of the quasi-isometric image of a half plane. (Russian) **84c:30036**
- Lohwater, Arthur J. See Csordas, George; et al., **84b:30035**
- Pavičević, Zarko Remarks on Fatou's theorem on corner boundary values. (Russian) **84c:30046**
- Piranian, G. See Belna, C. L.; et al., **84g:30031**
- Preobrazhenskii, S. P. A boundary uniqueness theorem for regular functions with a bounded integral of "Dirichlet type". (Russian. English summary) **84h:30044**
- Ramsey, Thomas See Csordas, George; et al., **84b:30035**

secondary classifications:

- Barnsley, M. F. (with Geronimo, Jeffrey S.; Harrington, Andrew N.; Dager, L. D.) Approximation theory on a snowflake. **(84c:30026)**
- Černý, Ilja (with Prokšová, Marie) On boundary elements of the fourth kind. (Czech summary) **(84m:30013)**
- Dager, L. D. See Barnsley, M. F.; et al., **(84c:30026)**
- Derrida, B. (with de Seze, L.; Itzykson, C.) Fractal structure of zeros in hierarchical models. **(84m:82112)**
- Dzhvarshvili, A. G. The cluster set of a function of two variables. (Russian) **(84j:32007)**
- Geronimo, Jeffrey S. See Barnsley, M. F.; et al., **(84c:30026)**
- Harrington, Andrew N. See Barnsley, M. F.; et al., **(84c:30026)**
- Humke, Paul D. (with Vessey, Theodore) Another note on σ -porous sets. **(84g:26009)**
- Itzykson, C. See Derrida, B.; et al., **(84m:82112)**
- Ivanov, O. V. Topological properties of a conformally invariant compact extension with the first axiom of countability. (Russian) **(84j:30019)**
- Kaufman, Robert P. Two problems on removable sets for analytic functions. **(84d:30008)**
- Null sets and analytic continuation. **(84f:30003)**
- Khavinson, D. Remarks concerning boundary properties of analytic functions of E_p -classes. **(84b:30037)**
- Mejia L., Jorge Enrique Boundary properties of equimorphic functions. (Russian) **(84j:30089)**
- Nagel, Alexander (with Rudin, Walter; Shapiro, Joel H.) Tangential boundary behavior of functions in Dirichlet-type spaces. **(84a:31002)**
- Ochiai, Hiroji (with Yanagihara, Niro) Homomorphisms and maximal ideals in the algebra of holomorphic functions. **(84m:46056)**
- Prokšová, Marie See Černý, Ilja, **(84m:30013)**
- Rudin, Walter See Nagel, Alexander; et al., **(84a:31002)**
- de Seze, L. See Derrida, B.; et al., **(84m:82112)**
- Shapiro, Joel H. See Nagel, Alexander; et al., **(84a:31002)**
- Tetvadze, G. E. Some boundary properties of products of Blaschke type in the unit disc. (Russian. English and Georgian summaries) **(84c:30047)**
- Vessey, Theodore See Humke, Paul D., **(84g:26009)**
- Vuorinen, Matti On the Harnack constant and the boundary behavior of Harnack functions. **(84c:31008)**
- Yanagihara, Niro See Ochiai, Hiroji, **(84m:46056)**

30D45 Normal functions, normal families

- Oshkin, I. B. On the continuous extension of functions that are normal on subgroups to points of the maximal ideal space of the algebra H^∞ . (Russian) **84m:30051**
- Pesch, Ernst Die Abschätzung von Blochschen Konstanten für drei Familien von im Einheitskreis holomorphen bzw. meromorphen verzweigten Abbildungen. [The estimation of Bloch constants for three families of branched mappings that are holomorphic or meromorphic in the unit disc] **84f:30045**

secondary classifications:

- De Souza, Geraldo Soares (with Sampson, Gary) A real characterization of the pre-dual of Bloch functions. **(84g:30051)**
- Ivanov, O. V. Normal functions and natural extension of a plane domain. (Russian) **(84j:30048)**
- Lappan, Peter A sufficient condition for the Bloch ordering. **(84b:30026)**
- Sampson, Gary See De Souza, Geraldo Soares, **(84g:30051)**
- Toppila, Sakari On the growth of the spherical derivative of a meromorphic function. **(84c:30041)**
- Yamashita, Shinji Functions of uniformly bounded characteristic. **(84d:30060)**

30D50 Blaschke products, bounded characteristic, bounded functions, functions with positive real part

- Ahern, Patrick (with Cohn, William S.) A geometric characterization of N^+ domains. **84i:30041**
- Cohn, William S. On the H^p classes of derivatives of functions orthogonal to invariant subspaces. **84j:30049**
- See also Ahern, Patrick, **84i:30041**
- Dagiène, E. See Kirjackis, E., **84f:30046**
- Delsarte, Philippe (with Genin, Yves; Kamp, Yves) Generalized Schur parametrization. (See **84g:93005c**)
- Èiderman, V. Ya. On the radii of exceptional discs in the lower bound of the modulus of a function of bounded type. (Russian) **84m:30052**
- Genin, Yves See Delsarte, Philippe; et al., **(See 84g:93005c)**
- Hwang, Jun Shung On an estimate for Bloch and Doob norm and covering problem in Doob's class. **84d:30058**

- Kamp, Yves See Delsarte, Philippe; et al., **(See 84g:93005c)**
- Kirjackis, E. (with Dagiène, E.) The disk of membership of a family in a class of functions with positive real part of the n th derivative. (Russian. English and Lithuanian summaries) **84f:30046**
- Kovalishina, I. V. (with Potapov, V. P.) Radii of the Weyl circle in the matrix Nevanlinna-Pick problem. (Russian) **84j:30050**
- Martin, N. F. G. On finite Blaschke products whose restrictions to the unit circle are exact endomorphisms. **84b:30045**
- Megrabyan, L. Kh. A class of mappings and the reconstruction of open systems by them. (Russian) **84m:30053**
- Nadkarni, M. G. Some measure-theoretic remarks on inner functions and related results. **84b:30036**
- Potapov, V. P. See Kovalishina, I. V., **84j:30050**
- Shamoyan, F. A. Zeros of functions analytic in the disk and growing near the boundary. (Russian. English and Armenian summaries) **84g:30032**
- Stephenson, Kenneth Analytic functions and hypergroups of function pairs. **84j:30051**
- Tetvadze, G. E. Some boundary properties of products of Blaschke type in the unit disc. (Russian. English and Georgian summaries) **84c:30047**
- Verbitskii, I. E. Inner functions as multipliers of the spaces D_α . (Russian) **84c:30060**
- On Taylor coefficients and L_p -moduli of continuity of Blaschke products. (Russian. English summary) **84c:30059**
- Wolff, Thomas H. Two algebras of bounded functions. **84c:30051**
- Yamashita, Shinji Functions of uniformly bounded characteristic. **84d:30060**
- Yu, Jia Rong On the growth and the distribution of values of exponential series convergent only in the right half-plane. (Chinese summary) **84d:30061**
- Unité de certaines fonctions analytiques et bornées. (English summary) [Uniqueness of certain bounded analytic functions] **84g:30033**

secondary classifications:

- Airapetyan, G. M. Multiple interpolation in the subclasses H^∞ and the basis property of rational fractions in the weak topology L^∞ . (Russian. English and Armenian summaries) **(84j:30053)**
- Amar, Éric Sur un problème de W. Rudin concernant les fonctions holomorphes et bornées. (English summary) [On a problem of W. Rudin concerning bounded holomorphic functions] **(84a:32008)**
- Andrica, Dorin (with Muşuroia, Nicolae) Cones of holomorphic functions with positive real part. **(84b:46034)**
- Bagdasaryan, D. T. A factorization of meromorphic functions in the unit disk. (Russian. Armenian summary) **(84d:30059)**
- Bajpai, Shyam K. On the coefficients of functions whose real part is bounded. **(84c:30012)**
- Jones, Peter Wilcox (with Zinsmeister, Michel) Sur la transformation conforme des domaines de Lavrentiev. (English summary) [Conformal mapping on Lavrent'ev domains] **(84g:30009)**
- Linden, C. N. Regular functions of restricted growth and their zeros in tangential regions. **(84a:30010)**
- Luecking, Daniel H. Division in Douglas algebras. **(84a:46114)**
- Muşuroia, Nicolae See Andrica, Dorin, **(84b:46034)**
- Rippon, P. J. The fine boundary behavior of certain delta-subharmonic functions. **(84f:31009)**
- Stepanyan, S. S. Best estimate of Taylor coefficients of functions of the class A_p . (Russian. Armenian summary) **(84c:30002)**
- Zinsmeister, Michel See Jones, Peter Wilcox, **(84g:30009)**

30D55 H^p -classes

- Burkholder, D. L. Brownian motion and the Hardy spaces H^p . **84a:30061**
- Cohn, Bill Carleson measures for functions orthogonal to invariant subspaces. **84m:30054**
- Dilanyan, E. K. Two corollaries of the theorem on two constants for functions of class H_p . (Russian. English and Armenian summaries) **84b:30046**
- Essén, Mats On analytic functions which are in H^p for some positive p . **84c:30052**
- Jerison, David S. (with Kenig, Carlos E.) Hardy spaces, A_∞ , and singular integrals on chord-arc domains. **84c:30037**
- Kenig, Carlos E. See Jerison, David S., **84c:30037**
- Khavinson, D. Remarks concerning boundary properties of analytic functions of E_p -classes. **84b:30037**
- Lippus, Yu. Multipliers of uniform convergence of classes of analytic functions. (Russian. German summary) **84h:30047**
- Lyubarskii, Yu. I. Representation of functions from H^p in a half plane and some of its applications. (Russian) **84c:30048**
- Mateljević, Miodrag (with Pavlović, Miroslav) An extension of the Hardy-Littlewood inequality. **84c:30049**
- (with Pavlović, Miroslav) L^p -behavior of power series with positive coefficients and Hardy spaces. **84g:30034**
- Pavlović, Miroslav See Mateljević, Miodrag, **84c:30049** and **84g:30034**
- Rubel, Lee A. Internal-external factorization in Lumer's Hardy spaces. **84m:30055**
- Rukshin, S. E. Interpolation in mixed Hardy classes. (Russian) **84c:30053**
- Shevchik, V. V. Functional equations with shift in spaces of analytic functions in a half plane. (Russian) **84b:30038**
- Shirokov, N. A. Division by an inner function does not change the class of smoothness. (Russian) **84d:30062**
- The Nevanlinna factorization in some classes of analytic functions. (Russian. English summary) **84f:30047**
- Stegbuchner, Hans Eindeutigkeitsmengen holomorpher Funktionen, die einer integrierten Lipschitzbedingung genügen. [Sets of uniqueness of holomorphic functions which satisfy an integrated Lipschitz condition] **84d:30063**
- Storozhenko, E. A. On a Hardy-Littlewood problem. (Russian) **84b:30039**
- Strömberg, Jan-Olov (with Wheeden, Richard L.) Relations between H^p_∞ and L^p_∞ with polynomial weights. **84b:30048**

Tolokomnikov, V. A. Free interpolation of harmonic functions by analytic functions. (Russian. English summary) **84c:30062**

Interpolating Blaschke products and ideals of the algebra H^∞ . (Russian. English summary) **84c:30038**

Wang, Hsui Ch'uan. Real Hardy spaces of an annulus. **84d:30064**

Wheeden, Richard L. See Strömberg, Jan-Olov. **84c:30048**

Zayed, Ahmed I. Recoverability of some classes of analytic functions from their boundary values. **84c:30050**

Zinsmeister, Michel. Courbes de Jordan vérifiant une condition corde-arc. (English summary) [Jordan curves satisfying a chord-arc condition] **84j:30052**

secondary classifications:

Baernstein, Albert, II. Analytic functions of bounded mean oscillation. (**84g:42021**)

Belna, C. L. (with Obaid, S. A.; Rung, D. C.) Geometric conditions for interpolation. (**84c:30051**)

Bokcharev, S. V. Construction of bases in finite-dimensional spaces of functions analytic in the disc. (Russian) (**84c:46017**)

Bukhvalov, A. V. (with Danilevich, A. A.) Boundary properties of analytic and harmonic functions with values in a Banach space. (Russian) (**84f:46032**)

Cohn, William S. On the H^p classes of derivatives of functions orthogonal to invariant subspaces. (**84j:30049**)

Coifman, R. R. (with Jones, Peter Wilcox; Rubio de Francia, José Luis) Constructive decomposition of BMO functions and factorization of A_p weights. (**84c:42031**)

Danilevich, A. A. See Bukhvalov, A. V. (**84f:46032**)

Duborija, Stojan. Some new properties of the space A^p . (Serbo-Croatian. English summary) (**84g:30050**)

Faour, Nazih S. Toeplitz operators on Bergman and Hardy spaces. (**84a:47031**)

Fisher, Stephen D. Eigen-values and eigen-vectors of compact composition operators on $H^p(\Omega)$. (**84c:47028**)

Helson, J. William. Non-Euclidean functional analysis and electronics. (**84c:94001**)

Ivanov, O. V. A theorem of I. M. Gel'fand. (Russian) (**84j:46082**)

Jevtić, Mirosljub. (with Matelević, Miodrag) Some inequalities for regular and univalent functions. (**84c:30020**)

Jones, Peter Wilcox. L^∞ estimates for the $\bar{\partial}$ problem in a half-plane. (**84g:35135**)

See also Coifman, R. R.; et al. (**84c:42031**)

Kislyakov, S. V. More on free interpolation by functions which are regular outside a prescribed set. (Russian. English summary) (**84a:30066**)

Kolyada, V. I. Best approximations and essential continuity of functions. (Russian) (**84m:30062**)

Loch, Horst. Abstrakte Hardy-Algebren und Konjugation. [Abstract Hardy algebras and conjugation] (**84a:46113**)

Matelević, Miodrag. See Jevtić, Mirosljub. (**84c:30020**)

McCoy, Peter A. H^p representation of ultraspherical expansions. (**84c:33012**)

Mochizuki, Naomasa. Inequalities of Fejér-Riesz type for holomorphic functions on certain product domains. (**84g:32006**)

Mueller, Carl A. Characterization of BMO and BMO $_0$. (**84j:42032**)

Obaid, S. A. See Belna, C. L.; et al. (**84c:30051**)

Oshkin, I. B. On the continuous extension of functions that are normal on subgroups to points of the maximal ideal space of the algebra H^∞ . (Russian) (**84m:30051**)

Pigno, Louis (with Smith, Brent) A Littlewood-Paley inequality for analytic measures. (**84d:43008**)

Rubel, Lee A. (with Stray, Arne) Joint approximation in the unit disc. (**84m:30064**)

Rubio de Francia, José Luis. See Coifman, R. R.; et al. (**84c:42031**)

Rukshin, S. E. See Vinogradov, S. A. (**84d:46083**)

Rung, D. C. See Belna, C. L.; et al. (**84c:30051**)

Sato, Takeyoshi. Isomorphisms between relative Hardy spaces of solutions of the differential equations $\Delta u = Pu$ on a Riemann surface. (**84j:30081**)

Sjögren, Peter. Generalized Poisson integrals in a half-space and weak L^1 . (**84f:31007**)

Smith, Brent. See Pigno, Louis. (**84d:43008**)

Stoilov, Peio. A class of generalized Toeplitz operators and some applications. (Russian. English summary) (**84c:30052**)

Multipliers of Cauchy type integrals with bounded density. (Russian) (**84j:30066**)

Storozhenko, E. A. (with Valashek, Ya.) A generalization of a Hardy-Littlewood theorem. (Russian) (**84m:30065**)

Stray, Arne. See Rubel, Lee A. (**84m:30064**)

Uchiyama, Akihito (with Wilson, J. Michael) Approximate identities and $H^1(\mathbb{R})$. (**84c:42032**)

Valashek, Ya. See Storozhenko, E. A. (**84m:30065**)

Vinogradov, S. A. (with Rukshin, S. E.) On the free interpolation of germs of analytic functions in Hardy spaces. (Russian. English summary) (**84d:46083**)

Wilson, J. Michael. See Uchiyama, Akihito. (**84c:42032**)

Wojtaszczyk, P. Hardy spaces on the complex ball are isomorphic to Hardy spaces on the disc, $1 \leq p < \infty$. (**84j:32006**)

Yamashita, Shinji. On the Hardy-Littlewood maximal theorem. (**84c:42023**)

Zabulonis, A. An imbedding operator in Hardy spaces. (Russian. English and Lithuanian summaries) (**84d:46043**)

30D60 Quasianalytic and other classes of functions

Fernández Castillo, M. On the existence of functions with a given asymptotic expansion and a given natural holomorphy domain. (Spanish. English summary) **84m:30056**

Rickman, Seppo. Value distribution of quasimeromorphic mappings. **84f:30048**

Volberg, A. L. Summability of the logarithm of a quasi-analytic function. (Russian) **84g:30035**

secondary classifications:

Khrushch'ev, S. V. Uniqueness theorems and essentially selfadjoint operators. (Russian. English summary) (**84a:47030**)

30D99 None of the above, but in this section

Davidson, Kenneth R. Pointwise limits of analytic functions. **84b:30049**

Jevtić, Mirosljub. Zeros of functions in $D^{p,q}$ spaces. **84a:30063**

Johnston, Elgin H. An extension of a theorem of Abian. **84a:30064**

Kha Zui Bang (with Korobeinik, Yu. F.) The applicability of composite differential operators to some classes of exponential functions. (Russian) **84d:30065**

Korobeinik, Yu. F. See Kha Zui Bang. **84d:30065**

Mukhtarov, F. Sh. A factorization problem. (Russian. English and Azerbaijani summaries) **84c:30051**

Rubel, Lee A. Almost periodic analytic functions in the unit disc. **84a:30065**

secondary classifications:

Ancel, Fredric D. Collections of paths and rays in the plane which fix its topology. (**84c:54007**)

Axler, Sheldon. Multiplication operators on Bergman spaces. (**84b:30052**)

Krupka, Z. I. Approximation of meromorphic functions by rational ones and acceleration of the convergence of power series. (Russian. English summary) (**84c:30057**)

Peller, V. V. Rational approximation and smoothness of functions. (Russian. English summary) (**84g:30043**)

Prather, C. L. (with Shaw, J. K.) Zeros of successive iterates of multiplier-sequence operators. (**84a:30041**)

Shaw, J. K. See Prather, C. L. (**84a:30041**)

Young, Robert M. On complete biorthogonal systems. (**84c:42048**)

30Exx Miscellaneous topics of analysis in the complex domain

30E05 Moment problems, interpolation problems

Airapetyan, G. M. Multiple interpolation in the subclasses H^∞ and the basis property of rational fractions in the weak topology L^∞ . (Russian. English and Armenian summaries) **84j:30053**

Arov, D. Z. (with Krein, M. G.) Calculation of entropy functionals and their minima in indeterminate continuation problems. (Russian) **84b:30050**

Baishanski, Bogdan M. Equiconvergence of interpolating processes. **84c:30039**

Belna, C. L. (with Obaid, S. A.; Rung, D. C.) Geometric conditions for interpolation. **84c:30051**

Bourgain, Jean. A theorem on interpolating sequences in the disc. **84g:30036**

Diallo, Ahmadou Kangun. See López Lagomasino, Guillermo. **84b:30040**

Dyn'kin, E. M. Free interpolation by functions with a derivative from H^1 . (Russian. English summary) **84c:30052**

Dyakarev, Yu. M. Multiplicative and additive Stieltjes classes of analytic matrix-valued functions and interpolation problems connected with them. II. (Russian) **84c:30042**

Kislyakov, S. V. More on free interpolation by functions which are regular outside a prescribed set. (Russian. English summary) **84a:30066**

Kovacheva, R. K. Convergence of interpolating rational functions. **84m:30057**

Kovalishina, I. V. Analytic theory of a class of interpolation problems. (Russian) **84c:30043**

Krein, M. G. See Arov, D. Z. **84c:30050**

Kuchment, P. A. The Hermite interpolation problem in the class of periodic entire functions of finite order. (Russian) **84m:30058**

Kuprin, V. A. Application of Faber polynomials to interpolation of analytic functions on convex sets. (Russian) **84m:30059**

López Lagomasino, Guillermo (with Diallo, Ahmadou Kangun) On the convergence of interpolating rational fractions with free poles to functions of Stieltjes type. (Spanish. English summary) **84b:30040**

Mal'yunin, K. G. Interpolation of regular sets on the upper half plane. (Russian. English summary) **84c:30067**

Mikhailova, I. V. On the correspondence between two classes of entire J -inner matrix-functions. (Russian. English summary) **84c:30053**

Nguyen Kong Tam. See Nguyen Thuong Uen. **84c:30044**

Nguyen Thuong Uen (with Nguyen Kong Tam) Interpolation with multiple nodes in a class of entire functions of finite order and normal type. Report 1. Construction of an associate function. (Russian) **84c:30044**

Obaid, S. A. See Belna, C. L.; et al. **84c:30051**

Opfer, Gerhard (with Puri, Madan L.) Complex Chebyshev polynomials and generalizations with an application to the optimal choice of interpolating knots in complex planar splines. **84c:30054**

Orudzhov, G. A. Interpolation by rational functions. (Russian) **84b:30054**

Puri, Madan L. See Opfer, Gerhard. **84c:30054**

Rivlin, T. J. On Walsh equiconvergence. **84c:30055**

Rukshin, S. E. On N. K. Nikol'skii's theorem on interpolation of germs of analytic functions with respect to a family of inner functions. (Russian) **84c:30055**

Rung, D. C. See Belna, C. L.; et al. **84c:30051**

Russakovskii, A. M. The problem of multiple interpolation in a class of functions analytic in the half plane and having an indicator not greater than the given one. (Russian) **84m:30060**

Sheremeta, M. M. See Skaskiv, O. B. **84c:30057**

Shirokov, N. A. Free interpolation in spaces C_{∞}^k . (Russian) **84b:30056**

Skaskiv, O. B. (with Sheremeta, M. M.) The Abel-Goncharov problem for entire functions specified by lacunary power series. (Ukrainian. Russian summary) **84c:30057**

Squires, William A. Geometric condition for universal interpolation in \mathcal{S}' . **84b:30058**

Stoilov, Peio. Interpolation by analytic functions smooth up to the boundary with a given modulus of continuity. (Russian. English and Bulgarian summaries) **84d:30066**

Stolbov, V. N. Functional interpolation by analytic functions with a finite number of singularities. (Russian) **84m:30061**

Szabados, J. (with Varga, Richard S.) On the overconvergence of complex interpolating polynomials. **84c:30056**

Varga, Richard S. See Szabados, J., 84c:30056

Vétes, P. Linear operators on the roots of unity. 84c:30052

On the almost everywhere divergence of Lagrange interpolation (complex and trigonometric cases). 84b:30041

Wallin, Hans Interpolation by rational functions with free poles in the complex plane. 84j:30037

secondary classifications:

Ball, Joseph A. (with Helton, J. William) Interpolation with outer functions and gain equalization in amplifiers. (See 84g:93005c)

Beller, Elyahu (with Fisher, Stephen D.; Pinchuk, Bernard) Minimal interpolation for harmonic functions. (84a:30039)

Bomash, G. Ya. Nonclassical interpolation in spaces of analytic functions smooth up to the boundary. (Russian. English summary) (84c:30051)

Cotlar, Mischa Moment theory and continuity of the Hilbert and Poisson transforms in L^2 spaces. (84d:44008)

Derviz, A. O. (with Khavin, V. P.) Free interpolation and the Dirichlet problem. (Russian. English summary) (84j:31001)

Evans, John W. (with Helton, J. William) Applications of Pick-Nevalinna interpolation theory to retention-solubility studies in the lungs. (84m:92005)

Fisher, Stephen D. See Beller, Elyahu; et al., (84a:30039)

Gaponenko, V. N. Lagrange interpolation formula for a class of entire functions of exponential type that are integrable with a weight. (Russian) (84j:41005)

Gürbük, K. ★Über Interpolation und Approximation verallgemeinert analytischer Funktionen. (German) [On interpolation and approximation of generalized analytic functions] (84j:30090)

Helton, J. William See Evans, John W., (84m:92005) and Ball, Joseph A., (See 84g:93005c)

Hengartner, Walter (with Schober, Glenn) Interpolation, continuation, and quadratic inequalities. (84b:32033)

Ivanchenko, T. S. The Nevanlinna-Pick problem in the case of an indefinite metric. (Russian. English summary) (84d:47056)

Jones, William B. (with Njåstad, Olav; Thron, W. J.) Two-point Padé expansions for a family of analytic functions. (84j:30057)

Katsnel'son, V. É. Continual analogues of the Hamburger-Nevalinna theorem and fundamental matrix inequalities of classical problems. I. (Russian) (84c:44016a)

Continual analogues of the Hamburger-Nevalinna theorem and fundamental matrix inequalities of classical problems. II. (Russian) (84c:44016b)

Khavin, V. P. See Derviz, A. O., (84j:31001)

Klunnik, A. A. (with Kopystya, N. P.; Makarov, Vladimir Leonidovich) On the existence and uniqueness of an x^{2k} -analytic interpolation function of a complex variable. (Russian) (84f:30057)

Kopystya, N. P. See Klunnik, A. A.; et al., (84f:30057)

Kovalishina, I. V. (with Potapov, V. P.) Radii of the Weyl circle in the matrix Nevanlinna-Pick problem. (Russian) (84j:30050)

Makarov, Vladimir Leonidovich See Klunnik, A. A.; et al., (84f:30057)

Njåstad, Olav See Jones, William B.; et al., (84j:30057)

Pinchuk, Bernard See Beller, Elyahu; et al., (84a:30039)

Potapov, V. P. See Kovalishina, I. V., (84j:30050)

Rahman, Qazi Ibadur See Unni, K. R.; et al., (84c:41004)

Rosenblum, Marvin (with Rovnyak, James) An operator-theoretic approach to theorems of the Pick-Nevalinna and Loewner types. II. (84b:47020)

Rovnyak, James See Rosenblum, Marvin, (84b:47020)

Rukhsin, S. E. Interpolation in mixed Hardy classes. (Russian) (84c:30053)

Schober, Glenn See Hengartner, Walter, (84b:32033)

Sivasubramanian, K. See Unni, K. R.; et al., (84c:41004)

Tannenbaum, Allen Modified Nevalinna-Pick interpolation and feedback stabilization of linear plants with uncertainty in the gain factor. (84c:93038)

Thron, W. J. See Jones, William B.; et al., (84j:30057)

Tolokonnikov, V. A. Free interpolation of harmonic functions by analytic functions. (Russian. English summary) (84a:30062)

Unni, K. R. (with Rahman, Qazi Ibadur; Sivasubramanian, K.) Lacunary interpolation for entire functions. (84c:41004)

Vladimirov, V. S. (with Volovich, I. V.) The Ising model with magnetic field and the Diophantine moment problem. (Russian. English summary) (84c:82090)

Volovich, I. V. See Vladimirov, V. S., (84c:82090)

Zabulonis, A. An imbedding operator in Hardy spaces. (Russian. English and Lithuanian summaries) (84d:46043)

30E10 Approximation in the complex domain

Andrievskii, V. V. Approximation of functions on continua with a piecewise

quasiconformal boundary. (Russian) 84b:30042

Constructive description of classes of functions on continua of the complex plane, taking account of growth in the approximation polynomials. (Russian) 84j:30054

Baker, George A., Jr. (with Graves-Morris, P. R.) The convergence of sequences of Padé approximants. 84g:30038

Bultheel, A. (with Dewilde, Patrick) Orthogonal functions related to the Nevanlinna-Pick problem. (See 84g:93005c)

Carmona Domènech, J. J. A necessary and sufficient condition for uniform approximation by certain rational modules. 84a:30068

Deeba, E. Y. On the convergence of generalized Szász operator in the complex plane. 84c:30053

Dewilde, Patrick See Bultheel, A., (See 84g:93005c)

Dodonova, L. K. See Seleznev, A. I., 84j:30061

Dveirin, M. Z. Moduli of continuity of analytic functions. (Russian) 84c:30054

Approximation of analytic functions in multiply connected domains. (Russian. English and Armenian summaries) 84j:30055

Farkov, Yu. A. The upper bound of n -dimensional diameters of a class of analytic functions. (Russian) 84j:30056

Ganelius, Tord Degree of rational approximation. 84i:30045

Goldstein, Myron A question of Arne Stray. 84c:30055

An example of an Arakelian glove which is a weak Arakelian set. 84g:30039

Gonchar, A. A. Poles of lines of a Padé table and a meromorphic continuation of functions. (Russian) 84c:30069

Uniform convergence of diagonal Padé approximants. (Russian) 84d:30067

Graves-Morris, P. R. See Baker, George A., Jr., 84g:30038

Grothkopf, U. (with Opfer, Gerhard) Complex Chebyshev polynomials on circular sectors with degree six or less. 84a:30070

Gutknecht, Martin H. On complex rational approximation. I. The characterization problem. 84i:30046a

On complex rational approximation. II. The Carathéodory-Fejér method. 84i:30046b

(with Trefethen, Lloyd N.) Real and complex Chebyshev approximation on the unit disk and interval. 84d:30068

Ilán González, J. See López Lagomasino, Guillermo, 84d:30069

Israilov, D. M. Approximation of functions by partial sums of generalized Faber polynomials in domains with a quasiconformal boundary. (Russian. English and Azerbaijani summaries) 84c:30040

Ivanuk, M. V. (with Sheremeta, M. M.) Rational approximation on $[0, 1]$ of entire functions of arbitrary growth. (Ukrainian. Russian summary) 84b:30043

Jones, William B. (with Njåstad, Olav; Thron, W. J.) Two-point Padé expansions for a family of analytic functions. 84j:30057

Kapoor, G. P. See Nautiyal, A.; et al., 84c:30056

Kaufman, Robert P. (with Wu, Jang Mei) Correction to: "Removable singularities for analytic or subharmonic functions" [Ark. Mat. 18 (1980), no. 1, 107-116; MR 82c:30048]. 84g:30041

Kolyada, V. I. Best approximations and essential continuity of functions. (Russian) 84m:30062

Kroó, Andras On the distribution of points of maximal deviation in complex Čebyšev approximation. (Russian summary) 84j:30058

Krupka, Z. I. Approximation of meromorphic functions by rational ones and acceleration of the convergence of power series. (Russian. English summary) 84c:30057

Lindberg, Per A constructive method for L^p -approximation by analytic functions. 84j:30059

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Wu, Jang Mei See Kaufman, Robert P., 84g:30041

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- Baillette, A. (with Siddiqi, J. A.) Approximation de fonctions par des sommes d'exponentielles sur un arc rectifiable. [Approximation of functions by exponential sums on a rectifiable arc] (84c:30006)
- Barnesley, M. F. (with Geronimo, Jeffrey S.; Harrington, Andrew N.) Some tree-like Julia sets and Padé approximants. (84m:41026)
- Charzyński, Zygmunt (with Śladkowska, Janina) Application de la méthode des fonctions algébriques à la représentation conforme. [Application of the method of algebraic functions to conformal representation] (84c:30009)
- Chen, Han Lin (with Hving, Tron) Approximation of complex harmonic functions by complex harmonic splines. (84m:30012)
- Coleman, J. P. (with Monaghan, A. J.) Chebyshev expansions for the Bessel function $J_\nu(z)$ in the complex plane. (84c:65013)
- Duyos Ruiz, Sarah Maria On the existence of universal functions. (Russian) (84d:30047)
- Dzhafarov, A. S. (with Mamazhonov, B.) The order of approximation of functions on the exterior of an interval by entire functions of finite degree. (Russian) (84d:41036)
- Ellacott, S. W. Computation of Faber series with application to numerical polynomial approximation in the complex plane. (84c:65021)
- Gabdulkhaev, B. G. (with Tikhonenko, N. Ya.) Optimal approximations of solutions of the Riemann problem. (Russian. English summary) (84j:30071)
- Ganelius, Tord Rational functions, capacities and approximation. (84a:30040)
- Geronimo, Jeffrey S. See Barnesley, M. F.; et al., (84m:41026)
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- Hving, Tron See Chen, Han Lin. (84m:30012)
- Khrushchëv, S. V. See Peller, V. V., (84c:47036)
- Kimura, Hidenori Optimal L_p -approximation with fixed poles. (84g:93030)
- Kovacheva, R. K. Convergence of generalized Padé approximants in the interior of the domain of holomorphy of a defining function. (Russian) (84d:41029)
- Kroó, Andriás On unicity of complex polynomial L_1 -approximation along curves. (84d:41053)
- Lu, Jian Ke Error analysis for interpolating complex cubic splines with deficiency 2. (84b:41006)
- Lubinsky, Doron S. Divergence of complex rational approximations. (84i:41024) (with Sidi, Avram) Convergence of linear and nonlinear Padé approximants from series of orthogonal polynomials. (84d:41030)
- Mamazhonov, B. See Dzhafarov, A. S., (84d:41036)
- Monaghan, A. J. See Coleman, J. P., (84c:65013)
- Nuttall, Albert H. See Streit, Roy L., (84g:49059)
- Opler, Gerhard Computation of T -approximations by complex planar splines. (84c:65026)
- Osipenko, K. Yu. Best methods of approximation of analytic functions given with error. (Russian) (84d:41050)
- Paramonov, P. V. A sufficient condition for the approximability of a function by rational fractions. (Russian) (84c:41016)
- Peller, V. V. (with Khrushchëv, S. V.) Hankel operators, best approximations and stationary Gaussian processes. (Russian) (84c:47036)
- Scheinberg, Stephen Gauthier's localization theorem on meromorphic uniform approximation. (84c:30046)
- Siddiqi, J. A. See Baillette, A., (84a:30006)
- Sidi, Avram See Lubinsky, Doron S., (84d:41030)
- Śladkowska, Janina See Charzyński, Zygmunt, (84c:30009)
- Sorokin, V. N. Simultaneous approximation of several linear forms. (Russian. English summary) (84i:41025)
- Streit, Roy L. (with Nuttall, Albert H.) A note on the semi-infinite programming approach to complex approximation. (84g:49059)
- Tikhonenko, N. Ya. See Gabdulkhaev, B. G., (84j:30071)
- Tokuda, Naoyuki A new application of Lagrange-Bürmann expansions. I. General principle. (German summary) (84m:41045)
- Trefethen, Lloyd N. Chebyshev approximation on the unit disk. (84c:65017)
- Valashek, Ya. Approximation in multidimensional Hardy spaces H^p , $0 < p \leq 1$. (Russian. English and Georgian summaries) (84c:32004)
- Yu, Jia Rong Uniqueness of analytic functions of several complex variables, weighted approximation of functions of several real variables, and moment problems in higher dimensions. (Chinese. English summary) (84c:32006)
- Yulmukhametov, R. S. Asymptotic approximation of subharmonic functions. (Russian) (84g:31001)

30E15 Asymptotic representations in the complex domain

- Abi-Khuzam, Faruk F. The asymptotic behavior of a Lindelöf function and its Taylor coefficients. 84c:30047
- Kovalevskii, M. A. The asymptotic behavior of a certain class of entire functions. (Russian. English summary) 84c:30048
- The asymptotic behavior of functions that generalize the Euler gamma-function. (Russian. English summary) 84j:30062
- Leavitt, Richard P. (with Morrison, Clyde A.) A technique for evaluating sums by means of complex integration. 84b:30047
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- Sorokin, V. N. Asymptotic behavior of linear functional forms of two logarithms. (Russian) 84c:30057

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- Farkov, Yu. A. Faber-Erokhin basis functions of several variables and estimates of e -entropy. (Russian) (84j:32004)
- Klemmt, Heinz-Jürgen ★ Asymptotische Entwicklungen für kanonische Weierstraßprodukte und Riemanns Überlegungen zur Nullstellenanzahl der Zetafunktion. (German) [Asymptotic expansions for canonical Weierstrass products and Riemann's reflections on the number of zeros of the zeta function] (84a:10042)

30E20 Integration, integrals of Cauchy type, integral representations of analytic functions [See also 45Exx.]

- Avetisyan, A. E. Classes of functions in a complex domain and their integral representations. (Russian. English and Armenian summaries) 84c:30062
- Bustamante González, Jorge See González Diéguez, Belarmino, 84c:30051
- Du, Jin Yuan A theorem on boundary values of integrals of Cauchy type and its applications. (Chinese. English summary) 84i:30049
- Gerus, O. F. Inverse estimation of moduli of smoothness of boundary values of a Cauchy type integral. (Russian) 84i:30050
- Goluzina, M. G. On the multiplication and division of Cauchy-Stieltjes-type integrals. (Russian) 84c:30074
- González Diéguez, Belarmino (with Bustamante González, Jorge) On an integral of Cauchy type with weight. (Spanish. English summary) 84c:30051
- Govorov, N. V. (with Sandrigailo, I. E.; Rogozin, S. V.) Asymptotic properties of a singular integral of Cauchy type with contour on a positive ray. (Russian) 84a:30075
- Ischenko, E. V. Factorization of piecewise continuous matrix functions. (Russian. English and Georgian summaries) 84j:30063
- Kim, Ik Kwon On the Cauchy-Lebesgue integral representation of a function analytic in the upper half plane. (Korean. English summary) 84f:30049
- Liu, Lai Fu A compound boundary value problem with shift for generalized analytic functions. (Chinese. English summary) 84m:30066
- Nguyễn Văn Mậu A condition for the analytic continuation of a Cauchy integral and applications. (Vietnamese. English summary) 84h:30063
- Popa, Octavian Determination of exact and explicit solutions to Cauchy integral representations on domains outside the disc of radius R . (Romanian. English summary) 84j:30064
- Pykhteev, G. N. ★ Приближенные методы вычисления интегралов типа Коши специального вида. (Russian) [Approximate methods for calculating integrals of Cauchy type of a special form] 84c:30052
- Rakhimov, R. M. I. I. Privalov's fundamental lemma for an integral of Cauchy type over a system of closed intersecting contours and its application. (Russian. Tajiki summary) 84j:30065
- Rogozin, S. V. See Govorov, N. V.; et al., 84a:30075
- Rubinstein, Zalman Characteristic functional equation of polynomials and the Morera-Carleman theorem. 84c:30076
- Sandrigailo, I. E. See Govorov, N. V.; et al., 84a:30075
- Simonenko, I. B. Some properties of a singular integral with continuous density in the case of a contour of type R . (Russian) 84d:30072
- Stability of weight properties of functions, with respect to a singular Cauchy integral. (Russian) 84c:30053
- Stoilov, Peio Multipliers of Cauchy type integrals with bounded density. (Russian) 84j:30066

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- Burbea, Jacob The Cauchy and the Szegő kernels on multiply connected regions. (84b:30011)
- Coifman, R. R. (with David, Guy; Meyer, Yves) La solution des conjectures de Calderón. [Solution of Calderón's conjectures] (84i:42025)
- Das, Rabindra Nath See Acharya, B. P., (84c:65038)
- David, Guy See Coifman, R. R.; et al., (84i:42025)
- Dzhvārshishvili, A. G. A two-dimensional integral of Cauchy type. (Russian) (84a:32012)
- Grabowski, Jerzy Solution of an infinite system of integral equations. (84b:45011)
- Huy Duong Bui Découplage du mode mixte de rupture par utilisation de deux nouvelles intégrales indépendantes du contour. (English summary) [Uncoupling the mixed mode of rupture by two new path-independent integrals] (84c:73072)
- Ioakimidis, Nikolaos I. A generalization of the concept of Cauchy-type principal value integrals for plane elasticity crack problems. (84c:73018)
- Meyer, Yves See Coifman, R. R.; et al., (84i:42025)
- Nguyễn Văn Mậu On a singular integral equation with a meromorphic kernel in complex domain. (Vietnamese. English summary) (84j:45018)
- Preobrazhenskii, S. P. A boundary uniqueness theorem for regular functions with a bounded integral of "Dirichlet type". (Russian. English summary) (84b:30044)
- Rakhimov, R. M. (with Salae, V. V.) Behavior of the logarithmic potential of a double layer near a line of integration. (Russian. Tajiki summary) (84b:31002)
- Salae, V. V. See Rakhimov, R. M., (84b:31002)
- Zinsmeister, Michel Transformation conforme et courbes presque lipschitziennes. (English summary) [Conformal mapping and almost Lipschitzian curves] (84m:42030)

30E25 Boundary value problems [See also 45Exx.]

- Abitbekov, I. A. The linear conjugation problem for a multiply connected domain in fractional spaces. (Russian) 84c:30058
- Akhlaya, G. Ya. A Riemann-Hilbert discontinuous boundary value problem for a generalized analytic vector. (Russian. English and Georgian summaries) 84m:30067
- Aksent'eva, E. P. On the solution of the nonlinear Carleman problem for a rectangle. (Russian) 84c:30059
- Alekhnov, A. G. Homogeneous Riemann problem with a multilateral vortex point in the exceptional case. (Russian. English summary) 84c:30059
- Aslanov, V. D. A linear integro-differential boundary value problem with Carleman shift. (Russian) 84b:30064
- Bikchantaev, I. A. (with Usmanova, S. G.) A boundary value problem with shift and conjugacy on a Riemann surface. (Russian) 84m:30068
- The Riemann boundary value problem on an open Riemann surface. (Russian) 84j:30067

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- Čanak, Miloš** Carleman type boundary value problem for an n -th order areolar differential equation. (Serbo-Croatian. German summary) **84c:30060**
- Cercignani, Carlo** (with Siewert, C. E.) On partial indices for a matrix Riemann-Hilbert problem. (German summary) **84j:30068**
- Chen, Fang Quan** A class of boundary problems for three elements with two Carleman shifts. (Chinese. English summary) **84c:30041**
- Danilov, E. A.** Dependence of the number of solutions of a homogeneous Riemann problem on the contour and the coefficient module. (Russian) **84g:30044**
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"Topologically nontrivial" and meromorphic solutions of the nonlinear Hilbert problem for a multiply connected domain. (Russian. English and Azerbaijani summaries) **84j:30070**
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- Kerekeshia, Piotr V.** (with Mederos Anoceto, Otilio B.) The Carleman problem with three elements for the strip. (Spanish) **84c:30067**
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- Komyak, I. I.** (with Mityushev, V. V.) Solution of the general boundary value problem of linear conjugation for an annulus. (Russian. English summary) **84h:30068**
- Kurbanov, M.** The Riemann-Hilbert problem with constant coefficients for a holomorphic vector in a ball. (Russian. Tajiki summary) **84c:30064**
- Kvitko, A. N.** The Riemann problem with a p -nonsingular coefficient for a generalized analytic vector in the case of a complex contour on a Riemann surface. (Russian) **84c:30055**
A discontinuous problem of linear conjugation for an elliptic system of differential equations on Riemann surfaces. (Russian) (See **84m:35003**)
- Lisovets, N. I.** A four-element boundary value problem with piecewise continuous coefficients with shift on a composite contour. (Russian) **84m:30070**
- Liu, Lai Fu** A four element boundary value problem with shift for generalized analytic functions. (Chinese. English summary) **84m:30071**
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- Mandzhavidze, G. F.** A class of boundary value problems of linear conjugation. (Russian. English and Georgian summaries) **84d:30075**
- Mederos Anoceto, Otilio B.** Solution of some special cases of the problem of Carleman with three elements. (Spanish. English summary) **84h:30069**
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- Mityushev, V. V.** See **Komyak, I. I.** **84h:30068**
- Nguen T'i Tkhon'** A Hilbert problem with special coefficient. (Russian. English summary) **84j:30073**
- Pal'tser, B. V.** Comment on: "On a method for constructing the canonical matrix of solutions for a Hilbert problem that arises in the solution of convolution equations on a finite interval" [Izv. Akad. Nauk SSSR Ser. Mat. **45** (1981), no. 6, 1332-1390; MR **83c:30042**]. (Russian) **84h:30070**
- Peschanskii, A. I.** (with Shevchik, V. V.) The area problem with shift. (Russian) **84j:30074**
- Radzhabov, N. R.** Integral representations and boundary value problems for a generalized Cauchy-Riemann system with a singular line. (Russian) **84d:30076**
- Salekhova, I. G.** Solution of the Riemann problem in the case of a countable set of intervals of the real axis. (Russian) **84h:30071**
- Salmov, Ya. Sh.** A loaded nonlinear problem of Hilbert type. (Russian) **84d:30077**
- Serodin, M. A.** Some sufficient conditions for univalence of the general solution of an inverse boundary value problem. (Russian) **84c:30065**
- Sheshko, M. A.** An optimal solution of the Riemann boundary value problem. (Russian. English summary) **84d:30078**
- Shevchik, V. V.** See **Peschanskii, A. I.** **84j:30074**
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- Siewert, C. E.** See **Cercignani, Carlo** **84j:30068**
- Simonenko, I. B.** An exponentially converging linear method for determining the Christoffel-Schwartz constant and A. A. Markov type estimates for harmonic power quasipolynomials. (Russian) **84j:30075**
- Skhirtadze, N. S.** A boundary value problem of the theory of analytic functions with shifts and its application in the two-dimensional theory of elasticity. (Russian. English and Georgian summaries) **84f:30052**
- Sliz'kii, V. I.** The theory of a boundary value problem for two functions on a Riemann surface. (Russian) **84j:30076**
- Sokolov, B. V.** Boundary behavior of mappings from weight classes. (Russian) **84m:30072**
- Soldatov, A. P.** A Riemann-Hilbert problem with shift. (Russian) **84c:30066**
- Spitkovskii, I. M.** Factorization of measurable matrix-valued functions and related problems in the theory of systems of singular integral equations and the vector Riemann boundary value problem. II. (Russian) **84j:30077**
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- Stegbuchner, Hans** On some extensions of a theorem of Hardy and Littlewood. **84c:30067**
- Tikhonenko, N. Ya.** See **Gabdulkhaev, B. G.** **84j:30071**
- Usmanova, S. G.** See **Bikchantaev, I. A.** **84m:30068**
- Wen, Guo Chun** On compound boundary value problem with shift for nonlinear elliptic complex equations of first order. **84c:30049**
- Yatsko, A. I.** Criterion for the Noethericity of a generalized Riemann boundary value problem for a complex contour. (Russian) **84d:30080**
- Zapuskalova, T. A.** The Riemann boundary value problem on a spiraloid contour of infinite length. (Russian) **84d:30081**
- Zayed, Ahmed I.** Recoverability of some classes of analytic functions from their boundary values. **84c:30062**
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- Aksent'ev, L. A.** (with Shabalin, P. L.) Conditions for univalence with a quasiconformal extension and its application. (Russian) (**84c:30023**)
- Aksent'eva, E. P.** (with Garif'yanov, F. N.) On the investigation of an integral equation with a Carleman kernel. (Russian) (**84j:45028**)
- Begehr, Heinrich** (with Hile, Gerald N.) Riemann boundary value problems for nonlinear elliptic systems. (**84c:35048**)
- Bondar', V. D.** A boundary value problem of nonlinear elasticity in the case of plane deformation. (Russian) (**84j:73022**)
- Cherskii, Yu. I.** Equations with periodic singular convolutions. (Russian. English and Georgian summaries) (**84j:45023**)
- Coifman, R. R.** (with McIntosh, Alan G. R.; Meyer, Yves) L'intégrale de Cauchy définit un opérateur borné sur L^2 pour les courbes lipschitziennes. [The Cauchy integral defines a bounded operator on L^2 for Lipschitz curves] (**84m:42027**)
- Duracz, T.** (with Zelazny, R.) Solutions to some Riemann-Hilbert problems in two-group neutron transport theory. (**84f:82058**)
- Erugin, N. P.** ★ Проблема Римана. (Russian) [The Riemann problem] (**84h:34015**)
- Garif'yanov, F. N.** See **Aksent'eva, E. P.** (**84j:45028**)
- Gogonea, Sorin** Sur un problème de type mixte pour le plan muni de coupures rectilignes alignées. [A problem of mixed type for a plane equipped with aligned rectilinear cuts] (**84c:73009**)
An extension of the semicircle theorem and its application in filtration theory. (Romanian. French summary) (**84f:30035**)
- Hile, Gerald N.** See **Begehr, Heinrich**. (**84c:35048**)
- Iacob, Calus** Generalizations of a theorem of Ștefan I. Gheorghijă. (Romanian. French summary) (**84d:76056**)
- Il'inskii, N. B.** (with Nasyrov, S. R.) The problem of constructing a spillway contour from the back pressure curve. (Russian) (**84j:76052**)
- Kakichev, V. A.** Investigation of a three-dimensional truncated Riemann problem by Fourier's method. (Russian) (**84d:32006**)
Two two-dimensional analogues of the Hilbert problem. (Russian) (**84d:32009**)
- Kas'yanov, V. I.** Optimization of direct methods of solution of singular integral equations and Riemann boundary value problems. (Russian) (**84m:45034**)
- Khakimov, A. Kh.** A geometric problem connected with the generalized Christoffel problem in a singular case. (Russian. Tajiki summary) (**84h:53004**)
- Khokhlov, Yu. E.** Biholomorphy of solutions of an inverse boundary value problem in C^n . (Russian) (**84c:32002**)
- Lu, Jian Ke** On singular integrals with singularities of high fractional order and their applications. (**84b:45008**)
On method of solution for a class of equations of convolution type. (Chinese summary) (**84m:45013**)
- McIntosh, Alan G. R.** See **Coifman, R. R.**; et al. (**84m:42027**)
- Meliksetyan, É. P.** The Dirichlet problem for weakly connected elliptic systems of second-order differential equations in bounded domains. (Russian. English and Armenian summaries) (**84c:35059**)
The Dirichlet problem for weakly connected elliptic systems of differential equations with continuous boundary conditions. (Russian) (**84c:35060**)

- Meyer, Yves. See Colman, R. R.; et al., (84m:42027)
- Nasyrov, S. R. See Il'inskiĭ, N. B., (84j:76052)
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- Orlansu, Mircea T. On the Riemann-Hilbert's boundary value problem, for flow through porous inhomogeneous media. (84f:76049)
- Rasulov, K. M. Boundary value problems of Riemann type for polyanalytic functions, which are solvable in closed form. (Russian) (84h:30079)
- Rodin, Yu. L. The Riemann boundary problem on a torus and the inverse scattering problem for the Landau-Lifschitz equation. (84c:82006)
- Rüppich, Wolfgang. Die Lösung des Rand-Sprungwertproblems für im allgemeinen nichtlineare Differentialgleichungssysteme in komplexer Normalform unter Verwendung des Schauderschen Fixpunktsatzes. [The solution of the boundary-jump value problem for generally nonlinear differential equation systems in complex normal form, using Schauder's fixed-point theorem] (84c:35078)
- Shabalin, P. L. See Akseñ'tev, L. A., (84c:30023)
- Sharipova, R. M. Boundary value problems for a class of n -order systems with unbounded coefficients. (Russian. Tajiki summary) (84m:35040)
- Siewert, C. E. (with Thomas, J. R., Jr.) Analytical solutions to two matrix Riemann-Hilbert problems. (Italian summary) (84d:76044)
- (with Thomas, J. R., Jr.) Strong evaporation into a half space. II. The three-dimensional BGK model. (German summary) (84j:76031)
- Sil'vestrov, V. V. Solution in closed form of a complete singular integral equation. (Russian) (84g:45004)
- Simonenko, I. B. Some properties of a singular integral with continuous density in the case of a contour of type R . (Russian) (84c:30072)
- Speck, Frank-Olme. Eine Methode zur Lösung mehrdimensionaler Kopplungsprobleme. [A method for the solution of multidimensional transmission problems] (84h:35138)
- Thomas, J. R., Jr. See Siewert, C. E., (84d:76044) and (84j:76031)
- Vladimirov, V. S. (with Volovich, I. V.) The Wiener-Hopf equation, the Riemann-Hilbert problem and orthogonal polynomials. (Russian) (84j:45027)
- Volovich, I. V. See Vladimirov, V. S., (84j:45027)
- Wen, Guo Chun. Green functions of multiply connected domains and oblique derivative problems for elliptic systems of second order. (Chinese. English summary) (84f:35050)
- Green functions and integral representations for the solutions of various boundary value problems on multiply connected regions. (84c:35029)
- von Wolfersdorf, Lothar. On a boundary value problem for a special class of first order semilinear elliptic systems in the plane. (German and Russian summaries) (84j:35075)
- Zayed, Ahmed I. Recoverability of some classes of analytic functions from their boundary values. (84c:30050)
- Želazny, R. See Duracz, T., (84f:82058)
- Zhao, Zhen. The problem of the solvability of singular integral equations with two Carleman shifts. (Chinese. English summary) (84d:45032)
- Zvirovich, E. I. The Carleman problem on a Riemann surface with an edge and a mapping of circular polygons. (Russian) (84c:30016)

30E99 None of the above, but in this section

- Ciulli, S. (with Spearman, T. D.) Analytic continuation from data points with unequal errors. 84j:30078
- Kaufman, Robert P. Hausdorff measure, BMO, and analytic functions. 84h:30050
- Khrushchëv, S. V. A simple proof of the removable singularities theorem for analytic functions that satisfy a Lipschitz condition. (Russian. English summary) 84d:30082
- Sakai, Makoto. Null quadrature domains. 84c:30069
- Spearman, T. D. See Ciulli, S., 84j:30078

secondary classifications:

- Capodanno, Pierre. Sur les mouvements non stationnaires d'un profil dans un fluide pesant limité par une ligne libre. (Russian summary) [On the nonstationary motions of a profile in a heavy fluid bounded by a free line] (84f:76024)
- Chibrikova, L. I. (with Pleshchinskii, N. B.) Singular integral equations with automorphic and quasiautomorphic logarithmic and power kernels. I. (Russian) (84h:45007)
- Hayasida, Kazuya (with Tachi, Hideaki) On the three circles theorem for solutions of elliptic equations with two variables. (84c:35056)
- Ikeda, Kazuyosi. Distribution of zeros and the equation of state. II. Phase transitions and singularities in the case of circular distribution. (84m:82041a)
- Distribution of zeros and the equation of state. III. Cluster series, the ideal Fermi-Dirac gas and other problems. (84m:82041b)
- Distribution of zeros and the equation of state. IV. Ideal Bose-Einstein gas. (84m:82041c)
- Jensen, Christian U. L'indécidabilité d'une classe de corps des fonctions méromorphes. [Undecidability of a class of fields of meromorphic functions] (84g:03062)
- Kirjackis, E. (with Mieliuskas, J.) Conditions for certain rational functions to belong to the class $K_n(D)$. (Russian. English and Lithuanian summaries) (84d:30038)
- Kosmodem'ianskii, A. A., Jr. Converse of the mean value theorem for harmonic functions. (Russian) (84d:31001)
- Mieliuskas, J. See Kirjackis, E., (84d:30038)
- Miwa, Tetsuji. Clifford operators and Riemann's monodromy problem. (84k:34013)
- Painlevé property of monodromy preserving deformation equations and the analyticity of τ functions. (84k:34014)
- Pleshchinskii, N. B. See Chibrikova, L. I., (84h:45007)
- Tachi, Hideaki. See Hayasida, Kazuya, (84c:35056)
- Wu, Xue Mou. Approximation transforming theory. I. (Chinese. English summary) (84j:00002)

30Fxx Riemann surfaces

30F10 Compact Riemann surfaces and uniformization [See also 14H15, 32G15.]

- Bujalance, Emilio. NEC groups and Klein surfaces. 84g:30045
- Halpern, Noemi. Some remarks on Nielsen extensions of Riemann surfaces. 84j:30079
- Izumi, Yasuyoshi. On the number of fixed points of an automorphism of a compact Riemann surface. 84a:30081
- Jürgensen, Troels. Simple geodesics on Riemann surfaces. 84f:30053
- Lü, Yi Nian. A simple proof of the main theorem in Ahlfors' theory of covering surfaces. (Chinese) 84j:30080
- MacLachlan, C. On the centres of mapping class groups of surfaces. 84a:30082

secondary classifications:

- Bryant, Robert L. Conformal and minimal immersions of compact surfaces into the 4-sphere. (84a:53062)
- Duma, Andrei. Die 3-Weierstrass-Punkte über dem Teichmüller-Raum T_2 . (English summary) [The 3-Weierstrass points over the Teichmüller space T_2] (84a:32033)
- Horiuchi, Ryutaro. Meromorphic functions on 2-hyperelliptic Riemann surfaces. (84m:14033)
- Gap orders of meromorphic functions on Riemann surfaces. (84c:14020b)
- Lax, R. F. Independence of normal Weierstrass points under deformation. (84a:14013)
- Lyons, Terry J. A simple criterion for transience of a reversible Markov chain. (84c:60102)
- Martens, Gerriet. Über den Clifford-Index algebraischer Kurven. [On the Clifford index of algebraic curves] (84c:14020a)
- Nag, Subhashis. The Torelli spaces of punctured tori and spheres. (84h:32031)
- Ryavec, C. A nonlinear interpolation formula. (84c:10023)
- Stiller, Peter F. On the uniformization of certain curves. (84j:14031)

30F15 Harmonic functions on Riemann surfaces

- Hayashi, Mikihiro. Szegő's theorem on Riemann surfaces. 84d:30083
- Sato, Takeyoshi. Isomorphisms between relative Hardy spaces of solutions of the differential equations $\Delta u = Pu$ on a Riemann surface. 84j:30081
- Schiff, Joel L. Isomorphic harmonic and P -harmonic function spaces on Riemann surfaces. 84a:30083
- See also Tanaka, Hiroshi, 84j:30083
- Shiga, Hiroshige. On harmonic dimensions and bilinear relations on open Riemann surfaces. 84c:30070
- On the quasiconformal deformation of open Riemann surfaces and variations of some conformal invariants. 84j:30082
- Tanaka, Hiroshi (with Schiff, Joel L.) Note on the Wiener compactification and the H^p -space of harmonic functions. 84j:30083
- Wakabayashi, Isao. Nonexistence of bounded functions on the homology covering surface of $P^1 - \{3 \text{ points}\}$. 84j:30084

secondary classifications:

- Kuramochi, Zenjiro. On Fatou's and Beurling's theorems. (84c:31003)
- McConnell, Alan. A simple proof of Rado's theorem. (84c:30034a)
- Erratum to: "A simple proof of Rado's theorem". (84c:30034b)
- Segawa, Shigeo. A duality relation for harmonic dimensions and its applications. (84c:31006)

30F20 Classification theory of Riemann surfaces

- Glaser, Moses. Examples of malformed subsets of a Riemann surface. 84i:30056
- Hara, Masaru. Analytic functions with finite Dirichlet integrals. 84a:30084
- Nguyen Dinh Sang. Mixed bordered Riemann surfaces. (Romanian. English summary) 84m:30073
- Oikawa, Kôtarô. A problem on the deformation and extension of Riemann surfaces. 84c:30063

secondary classifications:

- Ahlfors, Lars Valerian. Riemann surfaces and small point sets. (84c:01040)
- Biggers, R. See Fried, M., (84h:14034a) and (84h:14034b)
- Chung, L. O. Existence of harmonic L^p functions in complete Riemannian manifolds. (84c:31006)
- Constantinescu, Alexandru. A proof of Cartan's theorems A and B for Klein surfaces. (84i:32015)
- Dupont, Johan L. (with Poulsen, Ebbe Thue) Generation of $C(x)$ by a restricted set of operators. (84b:53062c)
- Erëmenko, A. È. Meromorphic solutions of equations of Briot-Bouquet type. (Russian) (84h:34013)
- Fried, M. (with Biggers, R.) Moduli spaces of covers and the Hurwitz monodromy group. (84h:14034a)
- (with Biggers, R.) Correction to the paper: "Moduli spaces of covers and the Hurwitz monodromy group". (84h:14034b)
- Kuribayashi, Akikazu. See Kuribayashi, Izumi, (84m:14035)
- Kuribayashi, Izumi (with Kuribayashi, Akikazu) On Eichler trace formula and automorphisms of Riemann surfaces (in case of genus 3). (84m:14035)
- Poulsen, Ebbe Thue. See Dupont, Johan L., (84b:53062c)
- Schiff, Joel L. See Tanaka, Hiroshi, (84j:30083)
- Seppälä, Mika. Real structures of Teichmüller spaces. (84d:32032)
- Shirakawa, Hiroshi. An example of infinite measure preserving ergodic geodesic flow on a surface with constant negative curvature. (84h:58116a)
- On zero type of infinite measure preserving ergodic geodesic flow on a surface with constant negative curvature. (84h:58116b)

- Tanaka, Hiroshi (with Schiff, Joel L.) Note on the Wiener compactification and the H^p -space of harmonic functions. (84j:30083)
 Wakabayashi, Isao Nonexistence of bounded functions on the homology covering surface of $P^1 - \{3 \text{ points}\}$. (84j:30084)
 Wolpert, Scott On the Kähler form of the moduli space of once punctured tori. (84j:32028)

30F25 Ideal boundary theory

- Satō, Takeyoshi Integral comparison theorems for relative Hardy spaces of solutions of the equations $\Delta u = Pu$ on a Riemann surface. (84i:30057)
 Tanaka, Hiroshi A generalization of Koebe's theorem to a Riemann surface. (84j:30085)

secondary classifications:

- Bikchantaev, I. A. (with Usmanova, S. G.) A boundary value problem with shift and conjugacy on a Riemann surface. (Russian) (84m:30068)
 The Riemann boundary value problem on an open Riemann surface. (Russian) (84j:30067)
 Kuramochi, Zenjiro On Fatou's and Beurling's theorems. (84c:31003)
 Rees, Mary An alternative approach to the ergodic theory of measured foliations on surfaces. (84c:58065)
 Segawa, Shigeo A duality relation for harmonic dimensions and its applications. (84c:31006)
 Usmanova, S. G. See Bikchantaev, I. A., (84m:30068)

30F30 Differentials on Riemann surfaces

- Bikchantaev, I. A. Investigation of a first-order linear elliptic system on a Riemann surface. (Russian) (See 84m:35003)
 Chen, Huai Hui On Abel's theorem for open surfaces. (Chinese. English summary) (84c:30064)
 Sainouchi, Yoshikazu On the multiplicative meromorphic functions on an open Riemann surface. (84c:30065)

secondary classifications:

- Farkas, Hershel M. Relations between holomorphic quadratic differentials. II. (84c:14025)
 Harris, Bruno Harmonic volumes. (84c:32032)
 Ma, Shu Ying Quadratic periods of holomorphic forms on a compact Riemann surface. (84c:32023)

30F35 Fuchsian groups and automorphic functions [See also 10Dxx, 20H10, 32Gxx, 32Nxx.]

- Beardon, A. F. (with Nicholls, Peter J.) Ford and Dirichlet regions for Fuchsian groups. (84h:30072)
 Gallo, Daniel M. (with Porter, R. Michael) Projective structures on open surfaces. (84j:30054)
 Nicholls, Peter J. See Beardon, A. F., (84h:30072)
 Ohtake, Hiromi Lifts of extremal quasiconformal mappings of arbitrary Riemann surfaces. (84c:30071)
 Pommerenke, Christian On Fuchsian groups of accessible type. (84g:30046)
 Porter, R. Michael See Gallo, Daniel M., (84j:30054)
 Series, Caroline The infinite word problem and limit sets in Fuchsian groups. (84d:30084)
 Yamada, Akira On Marden's universal constant of Fuchsian groups. II. (84h:30073)

secondary classifications:

- Bujalance, Emilio NEC groups and Klein surfaces. (84g:30045)
 Halpern, Noemi Some remarks on Nielsen extensions of Riemann surfaces. (84j:30079)
 Harris, Bruno Triple products, modular forms, and harmonic volumes. (84j:10026)
 A triple product for automorphic forms. (84j:10027)
 Hiramatsu, Toyokazu (with Mimura, Yoshio) On automorphic forms of weight one. II. The Arf invariant and $d_0 \bmod 2$. (84m:10016a)
 On automorphic forms of weight one. III. The Selberg eigenspace for discontinuous groups of finite type. (84m:10016b)
 Jørgensen, Troels (with Näätänen, Marjatta) Surfaces of genus 2: generic fundamental polygons. (84c:51029)
 Mimura, Yoshio See Hiramatsu, Toyokazu, (84m:10016a)
 Näätänen, Marjatta Regular n -gons and Fuchsian groups. (84i:51028)
 See also Jørgensen, Troels, (84c:51029)
 Pommerenke, Christian On the mean growth of the solutions of complex linear differential equations in the disk. (84a:34010)
 Porter, R. Michael Prescribed monodromy on noncompact surfaces. (84f:32023)
 Yamamoto, Hiro-o Boundaries of the Teichmüller spaces of finitely generated Fuchsian groups of the second kind. (84m:32029)
 Zograf, P. G. Fuchsian groups and small eigenvalues of the Laplace operator. (Russian. English summary) (84c:58090)

30F40 Kleinian groups [See also 20H10.]

- Akaza, Tohru (with Inoue, Katsumi) On the limit set of a geometrically finite Kleinian group. (84h:30074)
 Apanasov, B. N. Geometrically finite groups of transformations of a space. (Russian) (84h:30075)
 See also Krushkal', S. L.; et al., (84m:30074)
 Gallo, Daniel M. A 3-dimensional hyperbolic collar lemma. (84f:30055)
 Gusevskii, N. A. See Krushkal', S. L.; et al., (84m:30074)

- Inoue, Katsumi See Akaza, Tohru, (84h:30074)
 Krushkal', S. L. (with Apanasov, B. N.; Gusevskii, N. A.) ★ Униформизация и Клейновы группы. (Russian) [Uniformization and Kleinian groups] (84m:30074)
 Maskit, Bernard Punctured web groups. (84f:30056)
 A locally free Kleinian group. (84h:30076)
 Tetenov, A. V. Locally finite fundamental domains of discrete groups in a space. (Russian) (84i:30058)

secondary classifications:

- Ahlfors, Lars Valerian ★ Möbius transformations in several dimensions. (84m:30028)
 Bers, Lipman On iterates of hyperbolic transformations of Teichmüller space. (84g:32035)
 Chueshev, V. V. Spaces of compact Riemann surfaces and Koebe groups. (Russian) (84i:32033)
 Gallo, Daniel M. See Kleinian groups and related topics, (84h:30003)
 Kra, Irwin On the vanishing of Poincaré series of rational functions. (84j:10029)
 (Porter, R. Michael) See Kleinian groups and related topics, (84h:30003)
 Riley, R. Seven excellent knots. (84c:57008)
 Sullivan, Dennis Disjoint spheres, approximation by imaginary quadratic numbers, and the logarithm law for geodesics. (84j:58097)
 Kleinian groups and related topics ★ Kleinian groups and related topics. (84h:30003)
 Oaxtepec ★ Kleinian groups and related topics. (84h:30003)
 Workshop: Kleinian Groups and Related Topics ★ Kleinian groups and related topics. (84h:30003)

30F99 None of the above, but in this section

- Écalle, Jean ★ Les fonctions résurgentes. Tome I. (French) [Resurgent functions. Vol. I] (84h:30077a)
 ★ Les fonctions résurgentes. Tome II. (French) [Resurgent functions. Vol. II] (84h:30077b)
 Hirashita, Yukio Local finiteness of analytic arcs. (84d:30085)
 Patra, Kuntala On determination of the marks of some alternating groups of small degree. (84i:30059)
 Scheinberg, Stephen Gauthier's localization theorem on meromorphic uniform approximation. (84h:30046)

secondary classifications:

- Berenstein, Carlos A. (with Yang, P. C.) An overdetermined Neumann problem in the unit disk. (84c:35107)
 Engber, Michael On the Noether gap theorem. (84f:14017)
 Heins, Maurice Semigroups of holomorphic maps of a Riemann surface into itself which are homomorphisms of the set of positive reals considered additively. (84f:30012)
 Logemann, H. A note on the generalized inverse Nyquist stability criterion. (84f:93042)
 Mednykh, A. D. On the solution of the Hurwitz problem on the number of nonequivalent coverings over a compact Riemann surface. (Russian) (84c:14024)
 Minda, C. David Bloch constants for meromorphic functions. (84h:30033)
 Oikawa, Kōtaro A problem on the deformation and extension of Riemann surfaces. (84c:30063)
 Savel'ev, V. I. Zero-type imbedding of a sphere into complex surfaces. (Russian. English summary) (84d:32007)
 Sipe, Patricia L. Roots of the canonical bundle of the universal Teichmüller curve and certain subgroups of the mapping class group. (84c:32034)
 Stephenson, Kenneth Analytic functions and hypergroups of function pairs. (84j:30051)
 Yang, P. C. See Berenstein, Carlos A., (84c:35107)

30Gxx Generalized function theory

30G05 Non-Archimedean function theory [See also 12J25.]

- Escassut, Alain See Sarmant-Durix, Marie-Claude, (84j:30086)
 Sarmant-Durix, Marie-Claude (with Escassut, Alain) T -suites idempotentes. (English summary) [Idempotent T -sequences] (84j:30086)

secondary classifications:

- van der Put, Marius Revêtements étales d'une courbe de Mumford. [Étale coverings of a Mumford curve] (See 84c:10004)
 Srivastava, Jagvind Kumar Space of analytic functions over non-Archimedean fields. (84d:46057)

30G10 Nonstandard function theory [See also 03H05.]

30G15 Topological function theory

- Ivanov, O. V. (with Suvorov, G. D.) Stable conformally invariant compact extensions. (Russian. English summary) (84h:30051)
 Kruglikov, V. I. (with Selyakova, N. I.) Remarks on conformally invariant compact extensions of plane domains. (Russian) (84c:30066)
 Mikhailov, A. P. A mapping problem for a system of elliptic type, degenerate on the boundary. (Russian) (84m:30075)
 Selyakova, N. I. See Kruglikov, V. I., (84c:30066)
 Suvorov, G. D. See Ivanov, O. V., (84h:30051)

secondary classifications:

- Ivanov, O. V. Some properties of complete lattices of conformally invariant bicomplex extensions. (Russian) (84c:30010)
 Mejía L., Jorge Enrique Boundary properties of equimorphic functions. (Russian) (84j:30089)

30G20 Generalizations of Bers or Vekua type (pseudanalytic, p -analytic, etc.)

Abitbekov, I. A. (with Bliev, N. K.) Solvability of the generalized Riemann-Hilbert problem for a multiply connected domain in fractional spaces. (Russian. Kazakh summary) **84i:30078**

Akhmedov, Saidamir Akhmedovich Solutions of a first-order uniformly elliptic complex equation connected with the convergence of analytic functions. (Russian) **84c:30072**

Bliev, N. K. See Abitbekov, I. A., **84i:30078**

Buchanan, J. L. A similarity principle for Pascali systems. **84d:30086**

Čanák, Miloš Operator vom Schwarzschen Typus für eine Klasse der p -analytischen Funktionen. [Operator of Schwarz type for a class of p -analytic functions] **84m:30076**
Some complex representations of p -analytic and (p, q) -analytic functions with application to the solution of a Hilbert boundary value problem. (Serbo-Croatian. German summary) **84j:30087**

Chernyi, I. V. Problems on the complex x -analytic potential of an annular spherical disc. (Russian) **84i:30047**

Hou, Zong Yi The theory of hyperanalytic functions and generalized hyperanalytic functions. (Chinese) **84g:30047**

Kaldani, N. V. Some representations of kernels of the Carleman-Vekua equation. (Russian. English and Georgian summaries) **84c:30067**

Kapshiryi, A. A. (with Nogin, M. V.) Application of p -analytic functions to the solution of axisymmetric problems of elasticity theory and hydromechanics of a viscous incompressible fluid. (Russian) (See **84c:34002**)

Klunnik, A. A. (with Kopystya, N. P.; Makarov, Vladimir Leonidovich) On the existence and uniqueness of an x^{2k} -analytic interpolation function of a complex variable. (Russian) **84f:30057**

Kopystya, N. P. See Klunnik, A. A.; et al., **84f:30057**

Makarov, Vladimir Leonidovich See Klunnik, A. A.; et al., **84f:30057**

Nogin, M. V. See Kapshiryi, A. A., (See **84c:34002**)

Safarov, D. Doubly periodic generalized holomorphic vectors. (Russian. Tajiki summary) **84m:30077**

Tutschke, Wolfgang Associated operators of complex analysis. (Russian. English and Georgian summaries) **84f:30058**

secondary classifications:

Battle, Guy A., III (with Rosen, Lon) The FKG inequality for the Yukawa₂ quantum field theory. **(84i:81067)**

Bauer, K. W. On a class of Riemann functions. **(84b:35019)**

Begehr, Heinrich (with Hile, Gerald N.) Riemann boundary value problems for nonlinear elliptic systems. **(84c:35048)**

Harke, Otto Untersuchungen zum Picardschen Satz für verallgemeinerte analytische Funktionen. [Investigations on Picard's theorem for generalized analytic functions] **(84c:30054)**

Hile, Gerald N. See Begehr, Heinrich, **(84c:35048)**

Kucher, N. A. The Riemann-Hilbert problem for nonlinear systems of differential equations on the plane. (Russian) **(84c:35037)**

Liu, Lai Fu A four element boundary value problem with shift for generalized analytic functions. (Chinese. English summary) **(84m:30071)**

Makatsariya, G. T. The behavior of solutions of the Carleman-Vekua equation with polar singularities in the neighborhood of a fixed singular point. (Russian. English and Georgian summaries) **(84f:35047)**

McCoy, Peter A. H^p representation of ultraspherical expansions. **(84b:33012)**

Oestreich, D. Existenzsätze für einige Randsteuerprobleme bei verallgemeinerten analytischen Funktionen. (English and Russian summaries) [Existence theorems for some boundary control problems in generalized analytic functions] **(84m:49014)**

Renelt, Heinrich ★ Quasikonforme Abbildungen und elliptische Systeme erster Ordnung in der Ebene. (German) [Quasiconformal mappings and first-order elliptic systems in the plane] **(84b:35040)**

Rosen, Lon See Battle, Guy A., III, **(84i:81067)**

Vagrshakyan, A. A. Uniqueness of solutions of equations of elliptic type. (Russian. English and Armenian summaries) **(84a:35074)**

Vekua, I. N. ★ Некоторые общие методы построения различных вариантов теории оболочек. (Russian) [Some general methods for constructing several variants of shell theory] **(84b:73039)**

von Wolfersdorf, Lothar Monotonicity methods for two classes of nonlinear boundary value problems with semilinear first order elliptic systems in the plane. **(84g:35065)**

30G25 Discrete analytic functions

Harman, C. J. Polynomials in discrete geometric function theory. **84a:30085**

Tu, Shih Tong Monodiffic function theory and formal power series. **84i:30060**

30G30 Other generalizations of analytic functions (including abstract-valued functions)

Bezanilla López, A. Weierstrass infinite products and factorization of entire L -functions on commutative Banach algebras. (Spanish. English summary) **84j:30088**

Floret, Klaus Two questions concerning vector-valued holomorphic functions. **84k:30048**

Imanaliyev, M. I. (with Pankov, P. S.) Properties of generalized analytic functions. (Russian) **84k:30049**

Mejia L., Jorge Enrique Boundary properties of equimorphic functions. (Russian) **84j:30089**

Pankov, P. S. See Imanaliyev, M. I., **84k:30049**

Pokazeev, V. V. Polyanalytic doubly periodic functions. (Russian) **84c:30068**

Rasulov, K. M. Boundary value problems of Riemann type for polyanalytic functions, which are solvable in closed form. (Russian) **84b:30079**

Sălăgean, Grigore Ștefan (with Wiesler, H.) Jack's lemma for holomorphic vector-valued functions. **84i:30061**

Teixeira de Queiroz, F. ★ Elements of functions of a complex variable. **84g:30048**

Wiesler, H. See Sălăgean, Grigore Ștefan, **84i:30061**

secondary classifications:

Capri, Osvaldo Nicolás (with González Domínguez, Alberto) Exponential representations of operator-valued impedance functions. **(84a:94026)**

Chang, Feng Cheng (with Pulusani, Surender) Evaluation of constituent matrices of an analytic matrix function. (See **84g:93005b**)

González Domínguez, Alberto See Capri, Osvaldo Nicolás, **(84a:94026)**

Hoàng Đình Dũng Solution by the Oseen scheme of a problem of flow around a body. (Russian) **(84i:76047)**

Johnson, Donald E. Some recent results in the theory of polygenic functions of a complex variable. **(84i:30006)**

Katsnel'son, V. E. Logarithmic subharmonicity of the J -form of the analytic J -expanding matrix-function. (Russian. English summary) **(84d:47047)**

Lay, D. C. (with Thijse, G. Ph. A.) Decompositions and characterizations of finite-meromorphic operator functions. **(84a:47019)**

Pesonen, Martti I. A path family approach to Ahlfors's value distribution theory. **(84a:30056)**

Pulusani, Surender See Chang, Feng Cheng, (See **84g:93005b**)

Pustylnik, E. I. Functions of a positive operator. (Russian) **(84b:47019)**

Safarov, D. Liouville's theorem for generalized analytic functions of several complex variables. (Russian) **(84j:32005)**

Thijse, G. Ph. A. See Lay, D. C., **(84a:47019)**

30G35 Functions of hypercomplex variables and generalized variables

Bergh, Pentti See Lounesto, Pertti, **84m:30078**

Goldschmidt, Bernd Series expansion and maximum principles for generalized analytic vectors in the space \mathbb{R}^n . **84d:30087**

Gürlebeck, K. ★ Über Interpolation und Approximation verallgemeinert analytischer Funktionen. (German) [On interpolation and approximation of generalized analytic functions] **84j:30090**

Krasnov, Ya. A. Significance of the theory of functions that are conjugate in V. I. Smirnov's sense. (Russian) **84b:30080**

Lounesto, Pertti Hypercomplex analysis as a form of multivariable function theory. (Finnish. English summary) **84c:30069**

(with Bergh, Pentti) Axially symmetric vector fields and their complex potentials. **84m:30078**

Maksimov, V. M. Equations of Cauchy-Riemann type associated with commutative algebras. (Russian) **84c:30073**

Nôno, Kiyoharu Hyperholomorphic functions of a quaternion variable. **84k:30050**

Sastry, M. S. K. A representation for the derivative of a meta-analytic function. **84a:30086**

Sommen, Fransiscus A product and an exponential function in hypercomplex function theory. **84a:30087**

Wilkinson, Ralph W. Linear maps of holomorphic functions on commutative algebras. **84c:30074**

Xiong, Xi Jin Hypercomplex functionals. I. (Chinese) **84a:30088a**

Hypercomplex functionals. II. Some properties of hypercomplex functionals and their applications to partial differential equations. (Chinese) **84a:30088b**

secondary classifications:

Berezans'kii, Yu. M. (with Kalyuzhnyi, A. A.) Hypercomplex systems with a locally compact basis. (Russian) **(84i:43009)**

Gilbert, Robert P. (with Hile, Gerald N.) Degenerate elliptic systems whose coefficient matrix has a group inverse. **(84i:35056)**

Goldschmidt, Bernd Regularity properties of generalized analytic vectors in \mathbb{R}^n . **(84a:35071)**

Existence and representation of solutions of a class of elliptic systems of partial differential equations of first order in the space. **(84d:35047a)**

A Cauchy integral formula for a class of elliptic systems of partial differential equations of first order in the space. **(84d:35047b)**

Grigoryan, S. A. Maximal algebras of generalized analytic functions. (Russian. English and Armenian summaries) **(84d:46081)**

Gürsey, Feza (with Tze, Hsiung Chia) Complex and quaternionic analyticity in chiral and gauge theories. I. **(84d:81031)**

Hile, Gerald N. See Gilbert, Robert P., **(84i:35056)**

Hrubý, J. Analytical constraints in extended supersymmetry. **(84d:81059)**

Jurgaitis, Donatas Solutions of a first-order degenerate elliptic system. (Russian. English and Lithuanian summaries) **(84c:35047)**

Kalyuzhnyi, A. A. See Berezans'kii, Yu. M., **(84i:43009)**

Onishchenko, S. M. Application of hypercomplex numbers in the theory of platform-free inertial navigation systems. (Russian) **(84m:70047)**

Ryan, John Complexified Clifford analysis. **(84c:32006)**

Sommen, Fransiscus Distributional extension properties of hypercomplex functions. **(84f:46057)**

Spherical monogenic functions and analytic functionals on the unit sphere. **(84i:46033)**

Some connections between Clifford analysis and complex analysis. **(84c:30004)**
Hypercomplex Fourier and Laplace transforms. II. **(84g:46061)**

Souček, Vladimír Complex-quaternionic analysis applied to spin- $\frac{1}{2}$ massless fields. **(84i:81063)**

Tze, Hsiung Chia See Gürsey, Feza, **(84d:81031)**

Xiao, Yin An (with Xiong, Xi Jin) A class of quaternion functions and Maxwell's equations. (Chinese. English summary) **(84i:78013)**

Xiong, Xi Jin See Xiao, Yin An, **(84i:78013)**

30G99 None of the above, but in this section

Izverceanu, P. N. Operators on algebras with cyclic base. (Romanian. German summary) **84m:30079**

Martić, Branislav Contribution to nonanalytic functions. (Serbo-Croatian. English summary) **84a:30089**

Rasulov, A. B. Representation of a manifold of solutions and investigation of boundary value problems for some generalized Cauchy-Riemann systems with one and two singular lines. (Russian. Tajiki summary) **84i:30062**

Tolmachev, S. T. A spatially periodic generalization of the Weierstrass function. (Russian. English summary) **84h:30061**

secondary classifications:

Baizhev, S. The maximum principle and existence theorems for bounded solutions of nonlinear elliptic systems. (Russian. Tajiki summary) **84d:35051**

Bragg, L. R. (with Dettman, J. W.) Analogous function theories for the heat, wave, and Laplace equations. **84i:35031**

Dettman, J. W. See Bragg, L. R. **84i:35031**

Grigor'ev, Yu. M. See Naumov, V. V. **84h:35004**

Naumov, V. V. (with Grigor'ev, Yu. M.) The Laurent series for the Moisil-Theodorescu system. (Russian) **84h:35004**

Ramankutty, P. Extensions of Liouville theorems. **84b:31001**

30H05 Spaces and algebras of analytic functions [See also 32E25, 46Exx, 46J15.]

Axler, Sheldon Multiplication operators on Bergman spaces. **84b:30052**

Bochkarev, S. V. Construction of polynomial bases in finite-dimensional spaces of functions analytic in the disk. (Russian) (See **84a:00012**)

Bomash, G. Ya. Nonclassical interpolation in spaces of analytic functions smooth up to the boundary. (Russian. English summary) **84i:30051**

de Branges, Louis Grunsky spaces of analytic functions. (French summary) **84c:30070**

Bruna, Joaquim On the peak sets for holomorphic Lipschitz functions. **84g:30049**

Burckel, R. B. (with Sacki, Sadahiro) Additive mappings on rings of holomorphic functions. **84i:30063**

De Souza, Geraldo Soares (with Sampson, Gary) A real characterization of the pre-dual of Bloch functions. **84g:30051**

Duborija, Stojan Some new properties of the space A^p . (Serbo-Croatian. English summary) **84g:30050**

Epifanov, O. V. Criterion for the surjectivity of a convolution in arbitrary domains of the complex plane. (Russian) **84h:30082**

Jevtić, Mirosljub Sur l'espace f'' . [The space f''] **84a:30090**

Makarov, N. G. Invariant subspaces of the space C^∞ . (Russian) **84d:30088**

Sets of simple invariance. (Russian. English summary) **84f:30059**

Mal, Dingur Radius of starlikeness, convexity, and linear functionals and operators on space of meromorphic functions. **84a:30091**

Mayer, Jacques Isometry in spaces of analytic functions with a slowly growing derivative. (Russian) **84j:30091**

Nagnibida, N. I. Equivalence of certain operations in analytic spaces. (Russian. English summary) **84a:30092**

Raichinov, I. Some commuting properties of algebras of linear operators acting in spaces of analytic functions. II. (Bulgarian. English and Russian summaries) **84j:30092**

Rudol, Krzysztof Corona theorem for sequences of functions [on a] finitely connected domain. (Russian summary) **84c:30075**

Sacki, Sadahiro See Burckel, R. B. **84i:30063**

Salăgean, Grigore Ștefan Admissible functions method for operator functions. **84c:30076**

Sampson, Gary See De Souza, Geraldo Soares, **84g:30051**

Sánchez-Fernández, C. On the decomposition of an L -analytic function by a simple polynomial in a Banach algebra. (Spanish) **84a:30093**

Schnabl, R. Über Bruijersche Reihen mit nicht negativen Koeffizienten. (English summary) [Bruwier series with nonnegative coefficients] **84d:30089**

Shamoyan, F. A. Weak invertibility in some spaces of analytic functions. (Russian. Armenian summary) **84c:30077**

Toeplitz operators and division by an inner function in some spaces of analytic functions. (Russian. Armenian summary) **84j:30093**

Stoilov, Peio A class of generalized Toeplitz operators and some applications. (Russian. English summary) **84c:30052**

Sundberg, Carl (with Wolff, Thomas H.) Interpolating sequences for QA_B . **84c:30078**

Ullrich, Peter Automorphismen analytischer Banach-Algebren. [Automorphisms of analytic Banach algebras] **84f:30060**

Vinnichuk, S. D. Equations with an operator of generalized division over spaces of analytic functions. (Russian) **84j:30094**

Vinnitskii, B. V. Conditions for the convergence of sequences in some spaces of analytic functions. (Russian) **84a:30094**

Wolff, Edwin Functions in the space $R^2(E)$ at boundary points of the interior. **84i:30064**

Wolff, Thomas H. See Sundberg, Carl, **84c:30078**

secondary classifications:

Ahern, Patrick (with Jevtić, Mirosljub) Duality and multipliers for mixed norm spaces. **84h:46036**

Aleksandrov, A. B. Essays on nonlocally convex Hardy classes. **84h:46066**

Axler, Sheldon (with Shields, Allen) Extreme points in VMO and BMO. **84c:46021**

Bierstedt, Klaus-D. (with Meise, Reinhold G.; Summers, William H.) A projective description of weighted inductive limits. **84g:46037**

Bogachev, V. A. Differentiation and integration operators in some spaces of entire functions. (Russian) **84i:46036**

Bourgain, Jean The nonisomorphism of H^1 -spaces in one and several variables. **84i:46073**

Burbea, Jacob Norm inequalities of exponential type for holomorphic functions. **84j:46041**

Ciesielski, Zbigniew The Franklin orthogonal system as unconditional basis in $Re H^1$ and VMO. **84c:46034**

Delbaen, F. Automatic continuity of linear mappings on H^∞ . **84c:46054**

Farkov, Yu. A. Faber-Erokhin operators and isomorphisms of some spaces of analytic functions. (Russian) **84a:30077**

Gamelin, Theodore W. (with Lyons, Terry J.) Jensen measures for $R(K)$. **84d:46079**

Gromov, V. P. On the question of cyclic elements of the differentiation operator in spaces of analytic functions. (Russian) **84h:30005**

Hara, Masaru Analytic functions with finite Dirichlet integrals. **84a:30084**

The corona problem on 2-sheeted disks. **84b:46060**

Janssen, A. J. E. M. Bargmann transform, Zak transform, and coherent states. **84h:81041**

Jevtić, Mirosljub See Ahern, Patrick, **84h:46036**

Kalinin, S. I. On approximation of the solution of a homogeneous convolution equation by elementary solutions. (Russian) **84c:30004**

Kaspar, F. See Reik, H. G., **84c:81153**

Kulkarni, S. H. Analytic and harmonic maps into the maximal ideal space of a function algebra. **84j:46081**

Luecking, Daniel H. Division in Douglas algebras. **84a:46114**

(with Younis, Rahman M.) Quotients of L^∞ by Douglas algebras and best approximation. **84f:46074**

Lyons, Terry J. See Gamelin, Theodore W., **84d:46079**

Maurey, Bernard Isomorphismes entre espaces H_1 . [Isomorphisms between H_1 spaces] **84b:46027**

Meise, Reinhold G. See Bierstedt, Klaus-D.; et al., **84g:46037**

Meril, Alex Analytic functionals with unbounded carriers and mean periodic functions. **84i:46050**

Napalkov, V. V. Comparison of topologies in some spaces of entire functions. (Russian) **84d:32004**

O'Farrell, A. G. Restriction algebras. **84b:46058**

Raichinov, I. On the question of minimally commuting elements of algebras of linear operators acting in spaces of analytic functions. I. (Bulgarian. English and Russian summaries) **84i:47055**

Reich, Edgar On the uniqueness question for Hahn-Banach extensions from the space of \mathcal{L}^1 analytic functions. **84g:46040**

Reik, H. G. (with Kaspar, F.) Exact relation between the spectrum and the eigenfunctions of a generalized Jahn-Teller Hamiltonian for different parameter values. **84k:81153**

Rush, David E. Rings which resemble rings of entire functions. **84d:13019**

Shamoyan, F. A. Description of closed ideals of the algebra \mathcal{N}_∞^1 . (Russian) **84d:46082**

Shevchik, V. V. Functional equations with shift in spaces of analytic functions in a half plane. (Russian) **84h:30038**

Shields, Allen See Axler, Sheldon, **84c:46021**

Shirokov, N. A. Closed ideals of algebras of type B_{∞}^p . (Russian) **84b:46061**

Stoilor, Peio Estimates of norms of the Cauchy-Riesz projector on some subspaces of $C(T)$. (Russian. English and Bulgarian summaries) **84c:46021**

Summers, William H. See Bierstedt, Klaus-D.; et al., **84g:46037**

Szapiel, Maria (with Szapiel, Wojciech) Extreme points of convex sets. IV. Bounded typically real functions. (Russian summary) **84c:30017c**

Szapiel, Wojciech Extreme points of convex sets. II. Influence of normalization on integral representations. (Russian summary) **84c:30017a**

Extreme points of convex sets. III. Montel's normalization. (Russian summary) **84c:30017b**

See also Szapiel, Maria, **84c:30017c**

Tanaka, Jun-ichi Cocycles and local product decomposition. **84c:43004**

Tolokonnikov, V. A. Free interpolation of harmonic functions by analytic functions. (Russian. English summary) **84a:30062**

Vernier Piro, Stella Algebras of holomorphic functions and the space V.M.O. (Italian) **84i:46055**

Younis, Rahman M. See Luecking, Daniel H., **84f:46074**

Yulmukhametov, R. S. A space of analytic functions that have a given growth near the boundary. (Russian) **84d:46025**

31-XX POTENTIAL THEORY (For probabilistic potential theory, see 60J45.)

31-01 Elementary exposition, textbooks

secondary classifications:

Krantz, Steven G. ★Function theory of several complex variables. **84c:32001**

31-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

Wang, Zi Kun Brownian motion and Newtonian potentials. I. (Chinese) **84k:60103a**

Brownian motion and Newtonian potentials. II. (Chinese) **84k:60103b**

31-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Brelot, Marcel Über die Beiträge Christoffels zur Potentialtheorie. (English summary) [On Christoffel's contributions to potential theory] **84c:01028**

Fleckenstein, Joachim Otto Potentialtheorie bei Gauss. [Potential theory in Gauss's works] **84m:01025**

- Laine, Ilpo (with Martio, O.) Sketch of the development of potential theory. (Finnish. English summary) (84h:01049)
 Martio, O. See Laine, Ilpo, (84h:01049)

31-04 Explicit machine computation and programs (not the theory of computation or programming)

31-06 Proceedings, conferences, etc.

- Potential theory and its applications ★ Potential theory and its applications. 84m:31001
 Symposium:
 Potential theory and its applications ★ Potential theory and its applications. 84m:31001

31Axx Two-dimensional theory

31A05 Harmonic, subharmonic, superharmonic functions

- Derviz, A. O. (with Khavin, V. P.) Free interpolation and the Dirichlet problem. (Russian. English summary) 84j:31001
 Khavin, V. P. See Derviz, A. O. 84j:31001
 Korenblum, Boris Some problems in potential theory and the notion of harmonic entropy. 84f:31001
 Lacković, I. B. Complements to certain theorems of P. Montel. II. Subharmonic functions. 84m:31002
 Longinetti, Marco Convexity of the level lines of harmonic functions. (Italian. English summary) 84c:31001
 Ortel, Marvin (with Schneider, Walter J.) Curvature of level curves of harmonic functions. 84m:31003
 Ramankutty, P. Extensions of Liouville theorems. 84b:31001
 Ricci, Paolo Emilio Harmonic polynomials and systems of orthogonal functions of two variables. (Italian. English summary) 84g:31002
 Sakai, Makoto Applications of variational inequalities to the existence theorem on quadrature domains. 84i:31001
 Schneider, Walter J. See Ortel, Marvin, 84m:31003
 Tepper, David E. A free boundary problem in an annulus. 84c:31001
 Yulmukhametov, R. S. Asymptotic approximation of subharmonic functions. (Russian) 84g:31001

secondary classifications:

- Goldstein, Myron A question of Arne Stray. (84c:30055)
 Kaufman, Robert P. (with Wu, Jang Mei) Correction to: "Removable singularities for analytic or subharmonic functions" [Ark. Mat. 18 (1980), no. 1, 107-116; MR 82c:30048]. (84g:30041)
 Koosis, Paul La plus petite majorante surharmonique et son rapport avec l'existence des fonctions entières de type exponentiel jouant le rôle de multiplicateurs. [The smallest superharmonic majorant and its relation to the existence of entire functions of exponential type playing the role of multipliers] (84k:30032)
 Sakai, Makoto Null quadrature domains. (84c:30069)
 ★ Quadrature domains. (84h:41047)
 Simonenko, I. B. An exponentially converging linear method for determining the Christoffel-Schwarz constant and A. A. Markov type estimates for harmonic power quasipolynomials. (Russian) (84j:30075)
 Sobel'man, Ya. S. A problem of electrostatics in a domain with a nonsmooth thin inclusion. (Russian) (84k:78008)
 Ueda, Hideharu On the growth of subharmonic functions. (84c:30037a)
 A theorem on the spread relation. (84f:30044)
 Vanderbei, Robert Joseph Toward a stochastic calculus for several Markov processes. (84m:60087)
 Veselov, M. G. On a plane problem of potential theory. (Russian. English summary) (84c:78011)
 Wu, Jang Mei See Kaufman, Robert P., (84g:30041)
 Yamashita, Shinji On the Hardy-Littlewood maximal theorem. (84e:42023)

31A10 Integral representations

- Bliedtner, Jürgen Integral representations of bounded harmonic functions. (See 84i:00016)
 Rakhimov, R. M. (with Salaev, V. V.) Behavior of the logarithmic potential of a double layer near a line of integration. (Russian. Tajiki summary) 84b:31002
 Salaev, V. V. See Rakhimov, R. M., 84b:31002

secondary classifications:

- Mkhitarian, S. M. Eigenfunctions of an integral operator generated by a logarithmic kernel on two intervals and their application to contact problems. (Russian. English and Armenian summaries) (84j:45025)
 Schiff, Joel L. See Tanaka, Hiroshi, (84j:30083)
 Tanaka, Hiroshi (with Schiff, Joel L.) Note on the Wiener compactification and the H^p -space of harmonic functions. (84j:30083)

31A15 Potentials and capacity, harmonic measure, extremal length [See also 30C85.]

- Davie, Alexander M. (with Øksendal, Bernt) Analytic capacity and differentiability properties of finely harmonic functions. 84h:31001
 Duffin, R. J. (with McWhirter, J. H.) A formula for the potential of a polygon with varying charge density. 84m:31004

- Kaufman, Robert P. (with Wu, Jang Mei) Distortion of the boundary under conformal mapping. 84b:31003
 Khavin, V. P. The uncertainty principle for one-dimensional Riesz potentials. (Russian) 84j:31002
 McWhirter, J. H. See Duffin, R. J., 84m:31004
 Øksendal, Bernt See Davie, Alexander M., 84h:31001
 Shlyk, V. A. A uniqueness theorem for the symmetrization of arbitrary capacitors. (Russian) 84i:31002
 Wu, Jang Mei See Kaufman, Robert P., 84b:31003
 Xu, Pei A note on the logarithmic potential. (Chinese. English summary) 84c:31002
 Zorii, N. V. A generalization of A. A. Gonchar's problem on capacities of condensers. (Russian) 84h:31002

secondary classifications:

- Ahern, Patrick (with Cohn, William S.) A geometric characterization of N^+ domains. (84i:30041)
 Cohn, William S. See Ahern, Patrick, (84i:30041)
 Kaufman, Robert P. Hausdorff measure, BMO, and analytic functions. (84b:30050)
 Mo, Guo Duan A connection between the logarithmic capacity and sequences of analytic functions. (Chinese. English summary) (84i:30033)
 Ortel, Marvin (with Schneider, Walter J.) Curvature of level curves of harmonic functions. (84m:31003)
 Preobrazhenskii, S. P. A boundary uniqueness theorem for regular functions with a bounded integral of "Dirichlet type". (Russian. English summary) (84h:30044)
 Schneider, Walter J. See Ortel, Marvin, (84m:31003)

31A20 Boundary behavior (theorems of Fatou type, etc.)

- Azarin, V. S. (with Giner, V. B.) The structure of cluster sets of entire and subharmonic functions. (Russian) 84i:31003
 Cerdà, Joan L. (with Sueiro, Joan M.) Approximate identities and convergence at Lebesgue points. 84j:31003
 Giner, V. B. See Azarin, V. S., 84i:31003
 Kuramochi, Zenjiro On Fatou's and Beurling's theorems. 84c:31003
 Nagasaka, Yukio Notes on the Dirichlet problem for unbounded boundary functions. 84j:31004
 Shakhverdyan, A. Yu. Conditions of the Wiener criterion type and estimates for potentials and subharmonic functions. (Russian. Armenian summary) 84j:31005
 Sueiro, Joan M. See Cerdà, Joan L., 84j:31003

secondary classifications:

- Cherednichenko, V. G. Smoothness of solutions of an inverse potential problem in the two-dimensional case. (Russian) (84j:31006)
 Nakai, Mitsuru (with Sario, Leo) Parabolicity and the Riemann theorem. (84b:30025)
 Rippon, P. J. The fine boundary behavior of certain delta-subharmonic functions. (84f:31009)
 Sario, Leo See Nakai, Mitsuru, (84b:30025)
 Shiga, Hiroshige On harmonic dimensions and bilinear relations on open Riemann surfaces. (84c:30070)

31A25 Boundary value and inverse problems

- Atakhodzhaev, M. A. (with Serikbaev, A. U.) An inverse problem of logarithmic potential theory. (Russian) 84c:31002
 Cherednichenko, V. G. Smoothness of solutions of an inverse potential problem in the two-dimensional case. (Russian) 84j:31006
 Continuation with respect to a parameter of the solution of a two-dimensional inverse problem of the potential. (Russian) 84f:31002
 Costabel, Martin (with Stephan, Ernst) The normal derivative of the double layer potential on polygons and Galerkin approximation. 84j:31007
 England, A. H. Mixed boundary-value problems in potential theory. 84c:31001
 Gorbachuk, V. I. (with Lukiyanuk, M. V.) Boundary properties of solutions of the equation $\Delta u - c^2 u = 0$ in the half plane. (Russian) 84k:31001
 Kobilov, U. E. A problem for the Laplace equation. (Russian) 84c:31003
 Lukiyanuk, M. V. See Gorbachuk, V. I., 84k:31001
 Maz'ya, V. G. See Zargaryan, S. S., 84g:31003
 Mikhalyuk, M. I. (with Parasyuk, E. M.) Some properties of solutions of an inverse problem of logarithmic potential with variable density. (Ukrainian. Russian summary) 84h:31003
 Parasyuk, E. M. See Mikhalyuk, M. I., 84h:31003
 Serikbaev, A. U. See Atakhodzhaev, M. A., 84c:31002
 Stephan, Ernst See Costabel, Martin, 84j:31007
 Vessella, Sergio An ill-posed problem for the Laplace equation. 84h:31004
 Zargaryan, S. S. (with Maz'ya, V. G.) Singularities of solutions of a system of equations of potential theory for Zarembo's problem. (Russian. English summary) 84g:31003

secondary classifications:

- Cherednichenko, V. G. Sufficient conditions for solvability of an inverse potential problem on a plane. (Russian) (84j:86006)
 Derviz, A. O. (with Khavin, V. P.) Free interpolation and the Dirichlet problem. (Russian. English summary) (84j:31001)
 Devitsyn, V. M. Solution of the inverse potential problem in the case of two-dimensional layered media. (Russian) (84j:86007)
 Dont, Miroslav Third boundary value problem for the heat equation. II. (Czech summary) (84a:35109)
 England, A. H. Love's integral and other relations between solutions to mixed boundary-value problems in potential theory. (84k:73018)

- Geffen, Nima A nonstandard nonlinear boundary value problem for harmonic functions. (84c:76026)
- Karabassov, T. B. A nonlocal boundary value problem for the Laplace equation. (Russian) (84b:35027)
- Khavin, V. P. See Derviz, A. O., (84j:31001)
- Klibanov, M. V. A two-dimensional inverse problem for an elliptic equation. (Russian) (84c:35125)
- Mazilu, P. Potentialdarstellung einer asymptotischen Lösung der Gleichung $\Delta \Delta u - \kappa^2 \Delta u = f$. (English and Russian summaries) [Potential representation of an asymptotic solution of the equation $\Delta \Delta u - \kappa^2 \Delta u = f$] (84a:35066)
- Mel'nik, Yu. I. See Zaliznyak, S. N.; et al., (84d:45034)
- Nagasaka, Yukio Notes on the Dirichlet problem for unbounded boundary functions. (84j:31004)
- Pidlipenko, Yu. K. See Zaliznyak, S. N.; et al., (84d:45034)
- Protsenko, V. G. On expansion theorems for two-dimensional harmonic functions. (Russian) (84c:73019)
- Serikbaev, A. U. Application of the regularization method in inverse problems of the theory of logarithmic potential of a simple layer. (Russian) (84b:35167)
- Simonenko, I. B. An exponentially converging linear method for determining the Christoffel-Schwarz constant and A. A. Markov type estimates for harmonic power quasipolynomials. (Russian) (84j:30075)
- Zaliznyak, S. N. (with Mel'nik, Yu. I.; Pidlipenko, Yu. K.) On an approximate solution of integral equations of potential theory. (Russian) (84d:45034)

31A30 Biharmonic, polyharmonic functions and equations, Poisson's equation

- Akhmedov, Z. A. See Atakhodzhaev, M. A., (84c:31004)
- Atakhodzhaev, M. A. (with Akhmedov, Z. A.) A conditionally well-posed problem for the biharmonic equation. (Russian) (84c:31004)
- Kapoor, G. P. (with Nautiyal, A.) On the growth of generalized axisymmetric potentials. (84j:31008)
- Mamedov, I. T. Boundary properties of solutions of the biharmonic equation. (Russian. English and Azerbaijani summaries) (84c:31004)
- Nautiyal, A. See Kapoor, G. P., (84j:31008)

secondary classifications:

- Beaver, Brad (with Sario, Leo; Wang, Cecilia) Positive biharmonic functions. (84c:31007)
- Hřebíček, Jiří Numerical analysis of the general biharmonic problem by the finite element method. (Czech summary) (84a:65092)
- Joseph, Daniel D. (with Sturges, L. D.; Warner, W. H.) Convergence of biorthogonal series of biharmonic eigenfunctions by the method of Titchmarsh. (84i:35108)
- Pogu, Marc (with Tournemine, Georges) Étude et approche variationnelle d'équations biharmoniques posées dans des domaines non bornés. Applications à la mécanique. (English summary) [The study of and variational approach to biharmonic equations acting in unbounded domains. Applications in mechanics] (84j:35061)
- Sario, Leo See Beaver, Brad; et al., (84c:31007)
- Sturges, L. D. See Joseph, Daniel D.; et al., (84i:35108)
- Tournemine, Georges See Pogu, Marc, (84j:35061)
- Wang, Cecilia See Beaver, Brad; et al., (84c:31007)
- Warner, W. H. See Joseph, Daniel D.; et al., (84i:35108)

31A35 Connections with differential equations

secondary classifications:

- Baderko, E. A. Potentials for $2p$ -parabolic equations. (Russian) (84c:35058)
- Gorbachuk, V. I. (with Lukiyanchuk, M. V.) Boundary properties of solutions of the equation $\Delta u - c^2 u = 0$ in the half plane. (Russian) (84k:31001)
- Lukiyanchuk, M. V. See Gorbachuk, V. I., (84k:31001)
- McCoy, Peter A. Best L^p -approximation of generalized biaxially symmetric potentials. (84a:30071)
- Sato, Takeyoshi Integral comparison theorems for relative Hardy spaces of solutions of the equations $\Delta u = Pu$ on a Riemann surface. (84i:30057)

31A99 None of the above, but in this section

- Kosmodem'yanskii, A. A., Jr. Converse of the mean value theorem for harmonic functions. (Russian) (84d:31001)

31Bxx Higher-dimensional theory

31B05 Harmonic, subharmonic, superharmonic functions

- Armitage, David H. Mean values and associated measures of superharmonic functions. (84f:31003)
- Brawn, F. T. Mean values of strongly subharmonic functions on half-spaces. (84f:31004)
- Camera-Garcia, G. Subharmonic functions on sets of finite measure. (84c:31004)
- Flatto, Leopold (with Jacobson, David Norman) Functions satisfying a discrete mean value property. (84g:31004)
- Fugard, T. B. On the largest ball of harmonic continuation. (84c:31005)
- Gardiner, S. J. Harmonic majorization of subharmonic functions in unbounded domains. (84f:31005)
- Gleizer, E. V. Estimation of the Fourier coefficients of subharmonic functions. (Russian) (84c:31002)
- Jacobson, David Norman See Flatto, Leopold, (84g:31004)
- Kargaev, P. P. Existence of the Phragmén-Lindelöf function and some conditions for quasianalyticity. (Russian. English summary) (84m:31005)

- Kondratyuk, A. A. Spherical harmonics and subharmonic functions. (Russian) (84d:31002)
- Kral, Josef Some extension results concerning harmonic functions. (84g:31005)
- Kurbanov, A. A. See Novruzov, A. A., (84b:31005)
- Mizuta, Yoshihiro On the behaviour at infinity of superharmonic functions. (84m:31006)
- Nautiyal, A. On a space of entire harmonic functions in \mathbb{R}^1 . (84f:31006)
- Novruzov, A. A. (with Kurbanov, A. A.) The modulus of continuity of harmonic functions in regular boundary points. (Russian. English and Azerbaijani summaries) (84b:31005)
- Rippon, P. J. The hyperplane mean of a positive subharmonic function. (84d:31003)
- Wanby, Göran Convexity of means and growth of certain subharmonic functions in an n -dimensional cone. (84b:31006)

secondary classifications:

- Ahner, John F. On constructing the solution to the exterior Dirichlet problem for the Helmholtz equation. (84b:35026)
- Arushanyan, Z. A. A class of generalized Cauchy-Riemann systems. (Russian. English summary) (84g:42020)
- Bahar, Leon Y. See Massimo, F. M.; et al., (See 84b:94003)
- Brossard, Jean Intégrale d'aire et support d'une mesure positive. (English summary) [Area function and support of a positive measure] (84b:60093)
- Essén, Mats (with Shea, D. F.) Applications of Denjoy integral inequalities and differential inequalities to growth problems for subharmonic and meromorphic functions. (84g:30027)
- Goyal, Vinod B. (with Schaefer, Philip W.) Liouville theorems for elliptic systems and nonlinear equations of fourth order. (84f:35039)
- Kuptsov, L. P. Property of the mean for the heat equation. (Russian) (84f:35065)
- Kwatny, Harry G. See Massimo, F. M.; et al., (See 84b:94003)
- Massimo, F. M. (with Kwatny, Harry G.; Bahar, Leon Y.) Derivation of the Brayton-Moser equations from a topological mixed potential function. (See 84b:94003)
- Protsenko, V. S. (with Tomilova, E. P.) Formulas for re-expansion of harmonic functions in cylindrical and oblate-spheroid coordinate systems. (Russian. English summary) (84c:33009)
- Rossi, John (with Weitsman, Allen) A unified approach to certain questions in value distribution theory. (84j:30046)
- Sakai, Makoto Applications of variational inequalities to the existence theorem on quadrature domains. (84c:31001)
- Schaefer, Philip W. See Goyal, Vinod B., (84f:35039)
- Shea, D. F. See Essén, Mats, (84g:30027)
- Tomilova, E. P. See Protsenko, V. S., (84c:33009)
- Weitsman, Allen See Rossi, John, (84j:30046)
- Zerikhi, Ahmed Bases communes dans certains espaces de fonctions harmoniques et fonctions séparément harmoniques sur certains ensembles de \mathbb{C}^n . (English summary) [Common bases in certain spaces of harmonic and separately harmonic functions on certain sets of \mathbb{C}^n] (84i:32020)

31B10 Integral representations

- Sjögren, Peter Generalized Poisson integrals in a half-space and weak L^1 . (84f:31007)

secondary classifications:

- Baldino, R. R. An integral equation approximation of the mixed problem for the Laplacian in \mathbb{R}^n . (84a:35039)
- Erofeenko, V. T. Addition theorems and integral transformations on classes of harmonic functions. (Russian) (84b:35026)
- Hueber, H. (with Sieveking, M.) Uniform bounds for quotients of Green functions on $C^{1,1}$ -domains. (French summary) (84a:35063)
- Kytmanov, A. M. Calculation of an integral of Martinelli-Bochner type in a ball and some of its applications. (Russian) (84m:32008)
- Sieveking, M. See Hueber, H., (84a:35063)

31B15 Potentials and capacities, extremal length

- Borell, Christer Capacitary inequalities of the Brunn-Minkowski type. (84c:31005)
- Nogin, V. A. Inversion of generalized Riesz potentials with symbols linearly degenerating on a hyperplane. (Russian) (84b:31007)

secondary classifications:

- Alexander, Herbert A note on projective capacity. (84d:32021)
- Caraman, Petru Module and p -module in an abstract Wiener space. (84b:46059)
- Dont, Miroslav Flows of heat and time moving boundary. (Russian and Czech summaries) (84j:35082)
- Kondrat'ev, B. P. The Newtonian potentials and dynamics of a stratified ellipsoid. (84b:85002)
- Maz'ya, V. G. (with Preobrazhenskii, S. P.) ★ Abschätzungen der $(1,p)$ -Kapazität und Spursätze für Potentiale. (Russian) [Estimates of $(1,p)$ capacity and traces of potentials] (84g:46048)
- Ozawa, Shin Electrostatic capacity and eigenvalues of the Laplacian. (84m:35093)
- Pierre, Michel Parabolic capacity and Sobolev spaces. (84j:46060)
- Preobrazhenskii, S. P. See Maz'ya, V. G., (84g:46048)

31B20 Boundary value and inverse problems

- Brodskii, M. A. Uniqueness in the inverse problem of potential theory for uniform polyhedra. (Russian) (84c:31003)
- Cade, R. A class of physically relevant insoluble Dirichlet problems. (84f:31008)
- Emets, V. F. See Poddubnyak, A. P., (84c:31005)

- Erofeenko, V. T. (with Shushkevich, G. Ch.) A boundary value problem for a cylinder with an incomplete spherical inclusion. (Russian. English summary) **84g:31006**
- Galletto, Dionigi Some converse theorems in Newtonian field theory and their applications. **84h:31008**
- Jain, D. L. (with Kanwal, R. P.) Solutions of potential problems in composite media by integral equation techniques. III. Three-dimensional problems. **84d:31004**
- Kanwal, R. P. See Jain, D. L., **84d:31004**
- Kerimov, T. M. (with Maz'ya, V. G.; Novruzov, A. A.) An analogue of Wiener's criterion for the Zaremba problem in a cylindrical domain. (Russian) **84h:31009**
- Maz'ya, V. G. See Kerimov, T. M.; et al., **84h:31009**
- Mescheryakov, G. A. An inverse problem of potential theory. (Russian) **84m:31007**
- Meyer, Yves Théorie du potentiel dans les domaines lipschitziens d'après G. C. Verchota. [Potential theory in Lipschitz domains according to G. C. Verchota] (See **84i:35006**)
- Netuka, Ivan Monotone extensions of operators and the first boundary value problem. (See **84i:00016**)
- Novruzov, A. A. See Kerimov, T. M.; et al., **84h:31009**
- Ozawa, Shin Eigenvalues of the Laplacian on wildly perturbed domain. **84i:31004**
- Poddubnyak, A. P. (with Emets, V. F.) The Cauchy problem for the Laplace equation in an infinite $n+1$ -dimensional layer. (Russian) **84c:31005**
- Shushkevich, G. Ch. See Erofeenko, V. T., **84g:31006**

secondary classifications:

- Bakalets', V. A. (with Gordichuk, V. I.; Lyudkevich, I. V.) Numerical solution of three-dimensional boundary value problems of potential theory for surfaces with cuts. (Russian) **(84i:65105)**
- Bode, A. (with Grafarend, Erik W.) The spacelike Molodenski problem including the rotational term of the gravity potential. (See **84h:86002**)
- Brodskii, M. A. (with Nadirashvili, N. S.) Existence and uniqueness in the inverse problem of a potential with a priori information on the distribution of sources. (Russian) **(84c:86009)**
- England, A. H. Mixed boundary-value problems in potential theory. **(84a:31001)**
- Love's integral and other relations between solutions to mixed boundary-value problems in potential theory. **(84c:73018)**
- Erofeenko, V. T. Addition theorems and integral transformations on classes of harmonic functions. (Russian) **(84c:35026)**
- Fabes, Eugene B. (with Jerison, David S.; Kenig, Carlos E.) The Wiener test for degenerate elliptic equations. (French summary) **(84g:35067)**
- Gordichuk, V. I. See Bakalets', V. A.; et al., **(84i:65105)**
- Grafarend, Erik W. See Bode, A., **(See 84h:86002)**
- Grysa, Krzysztof Methods of potential theory in solving inverse problems of heat conduction. (Polish. English and Russian summaries) **(84c:80006)**
- Holota, Petr Direct methods for geodetic boundary problems. (See **84h:86002**)
- Homentcovich, Dorel Uniform asymptotic solutions for the potential field around a thin oblate body of revolutions. **(84h:78007)**
- Jerison, David S. (with Kenig, Carlos E.) The Neumann problem on Lipschitz domains. **(84a:35064)**
- See also Fabes, Eugene B.; et al., **(84g:35067)**
- Kenig, Carlos E. See Jerison, David S., **(84a:35064)** and Fabes, Eugene B.; et al., **(84g:35067)**
- Köbel, Klaus Eine inverse Aufgabe für eine Klasse parabolischer Potentiale. [An inverse problem for a class of parabolic potentials] **(84a:31003)**
- Kolsrud, Torbjörn Bounded point evaluations and balayage. **(84b:31005)**
- Lyudkevich, I. V. (with Ostudin, B. A.; Pasichnik, R. M.) Approximate solution of boundary value problems of potential theory for complex open surfaces. (Russian) **(84i:65107)**
- See also Bakalets', V. A.; et al., **(84i:65105)**
- Mäulen, J. Lösungen der Poissongleichung und harmonische Vektorfelder in unbeschränkten Gebieten. (English summary) [Solutions of the Poisson equation and harmonic vector fields in unbounded domains] **(84h:35035)**
- Maz'ya, V. G. (with Nazarov, S. A.; Plamenevskii, B. A.) Asymptotic behavior of the solution of the Dirichlet problem in a domain with a thin bridge. (Russian) **(84i:35045)**
- Nadirashvili, N. S. See Brodskii, M. A., **(84c:86009)**
- Nazarov, S. A. See Maz'ya, V. G.; et al., **(84i:35045)**
- Nikolaev, A. G. See Protchenko, V. S., **(84c:35021)**
- Ostudin, B. A. See Lyudkevich, I. V.; et al., **(84i:65107)**
- Pasichnik, R. M. See Lyudkevich, I. V.; et al., **(84i:65107)**
- Pavlov, G. A. Solvability of inverse problems of potential theory. (Russian) **(84d:35147)**
- Plamenevskii, B. A. See Maz'ya, V. G.; et al., **(84i:35045)**
- Protchenko, V. S. (with Nikolaev, A. G.) Re-expansion formulas for solutions of the Laplace equation in cylindrical and elongated spheroidal coordinates. (Russian. English summary) **(84c:35021)**
- Sansó, Fernando The point on the simple Molodenski's problem. (Italian summary) **(84g:86007)**

31B25 Boundary behavior

- Aleksandrov, A. B. Inner functions on spaces of homogeneous type. (Russian. English summary) **84m:31008**
- Jerison, David S. (with Kenig, Carlos E.) Boundary behavior of harmonic functions in nontangentially accessible domains. **84d:31005b**
- Jones, Peter Wilcox A geometric localization theorem. **84d:31005a**
- Kenig, Carlos E. See Jerison, David S., **84d:31005b**
- Mizuta, Yoshihiro Minimally semifine limits of Green potentials of general order. **84b:31004**
- Nagel, Alexander (with Rudin, Walter; Shapiro, Joel H.) Tangential boundary behavior of functions in Dirichlet-type spaces. **84a:31002**
- Rippon, P. J. The fine boundary behavior of certain delta-subharmonic functions. **84f:31009**
- Rudin, Walter See Nagel, Alexander; et al., **84a:31002**
- Shapiro, Joel H. See Nagel, Alexander; et al., **84a:31002**

secondary classifications:

- Debiard, Amédée (with Gaveau, Bernard) Valeurs frontières des fonctions holomorphes d'intégrale de Dirichlet finie et capacité sous elliptique. (English and Polish summaries) [Boundary values of holomorphic functions of a finite Dirichlet integral and subelliptic capacity] **(84d:32008)**
- Gaveau, Bernard See Debiard, Amédée, **(84d:32008)**
- Maeda, Fumi-Yuki Semilinear perturbation of harmonic spaces. **(84f:31017)**
- Shakhverdyan, A. Yu. Conditions of the Wiener criterion type and estimates for potentials and subharmonic functions. (Russian. Armenian summary) **(84j:31005)**

31B30 Biharmonic and polyharmonic equations and functions

- Donchev, T. See Maz'ya, V. G., **84m:31009**
- Estrada, R. (with Kanwal, R. P.) Distributional biharmonic equation. **84f:31010**
- Fichera, Gaetano On a theorem of L. Amoroso in the theory of analytic functions of two complex variables. (Italian) **84c:31006**
- Genev, V. N. Normalized biharmonic polynomials and some of their properties. (Bulgarian. English and Russian summaries) **84i:31005**
- Kanwal, R. P. See Estrada, R., **84f:31010**
- Maz'ya, V. G. (with Donchev, T.) Regularity in the sense of Wiener of a boundary point for a polyharmonic operator. (Russian) **84m:31009**
- Nystedt, Lars On polyharmonic continuation by reflection formulas. **84f:31011**
- Sharipov, T. Kh. On an exact method for the numerical solution of a polyharmonic equation. (Russian) **84d:31006**

secondary classifications:

- Beaver, Brad (with Sario, Leo; Wang, Cecilia) Positive biharmonic functions. **(84c:31007)**
- Diaz, J. B. (with Ram, Ram Bachan) The biharmonic partial differential equation and the method of descent. **(84i:35032)**
- Kolsrud, Torbjörn A uniqueness theorem for higher order elliptic partial differential equations. **(84f:35040)**
- Martinenko, Mariya D. (with Martynenko, Mikhailo D.; Shipka, I. G.) The Schwartz method for the biharmonic equation. (Ukrainian. Russian summary) **(84f:35041)**
- Martynenko, Mikhailo D. See Martinenko, Mariya D.; et al., **(84f:35041)**
- Maz'ya, V. G. (with Plamenevskii, B. A.) On the maximum principle for the biharmonic equation in a domain with conical points. (Russian) **(84b:35037)**
- Plamenevskii, B. A. See Maz'ya, V. G., **(84b:35037)**
- Ram, Ram Bachan See Diaz, J. B., **(84i:35032)**
- Sario, Leo See Beaver, Brad; et al., **(84c:31007)**
- Shipka, I. G. See Martinenko, Mariya D.; et al., **(84f:35041)**
- Wang, Cecilia See Beaver, Brad; et al., **(84c:31007)**

31B35 Connections with differential equations

- Köbel, Klaus Eine inverse Aufgabe für eine Klasse parabolischer Potentiale. [An inverse problem for a class of parabolic potentials] **84a:31003**

secondary classifications:

- Olzowski, Paweł Some properties of generalized thermal potentials related to a certain parabolic equation of order 2p. **(84i:35078)**

31B99 None of the above, but in this section

- Gauthier, P. M. (with Goldstein, Myron; Ow, W. H.) Uniform approximation on closed sets by harmonic functions with Newtonian singularities. **84j:31009**
- Goldstein, Myron See Gauthier, P. M.; et al., **84j:31009**
- Kolsrud, Torbjörn Bounded point evaluations and balayage. **84b:31005**
- Ow, W. H. See Gauthier, P. M.; et al., **84j:31009**

secondary classifications:

- Granlund, Seppo (with Lindqvist, Peter; Martio, O.) F -harmonic measure in space. **(84f:30031)**
- Lindqvist, Peter See Granlund, Seppo; et al., **(84f:30031)**
- Martio, O. See Granlund, Seppo; et al., **(84f:30031)**

31Cxx Other generalizations

31C05 Harmonic, subharmonic, superharmonic functions

- Pchelina, B. K. On the theory of almost everywhere polyharmonic functions. (Russian) **84j:31010**
- Segawa, Shigeo A duality relation for harmonic dimensions and its applications. **84c:31006**

secondary classifications:

- Avanissian, V. Sur les fonctions harmoniques d'ordre quelconque et leur prolongement analytique dans C^N . [On harmonic functions of arbitrary order and their analytic continuation in C^N] **(84c:32004)**
- Fugard, T. B. On the largest ball of harmonic continuation. **(84c:31005)**
- Fuglede, Bent Localization in fine potential theory and uniform approximation by subharmonic functions. **(84c:31009)**
- Katsnel'son, V. E. Logarithmic subharmonicity of the J -form of the analytic J -expanding matrix-function. (Russian. English summary) **(84d:47047)**
- Øksendal, Bernt (with Stroock, Daniel W.) A characterization of harmonic measure and Markov processes whose hitting distributions are preserved by rotations, translations and dilatations. (French summary) **(84g:60125)**

- Schiff, Joel L. Isomorphic harmonic and P -harmonic function spaces on Riemann surfaces. (84a:30083)
 Stroock, Daniel W. See Øksendal, Bernt. (84g:60125)

31C10 Pluriharmonic and plurisubharmonic functions [See also 32F05.]

- Singman, David Exceptional sets in a product of harmonic spaces. 84d:31007

secondary classifications:

- de Bartolomeis, Paolo (with Tomassini, Giuseppe) Traces of pluriharmonic functions. (84d:32023)
 Bedford, Eric (with Taylor, B. A.) A new capacity for plurisubharmonic functions. (84d:32024)
 Cegrell, Urban Removable singularity sets for analytic functions having modulus with bounded Laplace mass. (84g:32024)
 Dimiev, S. G. (with Marinov, Marin Stefanov) Théorème de type Liouville pour les fonctions presque-pluriharmoniques. [Liouville-type theorem for almost pluriharmonic functions] (84g:53042)
 Fichera, Gaetano (with Snider, Maria Adelaide) Pluriharmonic functions in the unit ball of \mathbb{R}^n . (Italian summary) (84i:32024)
 Järvi, Pentti Removable singularities for H^p -functions. (84a:32009)
 Laville, Guy Étude de deux opérateurs du quatrième ordre en analyse complexe. (English summary) [Two fourth-order partial differential operators appearing in complex analysis] (84c:32017)
 Marinov, Marin Stefanov See Dimiev, S. G., (84g:53042)
 Matsugu, Yasuo Pluriharmonic functions as the real parts of holomorphic functions. (84d:32025)
 Ramey, Wade (with Ullrich, David) The pointwise Fatou theorem and its converse for positive pluriharmonic functions. (84a:32003)
 Sadullaev, A. A class of plurisubharmonic functions. (Russian) (84b:32024)
 Snider, Maria Adelaide See Fichera, Gaetano, (84i:32024)
 Taylor, B. A. See Bedford, Eric, (84d:32024)
 Tomassini, Giuseppe See de Bartolomeis, Paolo, (84d:32023)
 Ullrich, David See Ramey, Wade, (84a:32003)

31C12 Potential theory on Riemannian manifolds [See also 53C20; for Hodge theory, see 58A14.]

- Beaver, Brad (with Sario, Leo; Wang, Cecilia) Positive biharmonic functions. 84c:31007
 Chung, L. O. Existence of harmonic L^1 functions in complete Riemannian manifolds. 84c:31006
 Glasner, Moses Stokes' theorem and parabolicity of Riemannian manifolds. 84c:31007
 Kayano, Takashi (with Yamasaki, Maresugu) Dirichlet finite solutions of Poisson equations on an infinite network. 84f:31012
 Sario, Leo See Beaver, Brad; et al., 84c:31007
 Wang, Cecilia See Beaver, Brad; et al., 84c:31007
 Yamasaki, Maresugu See Kayano, Takashi, 84f:31012

secondary classifications:

- Boyariski, Bogdan Analytical and geometrical properties of generalized potentials. (84f:58121)
 Karp, Leon Subharmonic functions on real and complex manifolds. (84d:53042)
 Varopoulos, Nicholas Th. The Poisson kernel on positively curved manifolds. (84h:58142a)
 Green's functions on positively curved manifolds. (84h:58142b)
 Green's functions on positively curved manifolds. II. (84h:58142c)
 Wakabayashi, Isao Nonexistence of bounded functions on the homology covering surface of $P^1 - \{3 \text{ points}\}$. (84j:30084)

31C15 Potentials and capacities

- Feyel, Denis Sur les extensions cylindriques de noyaux. [On cylindrical extensions of kernels] 84b:31006
 Kurokawa, Takahide On the Riesz and Bessel kernels as approximations of the identity. 84c:31007
 Lin, En Wu The relation between capacities and Hausdorff measures. (Chinese. English summary) 84d:31008
 Nogin, V. A. Inversion of Bessel potentials. (Russian) 84f:31013
 Talagrand, Michel Sur les résultats de Feyel concernant les épaisseurs. [On Feyel's results on thicknesses] 84j:31011

secondary classifications:

- Feyel, Denis Ensembles singuliers associés aux espaces de Banach réticulés. (English summary) [Singular sets associated with Banach lattices] (84i:28016)
 Gariepy, Ronald (with Ziemer, William P.) Thermal capacity and boundary regularity. (84c:35062)
 Glover, Joseph Markov processes with identical hitting probabilities. (84c:60115)
 Granlund, Seppo (with Lindqvist, Peter; Martio, O.) F -harmonic measure in space. (84f:30031)
 Habibullah, G. M. Bessel potentials with weights. (84i:46043)
 Lindqvist, Peter See Granlund, Seppo; et al., (84f:30031)
 Martio, O. See Granlund, Seppo; et al., (84f:30031)
 Sadullaev, A. Rational approximations and pluripolar sets. (Russian) (84d:32026)
 Samko, S. G. (with Umakhadzhiev, S. M.) Description of a space of Riesz potentials in terms of higher derivatives. (Russian) (84b:46033)
 Segawa, Shigeo A duality relation for harmonic dimensions and its applications. (84c:31006)

- Stone, Charles J. Potential theory for recurrent symmetric infinitely divisible processes. (84a:60090)

Umakhadzhiev, S. M. See Samko, S. G., (84b:46033)

Ziemer, William P. See Gariepy, Ronald, (84c:35062)

31C20 Discrete potential theory and numerical methods

- Murazawa, Tadashi Discrete potential and its properties. I. 84g:31007

secondary classifications:

- Kayano, Takashi (with Yamasaki, Maresugu) Dirichlet finite solutions of Poisson equations on an infinite network. (84f:31012)
 Yamasaki, Maresugu See Kayano, Takashi, (84f:31012)

31C25 Dirichlet spaces

secondary classifications:

- Dynkin, E. B. Green's and Dirichlet spaces for a symmetric Markov transition function. (84f:60104)
 Nagel, Alexander (with Rudin, Walter; Shapiro, Joel H.) Tangential boundary behavior of functions in Dirichlet-type spaces. (84a:31002)
 Rudin, Walter See Nagel, Alexander; et al., (84a:31002)
 Shapiro, Joel H. See Nagel, Alexander; et al., (84a:31002)

31C35 Martin boundary theory [See also 60J50.]

secondary classifications:

- Cranston, M. (with Orey, S.; Rösler, Uwe) The Martin boundary of two-dimensional Ornstein-Uhlenbeck processes. (84j:60085)
 Orey, S. See Cranston, M.; et al., (84j:60085)
 Rösler, Uwe See Cranston, M.; et al., (84j:60085)

31C99 None of the above, but in this section

- Higuti, Isao Régularité et propriété de convergence dominée des potentiels d'un noyau-fonction non-symétrique. [Regularity and property of dominated convergence of the potentials of a nonsymmetric kernel function] 84b:31010a
 Existence de résolvantes associées à un noyau vérifiant le principe de domination. [Existence of resolvents associated to a kernel satisfying the domination principle] 84b:31010b
 Křiváňková, Dagmar On a maximum principle in potential theory. (Czech summary) 84d:31009
 Vuorinen, Matti On the Harnack constant and the boundary behavior of Harnack functions. 84c:31008

secondary classifications:

- Belyaev, A. A. Integral representation of functions harmonic in a domain of Hilbert space. (Russian. English summary) (84d:46067a)
 The mean value theorem for harmonic functions in a domain of Hilbert space. (Russian. English summary) (84d:46067b)
 Doob, J. L. A potential theoretic approach to martingale theory. (84c:60067)
 Kumagai, Donna The measure spectrum of a uniform algebra and subharmonicity. (84a:46109)
 Wittmann, Rainer Sur les potentiels réguliers. (English summary) [On regular potentials] (84i:60096)

31D05 Axiomatic potential theory

- Anandam, Victor Energy function and balayage. (French summary) 84f:31014
 Bănuțescu, Martha H -cones of functions on topological groups. 84f:31015
 Barth, Thomas Sur le principe du minimum en théorie du potentiel. (English summary) [Minimum principle of potential theory] 84i:31006
 Bauer, Heinz Harmonische Räume. [Harmonic spaces] 84b:31007
 Boboc, N. (with Bucur, Gh.) Potentials and pure potentials in H -cones. 84c:31008
 Brelot, Marcel Refinements on the superharmonic continuation (application of a Gowrisankaran's minimum principle). 84b:31008
 Bucur, Gh. See Boboc, N., 84c:31008
 Dellacherie, C. (with Feyel, Denis; Mokobodzki, G.) Intégrales de capacités fortement sous-additives. [Strongly subadditive capacity integrals] 84f:31016
 Feyel, Denis Sur le théorème de partition de M. Brelot. [On M. Brelot's partition theorem] 84m:31010
 See also Dellacherie, C.; et al., 84f:31016
 Fuglede, Bent Fonctions BLD et fonctions finement surharmoniques. [BLD functions and finely superharmonic functions] 84b:31009
 Localization in fine potential theory and uniform approximation by subharmonic functions. 84c:31009
 Integral representation of fine potentials. 84g:31008
 Lukes, Jaroslav (with Malý, Jan) Fine hyperharmonicity without axiom D. 84b:31008b
 Lyons, Terry J. Cones of lower semicontinuous functions and a characterisation of finely superharmonic functions. 84b:31008a
 Maeda, Fumi-Yuki Semilinear perturbation of harmonic spaces. 84f:31017
 Malý, Jan See Lukes, Jaroslav, 84b:31008b
 Mokobodzki, G. See Dellacherie, C.; et al., 84f:31016
 Oja, Kirsti Exceptional sets and harmonic morphisms. 84d:31010
 Popa, Liliana Fonctions C -inférieurement semi-continues. [C-lower semicontinuous functions] 84m:31011

de la Pradelle, A. Sur le caractère métrique d'un espace harmonique de Brelot. [On the metric character of a Brelot harmonic space] 84b:31010

Sur la représentation intégrale des fonctions pseudo-excessives. [On the integral representation of pseudoeccessive functions] 84b:31011

Taylor, John Christopher An elementary proof of the theorem of Fatou-Naim-Doob. 84a:31004

Vesely, Jiří Restricted mean value property in axiomatic potential theory. 84c:31010

Wittmann, Rainer On the existence of Shilov boundaries. 84m:31012

secondary classifications:

Singman, David Exceptional sets in a product of harmonic spaces. (84d:31007)

Wittmann, Rainer Kacscche Potentialtheorie für Resolventen, Markoffsche Prozesse und harmonische Räume. [Kac potential theory for resolvents, Markov processes and harmonic spaces] (84g:60126)

32-XX SEVERAL COMPLEX VARIABLES AND ANALYTIC SPACES (For infinite-dimensional holomorphy, see also 46G20, 58B12.)

32-01 Elementary exposition, textbooks

Kopfermann, Klaus See Rothstein, Wolfgang. 84c:32001

Krantz, Steven G. ★Function theory of several complex variables. 84c:32001

Rothstein, Wolfgang (with Kopfermann, Klaus) ★Funktionentheorie mehrerer komplexer Veränderlicher. (German) [Theory of functions of several complex variables] 84c:32001

secondary classifications:

Hervé, Michel ★Les fonctions analytiques. (French) [Analytic functions] (84h:30001)

32-02 Advanced exposition (research surveys, monographs, etc.)

Lê Dũng Tráng (with Teissier, Bernard) Report on the problem session. 84c:32002

Teissier, Bernard See Lê Dũng Tráng. 84c:32002

secondary classifications:

Aizenberg, L. A. (with Dautov, Sh. A.) ★Differential forms orthogonal to holomorphic functions or forms, and their properties. (84c:32005)

Dautov, Sh. A. See Aizenberg, L. A. (84c:32005)

Diederich, Klas (with Lieb, Ingo) ★Konvexität in der komplexen Analysis. (German) [Convexity in complex analysis] (84h:32021)

Graham, Ian Zero sets and extension theorems for the H^p and Nevanlinna classes on the unit ball and polydisc in C^n . (84j:32001)

Lieb, Ingo See Diederich, Klas. (84h:32021)

(Simha, R. R.) See Aizenberg, L. A.; et al., (84c:32005)

32-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

(Ahlfors, Lars Valerian) See Teichmüller, Oswald. (84a:01062)

(Gehring, Frederick W.) See Teichmüller, Oswald. (84a:01062)

Teichmüller, Oswald ★Gesammelte Abhandlungen. (German) [Collected papers] (84a:01062)

32-04 Explicit machine computation and programs (not the theory of computation or programming)

32-06 Proceedings, conferences, etc.

(Boutet de Monvel, Louis) See Mathematics and physics. 84m:32001

(Carrell, James B.) See Group actions and vector fields. 84f:32001

(Doebner, Heinz-Dietrich) See Twistor geometry and nonlinear systems. 84c:32001

(Douady, Adrien) See Mathematics and physics. 84m:32001

(Palev, Tchavdar D.) See Twistor geometry and nonlinear systems. 84c:32001

(Verdier, Jean-Louis) See Mathematics and physics. 84m:32001

Group actions and vector fields ★Group actions and vector fields. 84f:32001

Mathematics and physics ★Mathématique et physique. (French) [Mathematics and physics] 84m:32001

Paris ★Mathématique et physique. (French) [Mathematics and physics] 84m:32001

Primorsko ★Twistor geometry and nonlinear systems. 84c:32001

Seminar:

Mathematics and physics ★Mathématique et physique. (French) [Mathematics and physics] 84m:32001

Polish-North American, Group Actions and Vector Fields ★Group actions and vector fields. (84f:32001)

Singularities in complex analytic geometry ★Singularities in complex analytic geometry. (Japanese) 84d:32001

Summer School:

Bulgarian, Mathematical Problems of Quantum Field Theory ★Twistor geometry and nonlinear systems. 84c:32001

Symposium:

Singularities in Complex Analytic Geometry ★Singularities in complex analytic geometry. (Japanese) 84d:32001

Twistor geometry and nonlinear systems ★Twistor geometry and nonlinear systems. 84c:32001

Vancouver, B.C. ★Group actions and vector fields. 84f:32001

secondary classifications:

(Aroca Hernández-Ros, José Manuel) See Algebraic geometry. (84h:14002)

(Buchweitz, Ragnar) See Algebraic geometry. (84h:14002)

(Giusti, Marc) See Algebraic geometry. (84h:14002)

(Itaka, Shigeru) See Algebraic varieties and analytic varieties. (84j:14004)

(Laine, Ilpo) See Value distribution theory. (84c:30003)

(Merle, Michel) See Algebraic geometry. (84h:14002)

(Orlik, Peter) See Singularities. (84h:14004a) and (84h:14004b)

(Rickman, Seppo) See Value distribution theory. (84c:30003)

(Ueno, Kenji) See Classification of algebraic and analytic manifolds. (84m:14003)

(Yang, Chung Chun) See Value distribution theory and its applications. (84m:30003)

Algebraic geometry ★Algebraic geometry. (84h:14002)

Algebraic varieties and analytic varieties ★Algebraic varieties and analytic varieties. (84j:14004)

Arcata, Calif. ★Singularities. Part 1. (84h:14004a)

★Singularities. Part 2. (84h:14004b)

Classification of algebraic and analytic manifolds ★Classification of algebraic and analytic manifolds. (84m:14003)

Conference:

Algebraic Geometry ★Algebraic geometry. (84h:14002)

Joensuu ★Value distribution theory. (84c:30003)

Katata ★Classification of algebraic and analytic manifolds. (84m:14003)

La Rabida ★Algebraic geometry. (84h:14002)

Meeting:

American Mathematical Society ★Value distribution theory and its applications. (84m:30003)

New York ★Value distribution theory and its applications. (84m:30003)

On the topology of compact complex surfaces ★Sur la topologie des surfaces complexes compactes. (French) [On the topology of compact complex surfaces] (84m:32036)

Session:

Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

Singularities ★Singularities. Part 1. (84h:14004a)

★Singularities. Part 2. (84h:14004b)

Summer Research Institute:

Singularities ★Singularities. Part 1. (84h:14004a)

★Singularities. Part 2. (84h:14004b)

Summer School:

Nordic, Mathematics ★Value distribution theory. (84c:30003)

Sur la topologie des surfaces complexes compactes ★Sur la topologie des surfaces complexes compactes. (French) [On the topology of compact complex surfaces] (84m:32036)

Symposium:

Algebraic varieties and analytic varieties ★Algebraic varieties and analytic varieties. (84j:14004)

Classification of algebraic and analytic manifolds ★Classification of algebraic and analytic manifolds. (84m:14003)

Tokyo ★Algebraic varieties and analytic varieties. (84j:14004)

Value distribution theory ★Value distribution theory. (84c:30003)

Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

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Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

secondary classifications:

- Avanissian, V. Sur les fonctions harmoniques d'ordre quelconque et leur prolongement analytique dans C^N . [On harmonic functions of arbitrary order and their analytic continuation in C^N] (84i:32004)
- Barth, Theodore J. The Kobayashi indicatrix at the center of a circular domain. (84f:32021)
- Bell, Steven R. An extension of Alexander's theorem on proper self-mappings of the ball in C^n . (84f:32028)
- Carmichael, Richard D. Generalization of H^p functions in tubes. I. (84h:32003)
- Kanemaru, Tadayoshi A remark on the Lu Qi Keng conjecture. (84d:32034)
- Kodama, Akio On generalized Siegel domains with exponent (c_1, c_2, \dots, c_n) . II. (84i:32039)
- Mazur, Ryszard On a certain class of holomorphic functions of several complex variables. (German and Russian summaries) (84m:32004)
- Meril, Alex Analytic functionals with unbounded carriers and mean periodic functions. (84i:46050)
- Yang, P. C. Automorphism of tube domains. (84b:32038)
- Zharinov, V. V. Distributive lattices and the "edge of the wedge" theorem of Bogolyubov. (84d:32010)

32A10 Holomorphic functions

- Alexander, Herbert On zero sets for the ball algebra. 84i:32002
- Berg, Gunnar Torsten Bounded holomorphic functions of several variables. 84c:32002
- Dobrowolska, Krystyna (with Liczberski, Piotr) On some differential inequalities for holomorphic functions of many variables. 84a:32001
- Graham, Ian Zero sets and extension theorems for the H^p and Nevanlinna classes on the unit ball and polydisc in C^n . 84j:32001
- Jörcke, Burghard A higher-dimensional analogue of Privalov's theorem. (Russian) 84h:32001
- Pseudocontinuation and properties of analytic functions on boundary sets of positive measure. (Russian. English summary) 84f:32002
- Khokhlov, Yu. E. Biholomorphy of solutions of an inverse boundary value problem in C^n . (Russian) 84b:32002
- Liczberski, Piotr See Dobrowolska, Krystyna. 84a:32001
- Mazur, Ryszard Distortion properties of holomorphic functions of several complex variables. 84d:32002
- On a certain class of holomorphic functions of several complex variables. (German and Russian summaries) 84m:32004
- McDonald, John N. Measures on the torus which are real parts of holomorphic functions. 84i:32003
- Shchekhorokii, A. I. Some properties of holomorphic mappings in C^n . (Russian) 84b:32003
- Majorant properties of holomorphic functions of the Hölder class. (Russian) 84m:32005
- Sibony, Nessim Constructions de fonctions holomorphes bornées. [Constructions of bounded holomorphic functions] (See 84i:35006)
- Zhuang, Qi Tai A Schwarz lemma on holomorphic functions of two complex variables. (Chinese) 84j:32002

secondary classifications:

- Abdukirimov, A. A problem of analytic continuation from a discrete set for functions of complex variables. (Russian) (84c:32009)
- Burbea, Jacob Inequalities for holomorphic functions of several complex variables. (84j:32030)
- Harris, Gary A. Real-analytic submanifolds which are local uniqueness sets for holomorphic functions of C^n . (84f:32005)
- Kaplan, Stanley On a theorem of Liapounoff on holomorphic solutions of singular first order partial differential equations. (84k:35036)
- Laville, Guy Étude de deux opérateurs du quatrième ordre en analyse complexe. (English summary) [Two fourth-order partial differential operators appearing in complex analysis] (84c:32017)
- Meise, Reinhold G. A remark on the ported and the compact-open topology for spaces of holomorphic functions on nuclear Fréchet spaces. (84a:46103)
- Meril, Alex Analytic functionals with unbounded carriers and mean periodic functions. (84i:46050)
- Sitté, András Bounds on Ising partition functions. I. (84k:82029a)
- Bounds on Ising partition functions. II. Application to frustration. (84k:82029b)

32A15 Entire functions

- Aliiev, I. A. L_p -estimates for differential operators in the class of entire functions of several variables. (Russian. English and Azerbaijani summaries) 84d:32003
- Nikol'skii type inequalities in terms of indicators of diagrams of entire functions of several variables. (Russian. English and Azerbaijani summaries) 84f:32003
- Avanissian, V. Sur les fonctions harmoniques d'ordre quelconque et leur prolongement analytique dans C^N . [On harmonic functions of arbitrary order and their analytic continuation in C^N] 84i:32004
- Berndtsson, B. Zeros of analytic functions of several variables. 84c:32003
- Favorov, S. Yu. Entire functions of completely regular growth of several variables. (Russian) 84c:32004
- Meril, Alex Symbole holomorphe. [Holomorphic symbol] 84g:32002
- Napalkov, V. V. Comparison of topologies in some spaces of entire functions. (Russian) 84d:32004
- Ostrovskii, I. V. Zero sets of entire periodic Hermitian-positive functions. (Russian) 84m:32006
- Popov, V. I. (with Savchenko, V. S.) p -indicator of entire functions and optimal control problems. (Russian) 84b:32004

Sarkar, P. K. On the space of entire double Dirichlet functions. 84m:32007

On Gol'dberg order and Gol'dberg type of an entire function of several complex variables represented by multiple Dirichlet series. 84b:32005

Savchenko, V. S. See Popov, V. I. 84b:32004

Storchayeva, G. D. A mapping of Appel-like polynomials by means of infinite-order differential operators with constant coefficients. (Russian) 84b:32006

secondary classifications:

- Berenstein, Carlos A. (with Taylor, B. A.; Yger, Alain) Sur les systèmes d'équations différence-différentielles. [On systems of difference-differential equations] (84i:42011)
- Bozhinov, Nikolai S. (with Dimovski, Ivan Kh.) Convolutions, multipliers and commutants related to double complex Dirichlet expansions. (84b:30004)
- Dimovski, Ivan Kh. See Bozhinov, Nikolai S. (84b:30004)
- Dineen, Sean Analytic functionals on fully nuclear spaces. (84c:46042)
- Jain, Pawan Kumar (with Singh, Balbir) Characterisations of bounded sets in the space of entire Dirichlet transforms of several complex variables having finite growth. (84b:46035)
- Manolitsakis, I. Two-dimensional scattered fields: a description in terms of the zeros of entire functions. (84b:78020)
- Masuda, Kyūya A note on the convolution theorem on functions of several variables. (84c:44007)
- Matos, Mario C. Convolution operators in spaces of uniform nuclear entire functions. (84c:46045)
- Moreau, Jean-Charles Lemmes de Schwarz en plusieurs variables et applications arithmétiques. [Schwarz lemmas in several variables and arithmetical applications] (84i:10038)
- Singh, Balbir See Jain, Pawan Kumar. (84b:46035)
- Struppa, Daniele C. Systems of convolution equations and LAU-spaces. (Italian summary) (84i:46049)
- Taylor, B. A. See Berenstein, Carlos A.; et al. (84i:42011)
- Yger, Alain Fonctions définies dans le plan et vérifiant certaines propriétés de moyenne. (English summary) [Functions defined in the plane and satisfying certain mean properties] (84c:39005)
- See also Berenstein, Carlos A.; et al. (84i:42011)

32A17 Normal families

- Mushkarov, Oleg K. Familles normales de fonctions presque-holomorphes. [Normal families of almost holomorphic functions] 84b:32002
- Nöno, Kiyoharu Normality of separately normal families. 84i:32003a
- Families of polyanalytic functions of two complex variables. 84i:32003b

secondary classifications:

- Kwak, Myung H. Meromorphic mappings into compact complex manifolds with a Grauert positive bundle of q -forms. (84f:32027)

32A20 Meromorphic functions

- Azoff, E. (with Clancey, Kevin F.; Gohberg, Israel) On line integrals of rational functions of two complex variables. 84a:32002
- Clancey, Kevin F. See Azoff, E.; et al. 84a:32002
- Gohberg, Israel See Azoff, E.; et al. 84a:32002

secondary classifications:

- Nguyen Van Khuê On meromorphic functions with values in locally convex spaces. (84c:32007)

32A22 Nevanlinna theory: growth estimates (For geometric theory, see 32H25, 32H30.)

- Katzberg, Harald Complex exponential terms with only finitely many zeros. (See 84i:03008)
- Matsugu, Yasuo On a problem of Kujala. 84g:32003
- Okada, Masami Un théorème de Bézout transcendant sur C^n . [A transcendental Bézout theorem on C^n] 84d:32005

secondary classifications:

- Alexander, Herbert A note on projective capacity. (84d:32021)
- Biancofiore, Aldo A defect relation for meromorphic maps. (84k:32033)
- Blel, Mongi Fonctions plurisubharmoniques et idéal définissant un ensemble analytique. [Plurisubharmonic functions and ideal defining an analytic set] (84a:32026)
- Favorov, S. Yu. Entire functions of completely regular growth of several variables. (Russian) (84c:32004)
- Matsugu, Yasuo On the uniform Blaschke condition and the zero sets of bounded holomorphic functions. (84a:32011)
- Molzon, Robert Holomorphic mappings in the Nevanlinna class. (84i:32035)
- Philippou, Patrice Interpolation dans les espaces affines. [Interpolation in affine spaces] (84i:32031)
- Shiffman, Bernard Introduction to the Carlson-Griffiths equidistribution theory. (84j:32033)
- Stoll, Wilhelm Introduction to value distribution theory of meromorphic maps. (84a:32041)
- Yoshioka, Tsunéo Cohomologie à estimation L^2 avec poids plurisubharmoniques et extension des fonctions holomorphes avec contrôle de la croissance. [Cohomology with L^2 bounds with plurisubharmonic weights, and extension of holomorphic functions with control on growth] (84c:32011)

32A25 Integral representation

- Aizenberg, L. A. (with Dautov, Sh. A.) ★ Differential forms orthogonal to holomorphic functions or forms, and their properties. **84c:32005**
- Andersson, Mats Erik Lennart See Berndtsson, B. **84j:32003**
- Berndtsson, B. (with Andersson, Mats Erik Lennart) Henkin-Ramirez formulas with weight factors. (French summary) **84j:32003**
- Dautov, Sh. A. See Aizenberg, L. A., **84c:32005**
- Gong, Sheng A remark on integral of Cauchy type in several complex variables. (See **84i:00020**)
- Ishankulov, T. Determination of analytic functions of several complex variables from their values on part of the boundary of the domain of regularity. (Russian) (See **84m:35003**)
- Kytmanov, A. M. Calculation of an integral of Martinelli-Bochner type in a ball and some of its applications. (Russian) **84m:32008**
- Laurent-Thiebaut, Christine Formules intégrales et théorèmes du type "Bochner" sur une variété de Stein. (English summary) [Integral formulas and theorems of "Bochner" type on a Stein manifold] **84c:32003**
- Nasibov, F. G. Extremal problems in classes of analytic functions of several variables. (Russian) **84b:32007**
- Ramey, Wade (with Ullrich, David) The pointwise Fatou theorem and its converse for positive plurisubharmonic functions. **84c:32003**
- (Simha, R. R.) See Aizenberg, L. A.; et al., **84c:32005**
- Simonzhnikov, S. D. The general form of a continuous linear functional on the space of functions that are holomorphic in a generalized ball. (Russian) **84a:32004**
- Tereschenko, G. M. Integral representations of functions that are holomorphic in domains of type T_1 . (Russian) **84a:32005**
- Tsuno, Yoshimichi Integral representation of an analytic functional. **84a:32006**
- Ullrich, David See Ramey, Wade, **84c:32003**

secondary classifications:

- Bonami, Aline (with Lohoué, Noël) Projecteurs de Bergman et Szegő pour une classe de domaines faiblement pseudo-convexes et estimations L^p . [Bergman and Szegő projectors for a class of weakly pseudoconvex domains and L^p estimates] **84b:32008**
- Carmichael, Richard D. Generalization of H^p functions in tubes. I. (**84b:32003**)
- Droste, Bernd Extension of analytic functional calculus mappings and duality by $\bar{\partial}$ -closed forms with growth. (**84c:46056**)
- Leinartas, E. K. A generalization of the Hadamard product in C^n . (Russian) (**84c:32002**)
- Lohoué, Noël See Bonami, Aline, (**84b:32008**)
- Napalkov, V. V. Comparison of topologies in some spaces of entire functions. (Russian) (**84d:32004**)
- Struppa, Daniele C. Systems of convolution equations and LAU-spaces. (Italian summary) (**84i:46049**)

32A27 Local theory of residues [See also 32C30.]

- Mikrtchyan, M. A. Some problems connected with the application of the multidimensional logarithmic residue to systems of nonlinear algebraic equations. (Russian) **84c:32004**
- The calculation of some integrals of rational forms. (Russian. Armenian summary) **84c:32005**

secondary classifications:

- Aizenberg, L. A. Application of multidimensional logarithmic residue for representation in the form of the integral of the difference between the number of integer points in a domain and its volume. (Russian) (**84j:10044**)
- Hopkins, Glenn An algebraic approach to Grothendieck's residue symbol. (**84d:14009**)

32A30 Other generalizations of function theory of one complex variable (should also be assigned at least one classification number from Section 30) (For functions of several hypercomplex variables, see 30G35.)

- Atabaei, M. A holomorphy criterion for functions of several complex variables. (Russian) **84c:32005**
- Bozhinov, Nikolai S. (with Dimovski, I. H.) A convolutional approach to multiplier problem for multiple complex Dirichlet expansions. **84m:32009**
- Dimovski, I. H. See Bozhinov, Nikolai S., **84m:32009**
- Farkov, Yu. A. Faber-Erokin basis functions of several variables and estimates of ϵ -entropy. (Russian) **84j:32004**
- Kakichev, V. A. Investigation of a three-dimensional truncated Riemann problem by Fourier's method. (Russian) **84d:32006**
- Ryan, John Complexified Clifford analysis. **84c:32006**
- Safarov, D. Liouville's theorem for generalized analytic functions of several complex variables. (Russian) **84j:32005**
- Savel'ev, V. I. Zero-type imbedding of a sphere into complex surfaces. (Russian. English summary) **84d:32007**
- Valashek, Ya. Approximation in multidimensional Hardy spaces H^p , $0 < p \leq 1$. (Russian. English and Georgian summaries) **84i:32004**
- Yu, Jia Rong Uniqueness of analytic functions of several complex variables, weighted approximation of functions of several real variables, and moment problems in higher dimensions. (Chinese. English summary) **84c:32006**
- Yuzhakov, A. P. The Lagrange expansion for the branches of a multivalued implicit function. (Russian) **84a:32007**

secondary classifications:

- Delsarte, Philippe (with Genin, Yves; Kamp, Yves) Stability of multidimensional systems. (**84d:93035**)
- (with Genin, Yves; Kamp, Yves) An equivalence between bounded multivariable functions and a class of bounded single-variable functions. (**84h:94019**)
- Dzhvarshvili, A. G. The cluster set of a function of two variables. (Russian) (**84j:32007**)
- Genin, Yves See Delsarte, Philippe; et al., (**84d:93035**) and (**84h:94019**)
- Izverceanu, P. N. Operators on algebras with cyclic base. (Romanian. German summary) (**84m:30079**)
- Jörjick, Burghard Pseudocontinuation and properties of analytic functions on boundary sets of positive measure. (Russian. English summary) (**84f:32002**)
- Kakichev, V. A. Two two-dimensional analogues of the Hilbert problem. (Russian) (**84d:32009**)
- Kamp, Yves See Delsarte, Philippe; et al., (**84d:93035**) and (**84h:94019**)
- Kovalishina, I. V. Analytic theory of a class of interpolation problems. (Russian) (**84i:30043**)
- Leinartas, E. K. A generalization of the Hadamard product in C^n . (Russian) (**84c:32002**)
- Lounesto, Pertti Hypercomplex analysis as a form of multivariable function theory. (Finnish. English summary) (**84c:30069**)
- Luecking, Daniel H. A technique for characterizing Carleson measures on Bergman spaces. (**84c:32025**)
- Mushkarov, Oleg K. Familles normales de fonctions presque-holomorphes. [Normal families of almost holomorphic functions] (**84h:32002**)
- Rubel, Lee A. Internal-external factorization in Lumer's Hardy spaces. (**84m:30055**)

32A35 H^p -spaces [See also 32M15, 42B30, 43A85, 46J15.]

- Amar, Éric Sur un problème de W. Rudin concernant les fonctions holomorphes et bornées. (English summary) [On a problem of W. Rudin concerning bounded holomorphic functions] **84a:32008**
- Bonami, Aline (with Lohoué, Noël) Projecteurs de Bergman et Szegő pour une classe de domaines faiblement pseudo-convexes et estimations L^p . [Bergman and Szegő projectors for a class of weakly pseudoconvex domains and L^p estimates] **84b:32008**
- Carmichael, Richard D. Generalization of H^p functions in tubes. I. **84b:32003**
- (with Richters, Stephen P.) Holomorphic functions in tubes which have distributional boundary values and which are H^p functions. **84g:32004**
- Chee, P. S. On the extension of H^p -functions in polydiscs. **84g:32005**
- Gowda, M. Seetharama Nonfactorization theorems in weighted Bergman and Hardy spaces on the unit ball of C^n ($n > 1$). **84i:32005**
- Järvi, Pentti Removable singularities for H^p -functions. **84a:32009**
- Lohoué, Noël See Bonami, Aline, **84b:32008**
- Matsugu, Yasuo A characterization of bounded holomorphic functions. **84a:32010**
- On the uniform Blaschke condition and the zero sets of bounded holomorphic functions. **84a:32011**
- Mochizuki, Nozomu Inequalities of Fejér-Riesz type for holomorphic functions on certain product domains. **84g:32006**
- Richters, Stephen P. See Carmichael, Richard D., **84g:32004**
- Ryll, J. (with Wojtaszczyk, P.) On homogeneous polynomials on a complex ball. **84f:32004**
- Wojtaszczyk, P. Hardy spaces on the complex ball are isomorphic to Hardy spaces on the disc, $1 \leq p < \infty$. **84i:32006**
- See also Ryll, J., **84f:32004**

secondary classifications:

- Ahern, Patrick On the behavior near a torus of functions holomorphic in the ball. (**84i:32023**)
- Ball, Joseph A. (with Helton, J. William) Lie groups over the field of rational functions, signed spectral factorization, signed interpolation, and amplifier design. (**84j:94033**)
- Beller, Eliyahu (with Fisher, Stephen D.; Pinchuk, Bernard) Minimal interpolation for harmonic functions. (**84a:30039**)
- Bourgain, Jean The nonisomorphism of H^1 -spaces in one and several variables. (**84f:46073**)
- Chang, Sun-Yung Alice (with Fefferman, Robert) The Calderón-Zygmund decomposition on product domains. (**84a:42028**)
- Fefferman, Robert See Chang, Sun-Yung Alice, (**84a:42028**)
- Fisher, Stephen D. See Beller, Eliyahu; et al., (**84a:30039**)
- Graham, Ian Zero sets and extension theorems for the H^p and Nevanlinna classes on the unit ball and polydisc in C^n . (**84j:32001**)
- Hakim, Monique (with Sibony, Nessim) Fonctions holomorphes bornées sur la boule unité de C^n . [Bounded holomorphic functions on the unit ball of C^n] (**84j:32008a**)
- Helton, J. William See Ball, Joseph A., (**84j:94033**)
- Low, Erik A construction of inner functions on the unit ball in C^n . (**84j:32008b**)
- Mitchell, Josephine Singular integrals on bounded symmetric domains. II. (**84i:32047b**)
- (with Sampson, Gary) Singular integrals on bounded symmetric domains in C^n . (**84i:32047a**)
- Pinchuk, Bernard See Beller, Eliyahu; et al., (**84a:30039**)
- Polyakov, P. L. Continuation of bounded holomorphic functions from an analytic curve in general position into the polydisc. (Russian) (**84c:32019**)
- Rudin, Walter Moebius-invariant algebras in balls. (**84m:32023**)
- Sampson, Gary See Mitchell, Josephine, (**84i:32047a**)
- Sibony, Nessim See Hakim, Monique, (**84j:32008a**)
- Valashek, Ya. Approximation in multidimensional Hardy spaces H^p , $0 < p \leq 1$. (Russian. English and Georgian summaries) (**84i:32004**)

32A40 Boundary behavior

- Debiard, Amédée** (with Gaveau, Bernard) Valeurs frontières des fonctions holomorphes d'intégrale de Dirichlet finie et capacité sous elliptique. (English and Polish summaries) [Boundary values of holomorphic functions of a finite Dirichlet integral and subelliptic capacity] **84d:32008**
- Dovbush, P. V.** See **Gavrilov, V. I.**, **84g:32007**
- Dzhvarshvili, A. G.** On the Meier theorem for meromorphic functions of two variables. (Russian. English and Georgian summaries) **84j:32006**
A two-dimensional integral of Cauchy type. (Russian) **84a:32012**
The cluster set of a function of two variables. (Russian) **84j:32007**
- Dzhvarshvili, I. A.** Boundary properties of a class of analytic functions in a bicylinder. (Russian. English and Armenian summaries) **84e:32006**
- Gaveau, Bernard** See **Debiard, Amédée**, **84d:32008**
- Gavrilov, V. I.** (with Dovbush, P. V.) Boundary singularities generated by limit sets of functions of several complex variables. (Russian) **84g:32007**
- Hakim, Monique** (with Sibony, Nessim) Fonctions holomorphes bornées sur la boule unité de \mathbb{C}^n . [Bounded holomorphic functions on the unit ball of \mathbb{C}^n] **84j:32008a** (with Sibony, Nessim) Fonctions holomorphes bornées et limites tangentielles. [Bounded holomorphic functions and tangential limits] **84m:32011**
- Jörcke, Burglind** The two-constants theorem for functions of several complex variables. (Russian) **84m:32010**
- Kakichev, V. A.** Two two-dimensional analogues of the Hilbert problem. (Russian) **84d:32009**
- Lojasiewicz, Stanisław, Jr.** (with Tomassini, Giuseppe) Valeurs au bord des formes holomorphes. [Boundary values of holomorphic forms] **84a:32013**
- Lew, Erik** A construction of inner functions on the unit ball in \mathbb{C}^n . **84j:32008b**
- Rodino, Luigi** A boundary value problem for functions of several complex variables in polycylinders. **84b:32009**
- Rudin, Walter** Inner functions in the unit ball of \mathbb{C}^n . **84i:32007**
- Sibony, Nessim** See **Hakim, Monique**, **84j:32008a** and **84m:32011**
- Tamm, Martin** Sur l'image par une fonction holomorphe bornée du bord d'un domaine pseudoconvexe. (English summary) [On the range of a holomorphic function on the boundary of a pseudoconvex domain] **84g:32008**
- Tomassini, Giuseppe** See **Lojasiewicz, Stanisław, Jr.**, **84a:32013**
- Zharinov, V. V.** Distributive lattices and the "edge of the wedge" theorem of Bogolyubov. **84d:32010**

secondary classifications:

- Ahern, Patrick** On the behavior near a torus of functions holomorphic in the ball. (84i:32023)
- Aleksandrov, A. B.** Inner functions on spaces of homogeneous type. (Russian. English summary) (84m:31008)
- Azukawa, Kazuo** (with Suzuki, Masaaki) The Bergman metric on a Thullen domain. (84d:32030)
- Carmichael, Richard D.** (with Richters, Stephen P.) Holomorphic functions in tubes which have distributional boundary values and which are H^p functions. (84g:32004)
- Chollet, Anne-Marie** Ensembles de zéros et ensembles pics pour des classes de fonctions analytiques à régularité imposée dans un domaine strictement pseudo-convexe. [Zero sets and peak sets for some classes of analytic functions with given regularity in a strictly pseudoconvex domain] (84e:32014)
- Drozhzhinov, Yu. N.** A multidimensional Tauberian theorem for holomorphic functions of bounded argument and the quasiasymptotic behavior of passive systems. (Russian) (84g:32001)
- Fichera, Gaetano** On a theorem of L. Amoroso in the theory of analytic functions of two complex variables. (Italian) (84e:31006)
- Globevnik, Josip** (with Stout, Edgar Lee) Holomorphic functions with highly noncontinuable boundary behavior. (84h:32016)
- Jörcke, Burglind** A higher-dimensional analogue of Privalov's theorem. (Russian) (84h:32001)
- Pseudocontinuation and properties of analytic functions on boundary sets of positive measure. (Russian. English summary) (84f:32002)
- Kas'yanov, V. I.** Direct methods for solving some boundary value problems of the theory of analytic functions. (Russian) (84c:30061)
- Park, Young Sik** Fourier ultra-hyperfunctions valued in a Fréchet space. (84a:46093)
- Patrizio, Giorgio** Boundary behavior of meromorphic maps. (84m:32031)
- Pinchuk, S. I.** Boundary behavior of analytic sets and algebroid mappings. (Russian) (84g:32041)
- Richters, Stephen P.** See **Carmichael, Richard D.**, (84g:32004)
- Stout, Edgar Lee** See **Globevnik, Josip**, (84h:32016)
- Suzuki, Masaaki** See **Azukawa, Kazuo**, (84m:32030)

32A45 Hyperfunctions [See also 46F15.]

secondary classifications:

- Bros, J.** (with Iagolnitzer, D.) Structure of scattering functions at m -particle thresholds in a simplified theory and nonholonomic character of the S matrix and Green's functions. (84m:81161)
- Havas, Peter** See **Rosenblum, Arnold**, et al., (84e:78018)
- Iagolnitzer, D.** See **Bros, J.**, (84m:81161)
- Ito, Yoshifumi** Analytic linear mappings and vector valued hyperfunctions. (84f:46062)
- Kataoka, Kiyomi** On the theory of Radon transformations of hyperfunctions. (84e:58067)
- Kates, Ronald E.** See **Rosenblum, Arnold**, et al., (84e:78018)
- Morimoto, Mitsuo** See **Sargos, Patrick**, (84c:46032)
- Muro, Masakazu** Singular spectrums of hyperfunctions and Fourier transforms of group invariant measures on singular orbits of prehomogeneous vector spaces. I. (84i:58113)
- Rosenblum, Arnold** (with Kates, Ronald E.; Havas, Peter) Use of hyperfunctions for classical radiation-reaction calculations. (84e:78018)

- Saburi, Yutaka** Vanishing theorems of cohomology groups with values in the sheaves $\mathcal{O}_{\text{loc},g}$ and $\mathcal{O}_{\text{loc},*}$. (84g:32017)
- Sargos, Patrick** (with Morimoto, Mitsuo) Transformation des fonctionnelles analytiques à porteurs non compacts. [Transformation of analytic functionals with noncompact carriers] (84c:46032)
- Sjöstrand, Johannes** Singularités analytiques microlocales. [Microlocal analytic singularities] (84m:58151)
- Yoshino, Kunio** Lerch's theorem for analytic functional. (84f:46056)

32A99 None of the above, but in this section

secondary classifications:

- Dineen, Seán** ★ Complex analysis in locally convex spaces. (84b:46050)
- Sadullaev, A.** Solution of the Dirichlet problem in a polydisc for the complex Monge-Ampère equation. (Russian) (84g:32029)
- Timoney, Richard M.** Maximal invariant spaces of analytic functions. (84d:32022)

32Bxx Local analytic geometry [See also 13-XX and 14-XX.]

Bochmak, Jacek Topology of real analytic sets—some open problems. 84a:32014

32B05 Analytic algebra and generalizations, preparation theorems

- Draper, Richard N.** (with Fischer, Klaus) Derivations and small \mathbb{C}_x . **84i:32008b** (with Fischer, Klaus) Derivations into the integral closure. **84i:32008a**
- Fischer, Klaus** See **Draper, Richard N.**, **84i:32008**
- Gemidzhiev, Georgi** Some methods of division, algorithms and criteria for polynomials. (Bulgarian. English and Russian summaries) **84h:32004**
- Levasseur, Thierry** Anneaux d'opérateurs différentiels. [Rings of differential operators] **84j:32009**
- Mazet, P.** Une démonstration géométrique du Nullstellensatz analytique complexe. (English summary) [A geometric proof of the complex analytic Nullstellensatz] **84m:32012**
- Müller, G.** Endliche Automorphismengruppen analytischer \mathbb{C} -Algebren und ihre Invarianten. [Finite automorphism groups of analytic \mathbb{C} -algebras and their invariants] **84d:32007**
- Rodman, Leiba** Remark on irreducible factorizations of polynomials in several variables. **84h:32005**
- Szafraniec, Zbigniew** On the division of functions of class \mathcal{C}^* by real analytic functions. (Russian summary) **84i:32009a**
On the division of \mathcal{C}^* -functions by real analytic functions. (Russian summary) **84i:32009b**

secondary classifications:

- Daepf, Ulrich** The saturation of k -analytic rings and topological equivalence of associated analytic set germs. (84h:32006)
- Drużkowski, Ludwik M.** Malgrange-Zerner theorem in infinite-dimensional case. (84d:46065)
- van den Essen, Arno** Le conoyau de l'opérateur $\partial/\partial x_n$ agissant sur un \mathcal{O}_x -module holonome. (English summary) [The cokernel of the operator $\partial/\partial x_n$ acting on a holonomic \mathcal{O}_x -module] (84c:58208)
- Schemmel, Klaus-Peter** Eine notwendige und hinreichende Bedingung für die Approximationseigenschaft analytischer Potenzreihenringe über einem Körper beliebiger Charakteristik. [A necessary and sufficient condition for the approximation property of analytic power series rings over a field of arbitrary characteristic] (84j:13003)

32B10 Germs of analytic sets

- Daepf, Ulrich** The saturation of k -analytic rings and topological equivalence of associated analytic set germs. **84h:32006**
- Kimura, Ikuro** A note on ideal sheaves. **84d:32011**

secondary classifications:

- Kruzhilin, N. G.** (with Shcherbina, N. V.) Some examples of domains of holomorphy without an analytic structure on the boundary. (Russian) (84e:32008)
- Lê Dũng Tráng** Limites d'espaces tangents sur les surfaces. [Limits of tangent spaces over surfaces] (84h:32008)
- Shcherbina, N. V.** See **Kruzhilin, N. G.**, (84e:32008)
- Szafraniec, Zbigniew** On the division of functions of class \mathcal{C}^* by real analytic functions. (Russian summary) (84i:32009a)
On the division of \mathcal{C}^* -functions by real analytic functions. (Russian summary) (84i:32009b)

32B15 Analytic subsets of affine space

secondary classifications:

- Shcherbina, N. V.** Decomposition of a common boundary of two domains of holomorphy into analytic curves. (Russian) (84b:32018)

32B20 Semi-analytic sets and subanalytic sets

- Andradas, C.** Normal decompositions of semi-algebraic sets. **84j:32010**
- Fontani, M. Grazia** (with Fortuna, Elisabetta; Galbiati, Margherita) Sur les projections d'un ensemble semi-analytique. (Italian summary) [On the projections of a semianalytic set] **84b:32010**

- Fortuna, Elisabetta *See* Fontani, M. Grazia; et al., 84b:32010
 Galbiati, Margherita *See* Fontani, M. Grazia; et al., 84b:32010
 Risler, Jean-Jacques Sur le théorème des fonctions composées différentiables. (English summary) [On the theorem of composite differentiable functions] 84k:32008
 Stasica, Jacek The Whitney condition for subanalytic sets. 84g:32009

secondary classifications:

- Bierstone, Edward (with Milman, Pierre D.) Composite differentiable functions. (84c:58016)
 (with Schwarz, Gerald W.) The extension problem and related themes in differential analysis. (84c:58027)
 Coste, Michel Ensembles semi-algébriques. [Semialgebraic sets] (84c:14023)
 Durfee, Alan H. Neighborhoods of algebraic sets. (84m:32013)
 Fortuna, Elisabetta (with Galbiati, Margherita) Le théorème de complexification semi-propre. [The semiproper complexification theorem] (84g:32010)
 Galbiati, Margherita *See* Fortuna, Elisabetta, 84g:32010
 Milman, Pierre D. *See* Bierstone, Edward, (84c:58016)
 Schwarz, Gerald W. *See* Bierstone, Edward, (84c:58027)
 Trotman, David Comparing regularity conditions on stratifications. (84j:58021)

32B25 Triangulation and related questions

secondary classifications:

- Durfee, Alan H. Neighborhoods of algebraic sets. (84m:32013)
 Johnson, Francis E. A. On the triangulation of stratified sets and singular varieties. (84c:58007)

32B30 Local singularities [See also 14B05, 32C40, 32C42.]

- Arnol'd, V. I. Some open problems in the theory of singularities. 84j:32011
 Bruce, J. W. (with Gaffney, Terence) Simple singularities of mappings $C^0 \rightarrow C^2, 0$. 84d:32012
 Chmutov, S. V. Monodromy groups of critical point of functions. 84h:32007
 Dimca, Alexandru (with Gibson, C. G.) Contact germs from the plane to the plane. 84j:32012
 Germes de fonctions définies sur des singularités isolées d'hypersurfaces. (English summary) [Function germs defined on isolated hypersurface singularities] 84j:32013
 Gaffney, Terence *See* Bruce, J. W., 84d:32012
 Gibson, C. G. *See* Dimca, Alexandru, 84j:32012
 Jacquemard, Alain Fibrations de Milnor pour des applications réelles. (English summary) [Milnor fibrations of real functions] 84i:32010
 Langevin, Rémi Geometry of the neighbourhood of a singularity. 84i:32011
 Lê Dũng Tráng Limites d'espaces tangents sur les surfaces. [Limits of tangent spaces over surfaces] 84h:32008
 Mather, John N. (with Yau, Stephen S.-T.) Classification of isolated hypersurface singularities by their moduli algebras. 84c:32007
 Neumann, Walter D. A calculus for plumbing applied to the topology of complex surface singularities and degenerating complex curves. 84a:32015
 Randall, Richard The fundamental group of the complement of a union of complex hyperplanes. 84c:32016
 Yano, Tamaki Exponents of singularities of plane irreducible curves. 84h:32009
 Yau, Stephen S.-T. s^{n-1} invariant for isolated n -dimensional singularities and its application to moduli problem. 84b:32011
 Various numerical invariants for isolated singularities. 84b:32012
See also Mather, John N., 84c:32007
 Yoshinaga, Etsuo Topological types of isolated singularities defined by weighted homogeneous polynomials. 84k:32009

secondary classifications:

- Arnol'd, V. I. On some problems in singularity theory. (84i:58019)
 Bennett, Bruce (with Yau, Stephen S.-T.) Milnor number and classification of isolated singularities of holomorphic maps. (84k:32013)
 Draper, Richard N. (with Fischer, Klaus) Derivations and small C_4 . (84i:32008b)
 (with Fischer, Klaus) Derivations into the integral closure. (84i:32008a)
 Ebeling, Wolfgang Milnor lattices and geometric bases of some special singularities. (84d:14002)
 Edmonds, Allan L. (with Ewing, John H.; Kalkarni, Ravi S.) Torsion free subgroups of Fuchsian groups and tessellations of surfaces. (84d:20046)
 Ewing, John H. *See* Edmonds, Allan L.; et al., (84d:20046)
 Fel'dman, G. L. Global dimension of rings of differential operators. (Russian) (84g:16023)
 Fischer, Klaus *See* Draper, Richard N., (84i:32008a) and (84i:32008b)
 Gau, Yih Nan (with Lipman, Joseph) Differential invariance of multiplicity. (84k:32014)
 Hiura, Masayuki *See* Yoshinaga, Etsuo; et al., (84j:14040)
 Ilyashenko, Yu. S. (with Pyartli, A. S.) Materialization of Poincaré resonances and divergence of normalizing series. (Russian. English summary) (84b:58079)
 Kalkarni, Ravi S. *See* Edmonds, Allan L.; et al., (84d:20046)
 Kirillov, A. N. The zeta function of the monodromy of a singular point of a complete intersection. (Russian) (84i:14007)
 Lê Dũng Tráng ★ Geometry of tangents on singular spaces and Chern classes. (84m:32018)
 Lê Văn Thành Le nombre de Milnor et l'exposant de bifurcation. (English summary) [Milnor number and bifurcation exponent] (84f:32011)
 Lipman, Joseph *See* Gau, Yih Nan, (84k:32014)
 Michel, Françoise (with Weber, Claude) Nœuds algébriques décomposables. (English summary) [Decomposable algebraic knots] (84a:57018)
 Müller, G. Endliche Automorphismengruppen analytischer C-Algebren und ihre Invarianten. [Finite automorphism groups of analytic C-algebras and their invariants] (84k:32007)

(Nakano, Shigeo) *See* Lê Dũng Tráng, (84m:32018)

Nguyễn Hữu Đức (with Nguyễn Tiến Đại) Stabilité de l'interaction géométrique entre deux composantes holonomes simples. (English summary) [Stability of the geometric interaction between two holonomic simple components] (84j:58033)

Systèmes de Gauss-Manin à bord et stabilité de l'interaction analytique. (English summary) (84j:58127)

Nguyễn Tiến Đại *See* Nguyễn Hữu Đức, (84j:58033)

Ohyanagi, Shigeki *See* Yoshinaga, Etsuo; et al., (84j:14040)

O'Shea, Donald B. Finite jumps in Milnor number imply vanishing folds. (84d:14001)

Pyartli, A. S. *See* Ilyashenko, Yu. S., (84b:58079)

Saito, Kyoji Primitive forms for a universal unfolding of a function with an isolated critical point. (84c:32031)

Séade, José A. (with Steer, Brian) The elements of π_j^* represented by invariant framings of quotients of $(SL_j(\mathbb{R}))$ by certain discrete subgroups. (84b:14001)

Shiota, Masahiro Equivalence of differentiable mappings and analytic mappings. (84c:58039)

Steer, Brian *See* Séade, José A., (84b:14001)

Suzuki, Masahiko The μ -number constant stratum of a quasihomogeneous function of corank two is smooth. (84b:58028)

Tang, Xian Jiang Asymptotic expansions of some oscillatory integrals with inhomogeneous phase function. (Chinese. English summary) (84e:58073)

Teissier, Bernard Polyèdre de Newton jacobien et équisingularité. [Jacobian Newton polyhedra and equisingularity] (84h:14007)

(Urabe, Tohsuke) *See* Lê Dũng Tráng, (84m:32018)

Weber, Claude *See* Michel, Françoise, (84a:57018)

Yau, Stephen S.-T. Deformations and equitopological deformations of strongly pseudoconvex manifolds. (84g:32023)

See also Bennett, Bruce, (84k:32013)

Yoshinaga, Etsuo (with Ohyanagi, Shigeki; Hiura, Masayuki) Remarks on maximally elliptic singularities. (84j:14040)

32B99 None of the above, but in this section

secondary classifications:

Hirashita, Yukio Local finiteness of analytic arcs. (84d:30085)

Lê Dũng Tráng Faisceaux constructibles quasi-unipotents. [Quasiunipotent constructible sheaves] (84g:32015)

32Cxx General theory of analytic spaces

32C05 Real-analytic manifolds, real-analytic spaces [See also 14G30, 58A07.]

- Bochnak, Jacek (with Efrogmson, Gustave A.) An introduction to Nash functions. 84c:32013
 (with Kucharz, Wojciech; Shiota, Masahiro) The divisor class groups of some rings of global real analytic, Nash or rational regular functions. 84k:32010
 (with Kucharz, Wojciech; Shiota, Masahiro) On algebraicity of global real analytic sets and functions. 84i:32012
 Diederich, Klas (with Forness, John Erik) Thin complements of complete Kähler domains. 84c:32017
 Durfee, Alan H. Neighborhoods of algebraic sets. 84m:32013
 Efrogmson, Gustave A. *See* Bochnak, Jacek, 84c:32013
 Forness, John Erik *See* Diederich, Klas, 84c:32017
 Fortuna, Elisabetta (with Galbiati, Margherita) Le théorème de complexification semi-propre. [The semiproper complexification theorem] 84g:32010
 Galbiati, Margherita *See* Fortuna, Elisabetta, 84g:32010
 Harris, Gary A. Real-analytic submanifolds which are local uniqueness sets for holomorphic functions of C^1 . 84f:32005
 Jaworski, Piotr Positive definite analytic functions and vector bundles. (Russian summary) 84m:32014
 Kucharz, Wojciech *See* Bochnak, Jacek; et al., 84i:32012 and 84k:32010
 Shiota, Masahiro *See* Bochnak, Jacek; et al., 84i:32012 and 84k:32010
 Tognoli, Alberto Problemes d'approximation pour espaces analytiques réels. (English and Italian summaries) [Approximation problems for real analytic spaces] 84m:32015

secondary classifications:

- Benedetti, Riccardo (with Tognoli, Alberto) Théorèmes d'approximation en géométrie algébrique réelle. [Approximation theorems in real algebraic geometry] (See 84c:14002)
 Bierstone, Edward (with Milman, Pierre D.) Composite differentiable functions. (84c:58016)
 Chern, S. S. (with Moser, J. K.) Real hypersurfaces in complex manifolds. (Russian) (84g:32031)
 Efrogmson, Gustave A. The extension theorem for Nash functions. (84i:58002)
 Fontani, M. Grazia (with Fortuna, Elisabetta; Galbiati, Margherita) Sur les projections d'un ensemble semi-analytique. (Italian summary) [On the projections of a semianalytic set] (84b:32010)
 Fortuna, Elisabetta *See* Fontani, M. Grazia; et al., (84b:32010)
 Galbiati, Margherita *See* Fontani, M. Grazia; et al., (84b:32010)
 Ischebeck, Friedrich On real one-dimensional cycles. (84h:14011)
 Ivanov, N. V. Approximation of smooth manifolds by real algebraic sets. (Russian) (84i:57029)
 Sharpening of the Nash-Tognoli theorem. (Russian. English summary) (84a:58009)
 Milman, Pierre D. *See* Bierstone, Edward, (84c:58016)
 Moser, J. K. *See* Chern, S. S., (84g:32031)

- Risler, Jean-Jacques** Sur le théorème des fonctions composées différentiables. (English summary) [On the theorem of composite differentiable functions] (84i:32008)
- Roggero, Margherita** Sur la factoriabilité de l'anneau des fonctions polynomiales d'une variété réelle. (English summary) [On the factoriability of the polynomial ring on a real variety] (84j:14019)
- Se-Ashi, Yutaka** On holomorphic vector fields on compact nondegenerate real hypersurfaces of complex manifolds. (84a:53059)
- (Shcherbak, I. G.)** See Chern, S. S.; et al., (84g:32031)
- (Shcherbak, O. P.)** See Chern, S. S.; et al., (84g:32031)
- Szafrańiec, Zbigniew** On the division of functions of class C^r by real analytic functions. (Russian summary) (84i:32009a)
- On the division of C^r -functions by real analytic functions. (Russian summary) (84i:32009b)
- Tognoli, Alberto** Algebraic approximation in differential topology. (See 84b:00011)
- Le problème d'algébrisation des polyèdres est local. [The problem of the algebraization of polyhedra is local] (84c:57010)
- See also **Benedetti, Riccardo**, (See 84e:14002)
- Trèves, François** A remark on the Poincaré lemma in analytic complexes with nondegenerate Levi form. (84h:58140)
- Zinzius, E.** Ein spieltheoretische Folgerung aus einem Satz über die Nullstellenmenge reell-analytischer Funktionen mehrerer Veränderlicher. (English and Russian summaries) [A game-theoretic corollary of a theorem on the zero set of real-analytic functions of several variables] (84j:90104)

32C10 Complex manifolds {For almost complex manifolds, see 53C15.}

- Borcea, Ciprian** The Chern class of a divisor. (Romanian. English summary) 84c:32008
- Gómez Mont, Xavier** Locally determined ideals in analytic spaces. (Spanish) 84j:32014
- Hitchin, N. J.** Kählerian twistor spaces. 84b:32014
- Mok, Ngaiming** (with Siu, Yum Tong; Yau, Shing Tung) The Poincaré-Lelong equation on complete Kähler manifolds. 84g:32011
- Sabbah, Claude** Fonctions de Morse sur une variété analytique complexe. [Morse functions on a complex analytic manifold] (84c:32010)
- Siu, Yum Tong** See Mok, Ngaiming; et al., 84g:32011
- Succi, Francesco** Complex manifolds with boundary. (Italian) 84g:32012
- Uluçay, Cengiz** On the restricted ideal sheaves. (Turkish summary) 84m:32016
- Yau, Shing Tung** See Mok, Ngaiming; et al., 84g:32011

secondary classifications:

- Carrell, James B.** (with Sommese, Andrew John) $SL(2, \mathbb{C})$ actions on compact Kaehler manifolds. (84c:32031)
- Friedrich, Th.** (with Kurke, Herbert) Compact four-dimensional self-dual Einstein manifolds with positive scalar curvature. (84b:53043)
- Gauduchon, Paul** Le théorème de dualité pluri-harmonique. (English summary) [The pluriharmonic duality theorem] (84h:32012)
- Hirschowitz, André** On the convergence of formal equivalence between embeddings. (84m:32027)
- Itoh, Mitsuhiro** Some geometrical aspects of Riemannian manifolds with a pole. (84g:53067)
- Jurchescu, M.** A theorem on C^∞ -families of complex manifolds. (84d:32031)
- Kato, Masahide** Examples of simply connected compact complex 3-folds. (84f:32033)
- Kurke, Herbert** See Friedrich, Th., (84b:53043)
- Morrow, Jim** (with Rossi, Hugo) Pluricanonical embeddings. (84a:32020)
- Newman, E. T.** An introduction to complex manifolds. (See 84d:83002)
- Rizza, Giovanni Battista** Some geometric remarks on almost complex manifolds. (Italian) (84j:53049)
- Rossi, Hugo** See Morrow, Jim, (84a:32020)
- Schumacher, Georg** Eine Anwendung des Satzes von Calabi-Yau auf Familien kompakter komplexer Mannigfaltigkeiten. [An application of the Calabi-Yau theorem to families of compact complex manifolds] (84j:32029)
- Sommese, Andrew John** See Carrell, James B., (84c:32031)
- Takegoshi, Kenshō** On weakly 1-complete surfaces without nonconstant holomorphic functions. (84i:32026)

32C15 Complex spaces

- Commichau, Michael** (with Grauert, Hans) Das formale Prinzip für kompakte komplexe Untermannigfaltigkeiten mit 1-positivem Normalenbündel. [The formal principle for compact complex submanifolds with 1-positive normal bundles] 84a:32018
- Decker, Wolfram** Topologien auf Schnittmoduln kohärenter komplex- und reell-analytischer Garben. (English summary) [Topologies on modules of sections in coherent complex- and real-analytic sheaves] 84a:32019
- Grauert, Hans** See Commichau, Michael, 84a:32018
- Schneider, Michael** Vollständige, fast-vollständige und mengen-theoretisch-vollständige Durchschnitte in Steinschen Mannigfaltigkeiten. [Complete, almost-complete and set-theoretic complete intersections in Stein manifolds] 84i:32013
- Schwartz, Marie-Hélène** Classes et caractères de Chern-Mather des espaces linéaires. (English summary) [Chern-Mather classes and characters of linear spaces] 84h:32011
- Tworzewski, P.** (with Winiarski, T.) Analytic sets with proper projections. 84f:32006
- Winiarski, T.** See Tworzewski, P., 84f:32006

secondary classifications:

- Hassan, H. S.** (with Lloyd, N. G.) On the structure of the set of solutions of certain holomorphic two-point boundary value problems. (84c:34006)
- Lloyd, N. G.** See Hassan, H. S., (84c:34006)
- Urata, Toshio** The hyperbolicity of complex analytic spaces. (84h:32031)

32C20 Normal analytic spaces

- Adkins, William A.** (with Andreotti, Aldo; Leahy, John V.) ★Weakly normal complex spaces. 84g:32013
- Andreotti, Aldo** See Adkins, William A.; et al., 84g:32013
- Greither, Cornelius** Eine Charakterisierung maximaler komplexer Räume. [A characterization of maximal complex spaces] 84d:32013
- Leahy, John V.** See Adkins, William A.; et al., 84g:32013

secondary classifications:

- Cumino, Caterina** (with Greco, Silvio; Manaresi, Mirella) Bertini theorems for weak normality. (84i:14036)
- Greco, Silvio** See Cumino, Caterina; et al., (84i:14036)
- Gurjar, Rajendra V.** Varieties dominated by C^n . (84a:32024)
- Manaresi, Mirella** See Cumino, Caterina; et al., (84i:14036)

32C25 Analytic subsets and submanifolds

- Campana, Frédéric** Réduction algébrique d'un morphisme faiblement Kähliérien propre et applications. [Algebraic reduction of a proper weakly Kähler morphism and applications] 84i:32014
- Morimoto, Hiroshi** On the generic existence of holomorphic sections and complex analytic bordism. 84c:32009
- Morrow, Jim** (with Rossi, Hugo) Pluricanonical embeddings. 84a:32020
- Rossi, Hugo** See Morrow, Jim, 84a:32020

secondary classifications:

- Diederich, Klas** (with Fornæss, John Erik) Thin complements of complete Kähler domains. (84c:32017)
- Fornæss, John Erik** See Diederich, Klas, (84c:32017)
- Harris, Gary A.** Real-analytic submanifolds which are local uniqueness sets for holomorphic functions of C^1 . (84f:32005)
- Kalka, Morris** Measures associated to Chern, Levine and Nirenberg norms. (84h:32029)
- Lê Dũng Tráng** Faisceaux constructibles quasi-unipotents. [Quasiunipotent constructible sheaves] (84g:32015)
- Ogievetskii, O. V.** \hat{a} -cohomology on infinitesimal neighborhoods. (Russian) (84f:32036)
- Rodman, Leiba** Remark on irreducible factorizations of polynomials in several variables. (84h:32005)

32C30 Integration on analytic sets and spaces, currents {For local theory, see 32A25 or 32A27.}

- Barlet, D.** Développement asymptotique des fonctions obtenues par intégration sur les fibres. [Asymptotic expansion of functions obtained by integration on the fibers] 84c:32021
- Demaily, Jean-Pierre** Sur les nombres de Lelong associés à l'image directe d'un courant positif fermé. (English summary) [On the Lelong numbers associated with the direct image of a closed positive current] 84c:32011
- Formules de Jensen en plusieurs variables et applications arithmétiques. (English summary) [Jensen formulas in several variables and arithmetic applications] 84d:32014
- Courants positifs extrémaux et conjecture de Hodge. [Extremal positive currents and the Hodge conjecture] 84f:32007
- Vaillant, J.** Intégrales singulières holomorphes. [Holomorphic singular integrals] (See 84i:35003)

secondary classifications:

- de Bartolomeis, Paolo** (with Tomassini, Giuseppe) Traces of pluriharmonic functions. (84d:32023)
- Bedford, Eric** (with Taylor, B. A.) A new capacity for plurisubharmonic functions. (84d:32024)
- Berndtsson, B.** Zeros of analytic functions of several variables. (84c:32003)
- El Mir, Hassine** Sur le prolongement des courants positifs fermés à travers des sous-variétés réelles. (English summary) [The extension of positive d -closed currents across real submanifolds] (84f:32013)
- Gauduchon, Paul** Le théorème de dualité pluri-harmonique. (English summary) [The pluriharmonic duality theorem] (84h:32012)
- Kalka, Morris** Measures associated to Chern, Levine and Nirenberg norms. (84h:32029)
- Langevin, Rémi** (with Shifrin, Theodore) Polar varieties and integral geometry. (84i:53068)
- Maier, K.** Integral geometry on linear complexes of lines. (Russian) (84f:53060)
- Michelsson, M. L.** On the existence of special metrics in complex geometry. (84c:32063)
- Ohtsuki, Makoto** A residue formula for Chern classes associated with logarithmic connections. (84h:32037)
- Shifrin, Theodore** See Langevin, Rémi, (84i:53068)
- Skoda, Henri** Prolongement des courants, positifs, fermés de masse finie. [Extension of closed, positive currents of finite mass] (84h:32020)
- Taylor, B. A.** See Bedford, Eric, (84d:32024)
- Tomassini, Giuseppe** See de Bartolomeis, Paolo, (84d:32023)

32C35 Analytic sheaves and cohomology groups [See also 14Fxx, 18F20, 55N30.]

- Alessandrini, Lucia** On the cohomology of a holomorphically separable complex analytic space. (Italian summary) 84g:32014
- Ballico, Edoardo** Vanishing of cohomology groups and Stein spaces. (Italian. English summary) 84j:32015
- Coen, Salvatore** A remark on coherent finitely generated sheaves. 84a:32022

Constantinescu, Alexandru A proof of Cartan's theorems A and B for Klein surfaces. **84i:32015**

Fujiki, Akira A coherency theorem for direct images with proper supports in the case of a 1-convex map. **84d:32015**

Golovin, V. D. On a topological property of holomorphically complete complex spaces. (Russian) **84c:32010**

Generalization of the Lefschetz theorem on hyperplane sections. (Russian)

84d:32016

Grauert, Hans Kantenkohomologie. [Edge homology] **84d:32012**

Kajiura, Jeji (with Koyanagi, Ryohi) Erratum: "Stein property and the existence of holomorphic global solutions of a system of differential equations with complex parameters" [Funkcial. Ekvac. **23** (1980), no. 2, 123-133; MR 82k:32032]. **84f:32008**

(with Koyanagi, Ryohi) Correction: "The Stein property and the existence of holomorphic global solutions of a system of differential equations with complex parameters" [Funkcial. Ekvac. **23** (1980), no. 2, 123-133; MR 82k:32032]. **84m:32017**

Kashiwara, Masaki Quasi-unipotent constructible sheaves. **84f:32009**
Holonomic systems of linear differential equations with regular singularities and related topics in topology. **84j:32016**

Koyanagi, Ryohi See Kajiura, Jeji. **84f:32008** and **84m:32017**

Lê Dũng Tráng Faisceaux constructibles quasi-unipotents. [Quasiunipotent constructible sheaves] **84g:32015**

Nguyen Van Khuê On meromorphic functions with values in locally convex spaces. **84c:32007**

Penkov, I. B. Linear differential operators and the cohomology of analytic spaces. (Russian) **84g:32016**

Saburi, Yutaka Vanishing theorems of cohomology groups with values in the sheaves $\mathcal{O}_{m, \gamma}$ and \mathcal{O}_{loc} . **84g:32017**

Sasakura, Nobuo Cohomology with polynomial growth and completion theory. **84c:32011**

Wolfhardt, Klaus Zur lokalen Hochschild-Homologie eines komplexen Raums. (English summary) [On the local Hochschild homology of a complex space] **84c:32023**

secondary classifications:

Ancona, Vincenzo Faisceaux amples sur les espaces analytiques. (English summary) [Ample sheaves on analytic spaces] **84c:32029**

Bănică, Constantin Sur les Ext-globaux dans une déformation. [On the global Ext in a deformation] **84g:32032**

de Bartolomeis, Paolo (with Tomassini, Giuseppe) Finitely generated ideals in $A^*(D)$. **84c:32025**

Buchner, Michael A. (with Fritzsche, Klaus) The cohomological and analytic completeness of $P(\mathbb{A}^2_{\mathbb{C}}) \setminus G_{\text{reg}}$. **84c:32018**

Fritzsche, Klaus See Buchner, Michael A. **84c:32018**

Gigante, Giuliana Vector bundles with semidefinite curvature and vanishing of cohomology. (Italian. English summary) **84a:53068**

Kashiwara, Masaki See Sato, Mikio; et al. **84h:14054**

Kawai, Takahiro An example of a complex of linear differential operators of infinite order. **84i:58112**

See also Sato, Mikio; et al. **84h:14054**

Kosarew, Siegmund Ein Verschwindungssatz für gewisse Kohomologiegruppen in Umgebung kompakter komplexer Unterräume mit konvex/konkavem Normalenbündel. [A vanishing theorem for certain cohomology groups in the neighborhood of compact complex subspaces with convex/concave normal bundle] **84d:32043**

Kuchment, P. A. Floquet theory for partial differential equations. (Russian) **84b:35018**

LeBrun, Claude The first formal neighbourhood of ambitwistor space for curved space-time. **84d:32044**

Malgrange, Bernard Réduction d'un système microdifférentiel aux points génériques. I. [Reduction of a microdifferential system to the generic points. I] **84j:58118**

Mihui, I. Remarks about complex analytic foliate manifolds. **84i:32040**

Nguyen Van Khuê On the extension of continuous linear maps in function spaces and splittiness of Dolbeault complexes of holomorphic Banach bundles. **84d:32041**

Peternell, Thomas Über exzeptionelle Mengen. (English summary) [On exceptional sets] **84d:32042**

Sato, Mikio (with Kashiwara, Masaki; Kawai, Takahiro) Linear differential equations of infinite order and theta functions. **84h:14054**

Tajima, Shinichi Analyse microlocale sur les variétés de Cauchy-Riemann et problème du prolongement des solutions holomorphes des équations aux dérivées partielles. [Microlocal analysis on Cauchy-Riemann manifolds and the extension problem for holomorphic solutions of partial differential equations] **84i:32031**

Tomassini, Giuseppe See de Bartolomeis, Paolo. **84a:32025**

Yau, Stephen S.-T. Various numerical invariants for isolated singularities. **84b:32012**

32C36 Local cohomology of analytic spaces

Lê Dũng Tráng (with Mebkhout, Zoghman) Variétés caractéristiques et variétés polaires. (English summary) [Characteristic varieties and polar varieties] **84g:32018**

Mebkhout, Zoghman The Riemann-Hilbert problem in higher dimension. **84c:32012**

See also Lê Dũng Tráng. **84g:32018**

secondary classifications:

Kori, Tosiaki Théorème de dualité pour la cohomologie locale au bord des ouverts fortement pseudoconvexes. [Duality theorem for local cohomology at the boundary of strongly pseudoconvex open sets] **84g:32019**

Mebkhout, Zoghman Dualité de Poincaré. [Poincaré duality] **84h:32014**

32C37 Duality theorems

Cassa, Antonio New spectral sequences for duality theorems on complex analytic spaces. (Italian summary) **84c:32013**

Gauduchon, Paul Le théorème de dualité pluri-harmonique. (English summary) [The pluriharmonic duality theorem] **84h:32012**

Kori, Tosiaki Théorème de dualité pour la cohomologie locale au bord des ouverts fortement pseudoconvexes. [Duality theorem for local cohomology at the boundary of strongly pseudoconvex open sets] **84g:32019**

Théorèmes de dualité du type Serre et du type Poincaré-Lefschetz sur la frontière fortement pseudoconvexe. [Duality theorems of Serre and Poincaré-Lefschetz type on the strongly pseudoconvex boundary] **84h:32013**

Mebkhout, Zoghman Dualité de Poincaré. [Poincaré duality] **84h:32014**

secondary classifications:

Golovin, V. D. On a topological property of holomorphically complete complex spaces. (Russian) **84c:32010**

Goresky, R. Mark (with Siegel, Paul) Linking pairings on singular spaces. **84h:55004**

(with MacPherson, Robert D.) Intersection homology. II. **84i:57012**

MacPherson, Robert D. See Goresky, R. Mark. **84i:57012**

Mebkhout, Zoghman The Riemann-Hilbert problem in higher dimension. **84c:32012**
Théorèmes de bidualité locale pour les \mathcal{O}_Y -modules holonomes. [Local biduality theorems for holonomic \mathcal{O}_Y -modules] **84a:58075**

Siegel, Paul See Goresky, R. Mark. **84h:55004**

32C40 Singularities

Bennett, Bruce (with Yau, Stephen S.-T.) Milnor number and classification of isolated singularities of holomorphic maps. **84h:32013**

Cartier, Pierre Les arrangements d'hyperplans: un chapitre de géométrie combinatoire. [Arrangements of hyperplanes: a chapter of combinatorial geometry] **84d:32017**

Gau, Yih Nan (with Lipman, Joseph) Differential invariance of multiplicity. **84c:32014**

Givental', A. B. Asymptotics of the intersection form of a quasihomogeneous singularity of functions. (Russian) **84f:32010**

See also Varchenko, A. N. **84b:32016**

Kaneko, Jyoichi (with Tokunaga, Shoshi; Yoshida, Masaaki) Complex crystallographic groups. II. **84d:32018**

Kimura, Tatsuo The b-functions and holonomy diagrams of irreducible regular prehomogeneous vector spaces. **84j:32017**

Lê Dũng Tráng Ensembles analytiques complexes avec lieu singulier de dimension un (d'après I. N. Iomdine). [Complex analytic sets with one-dimensional singular locus (following Y. N. Yomdin)] **84b:32015**

★ Geometry of tangents on singular spaces and Chern classes. **84m:32018**

Lê Văn Thành Le nombre de Milnor et l'exposant de bifurcation. (English summary) [Milnor number and bifurcation exponent] **84f:32011**

Lipman, Joseph See Gau, Yih Nan. **84c:32014**

(Nakano, Shigeo) See Lê Dũng Tráng. **84m:32018**

Perron, Bernard "μ constant" implique "type topologique constant" en dimension complexe trois. (English summary) ["μ constant" implies "constant topological type" in complex dimension three] **84g:32020**

Sebastiani, Marcos Variation du nombre de Lefschetz dans une famille d'automorphismes analytiques. [Variation of the Lefschetz number in a family of analytic automorphisms] **84g:32021**

Terao, Hiroaki Arrangements of hyperplanes and their freeness. I. **84i:32016a**

Arrangements of hyperplanes and their freeness. II. The Coxeter equality. **84i:32016b**

Tokunaga, Shoshi (with Yoshida, Masaaki) Complex crystallographic groups. I. **84d:32018a**

See also Kaneko, Jyoichi; et al. **84d:32018b**

(Urabe, Toshio) See Lê Dũng Tráng. **84m:32018**

Varchenko, A. N. (with Givental', A. B.) The period mapping and the intersection form. (Russian) **84b:32016**

Yau, Stephen S.-T. See Bennett, Bruce. **84h:32013**

Yoshida, Masaaki See Tokunaga, Shoshi. **84d:32018a** and Kaneko, Jyoichi; et al. **84d:32018b**

secondary classifications:

Adkins, William A. (with Andreotti, Aldo; Leahy, John V.) ★Weakly normal complex spaces. **84g:32013**

Andreotti, Aldo See Adkins, William A.; et al. **84g:32013**

Appel, K. L. (with Schupp, Paul E.) Artin groups and infinite Coxeter groups. **84h:20028**

Arnol'd, V. I. (with Varchenko, A. N.; Gusein-Zade, S. M.) ★Особенности дифференцируемых отображений. (Russian) [Singularities of differentiable mappings] **84m:58016**

Some open problems in the theory of singularities. **84j:32011**

Bariet, D. Développement asymptotique des fonctions obtenues par intégration sur les fibres. [Asymptotic expansion of functions obtained by integration on the fibers] **84a:32021**

Barthel, Gottfried (with Kaup, Ludger) Topologie des surfaces complexes compactes singulières. [Topology of singular compact complex surfaces] **84j:32035**

Camacho, César (with Lins Neto, Alcides) The topology of integrable differential forms near a singularity. **84g:58017**

Dimca, Alexandru (with Dimca, Gabriela) Two applications of the Thom polynomials. **84h:58022**

Dimca, Gabriela See Dimca, Alexandru. **84h:58022**

Ensnault, Hélène Fibre de Milnor d'un cône sur une courbe plane singulière. [Milnor fibre of a cone on a singular plane curve] **84a:14003**

Gérard, Raymond Meromorphic forms solutions of completely integrable Pfaffian systems with regular singularities. **84a:58012**

Grinblat, V. A. Normalizers of Artin groups. (Russian) **84b:20047**

Gusein-Zade, S. M. See Arnol'd, V. I.; et al. **84m:58016**

Jacquemard, Alain Fibrations de Milnor pour des applications réelles. (English summary) [Milnor fibrations of real functions] (84i:32010)

Kaup, Ludger See Barthel, Gottfried, (84j:32005)

Langvin, Rémi Courbure, feuilletages et singularités algébriques. [Curvature, foliations and algebraic singularities] (84j:14008)

Geometry of the neighbourhood of a singularity. (84i:32011)

Leahy, John V. See Adkins, William A.; et al., (84g:32013)

Lê Dũng Tráng Limites d'espaces tangents sur les surfaces. [Limits of tangent spaces over surfaces] (84h:32008)

Levasseur, Thierry Anneaux d'opérateurs différentiels. [Rings of differential operators] (84j:32009)

Lins Neto, Alcides See Camacho, César, (84g:58017)

Mebkhout, Zoghman The Riemann-Hilbert problem in higher dimension. (84c:32012)

Nguyễn Hữu Đức See Nguyễn Tiên Dai; et al., (84m:58134)

Nguyễn Tiên Dai (with Nguyễn Hữu Đức; Pham, Frédéric) Singularités non dégénérées des systèmes de Gauss-Manin réticulés. [Nondegenerate singularities of reticulated Gauss-Manin systems] (84m:58134)

Nguyễn Tu' Cu'ong ★ Freie Auflösung eines flachen holonomen Systems und ihre Entfaltung. (German) [Free resolution of a flat holonomic system and its unfolding] (84d:58074)

See also Nguyễn Tiên Dai; et al., (84m:58134)

Orlik, Peter (with Solomon, Louis) Arrangements defined by unitary reflection groups. (84h:14006)

Palamodov, V. P. Caustics of wave processes and generalized functions that are connected with singular analytic hypersurfaces. (Russian) (84m:58150)

Pham, Frédéric See Nguyễn Tiên Dai; et al., (84m:58134)

Randell, Richard The fundamental group of the complement of a union of complex hyperplanes. (84c:32016)

Reiffen, Hans-Jörg (with Trapp, Heinz Wilhelm) Ein Beitrag zur Lipschitz-Saturierung im unendlichdimensionalen Fall. (English summary) [A contribution to Lipschitz-saturation in the infinite-dimensional case] (84k:32036)

Riekstina, V. Uniform asymptotic expansion of a class of integrals with a logarithmic singularity. (Russian) (84c:41039)

Sasakura, Nobuo Cohomology with polynomial growth and completion theory. (84c:32011)

Schupp, Paul E. See Appel, K. L., (84c:20028)

Seade, José A. Singular points of complex surfaces and homotopy. (84g:57028)

A cobordism invariant for surface singularities. (84k:14028)

Shterenberg, M. I. An investigation using a computer of an equation that is connected with the representation of braid groups. (Russian) (84c:20044)

Solomon, Louis See Orlik, Peter, (84h:14006)

Trapp, Heinz Wilhelm See Reiffen, Hans-Jörg, (84k:32036)

Varchenko, A. N. See Arnold, V. I.; et al., (84m:58016)

Yau, Stephen S.-T. Continuous family of finite-dimensional representations of a solvable Lie algebra arising from singularities. (84k:58043)

32C42 Stratified sets, etc. [See also 32Bxx.]

secondary classifications:

Andradas, C. Normal decompositions of semi-algebraic sets. (84j:32010)

Goresky, R. Mark (with MacPherson, Robert D.) Stratified Morse theory. (84k:58017)

Johnson, Francis E. A. On the presentation of stratified sets and singular varieties. (84h:58009)

Kashiwara, Masaki Holonomic systems of linear differential equations with regular singularities and related topics in topology. (84j:32016)

Lê Dũng Tráng ★ Geometry of tangents on singular spaces and Chern classes. (84m:32018)

MacPherson, Robert D. See Goresky, Mark, (84k:58017)

(Nakano, Shigeo) See Lê Dũng Tráng, (84m:32018)

Teufel, Michael Abstract prestratified sets are (b)-regular. (84f:58010)

Trotman, David Comparing regularity conditions on stratifications. (84j:58021)

(Urbate, Tetsuke) See Lê Dũng Tráng, (84m:32018)

Vicente, José L. Zariski equisingular stratification of a variety. (Spanish) (84f:14002)

Xu, Sen Lin The estimate $s \leq 2^s - 1$ of the number s of steps in the splitting by rank process for an algebraic variety in C^n or R^n is the best possible. (Chinese summary) (84i:14011)

32C45 Modifications, resolution of singularities [See also 14E15.]

Ancona, Vincenzo (with Tomassini, Giuseppe) ★ Modifications analytiques. (French) [Analytic modifications] 84g:32022

Bingener, Jürgen On the existence of analytic contractions. 84b:32017

Matsumoto, Yukio See Yamada, Akio, 84k:32015

Tomassini, Giuseppe See Ancona, Vincenzo, 84g:32022

Yamada, Akio (with Matsumoto, Yukio) Network induction and resolution diagrams of the Brieskorn singularities. 84k:32015

Yau, Stephen S.-T. Deformations and equitopological deformations of strongly pseudoconvex manifolds. 84g:32023

secondary classifications:

Campana, Frédéric Réduction algébrique d'un morphisme faiblement Kählérien propre et applications. [Algebraic reduction of a proper weakly Kähler morphism and applications] (84i:32014)

Esnault, Hélène Sur l'identification de singularités apparaissant dans des groupes algébriques complexes. [On the identification of singularities appearing in complex algebraic groups] (84h:14005)

Fujiki, Akira Kählerian normal complex surfaces. (84k:32035)

Lauffer, Henry B. Weak simultaneous resolution for deformations of Gorenstein surface singularities. (84k:32030)

Lê Dũng Tráng Limites d'espaces tangents sur les surfaces. [Limits of tangent spaces over surfaces] (84h:32008)

(with Mebkhout, Zoghman) Variétés caractéristiques et variétés polaires. (English summary) [Characteristic varieties and polar varieties] (84g:32018)

Lejeune-Jalabert, Monique Désingularisation explicite des surfaces quasi-homogènes dans C^3 . [Explicit desingularization of quasihomogeneous surfaces in C^3] (84j:14021)

Mebkhout, Zoghman See Lê Dũng Tráng, (84g:32018)

Morimoto, Hiroshi On the generic existence of holomorphic sections and complex analytic bordism. (84c:32009)

Nguyễn Hữu Đức See Nguyễn Tiên Dai; et al., (84m:58134)

Nguyễn Tiên Dai (with Nguyễn Hữu Đức; Pham, Frédéric) Singularités non dégénérées des systèmes de Gauss-Manin réticulés. [Nondegenerate singularities of reticulated Gauss-Manin systems] (84m:58134)

(Nguyễn Tu' Cu'ong) See Nguyễn Tiên Dai; et al., (84m:58134)

Peternell, Thomas Erratum and addendum to the article: "On exceptional sets" [Manuscripta Math. 37 (1982), no. 1, 19-26; MR 84d:32042]. (German. English summary) (84g:32044)

Pham, Frédéric See Nguyễn Tiên Dai; et al., (84m:58134)

Schwartz, Marie-Hélène Classes et caractères de Chern-Mather des espaces linéaires. (English summary) [Chern-Mather classes and characters of linear spaces] (84h:32011)

Vo Van Tan Embedding theorems and Kählerity for 1-convex spaces. (84c:32029)

32C99 None of the above, but in this section

secondary classifications:

Hamm, Helmut A. Zur Homotopietyp Steinscher Räume. [On the homotopy type of Stein spaces] (84i:32021)

Ueno, Kenji Bimeromorphic geometry of algebraic and analytic threefolds. (84h:14017)

32Dxx Analytic continuation

32D05 Domains of holomorphy

Abe, Makoto On the Nebenhülle. 84f:32012

Kruzhilin, N. G. (with Shcherbina, N. V.) Some examples of domains of holomorphy without an analytic structure on the boundary. (Russian) 84c:32008

Nikić, M. $T(\Omega)$ -bundles over domains in C^n . (Serbo-Croatian. Russian summary) 84d:32019

Shcherbina, N. V. Decomposition of a common boundary of two domains of holomorphy into analytic curves. (Russian) 84h:32018

See also Kruzhilin, N. G., 84c:32008

secondary classifications:

Berg, Gunnar Torsten Complex spaces with plenty of Stein subvarieties. (84c:32013)

Buchner, Michael A. (with Fritzsche, Klaus) The cohomological and analytic completeness of $P(\Lambda^2 C_n) \setminus G_{n,n}$. (84c:32018)

Fritzsche, Klaus See Buchner, Michael A., (84c:32018)

Nôno, Kiyoharu Normality of separately normal families. (84i:32003a)

Families of polyanalytic functions of two complex variables. (84i:32003b)

Pflug, Peter Eine Bemerkung über die Konstruktion von Holomorphiehüllen. [A comment on the construction of envelopes of holomorphy] (84i:32018)

Takase, Masahito Nouvelle construction des enveloppes d'holomorphic des domaines intérieurement ramifiés. [New construction for envelopes of holomorphy of interiorly ramified domains] (84m:32019)

Zérialhi, Ahmed Bases communes dans certains espaces de fonctions harmoniques et fonctions séparément harmoniques sur certains ensembles de C^n . (English summary) [Common bases in certain spaces of harmonic and separately harmonic functions on certain sets of C^n] (84i:32020)

32D10 Envelopes of holomorphy

Bedford, Eric (with Gaveau, Bernard) Envelopes of holomorphy of certain 2-spheres in C^2 . 84k:32016

Cerrone, Paolo Nonramified Riemann domains over a complex space: examples and counterexamples. (Italian. English summary) 84d:32020

Fornæss, John Erik (with Zame, William R.) Riemann domains and envelopes of holomorphy. 84i:32017

Gaveau, Bernard See Bedford, Eric, 84k:32016

Kenig, Carlos E. (with Webster, Sidney M.) The local hull of holomorphy of a surface in the space of two complex variables. 84c:32014

Pflug, Peter Eine Bemerkung über die Konstruktion von Holomorphiehüllen. [A comment on the construction of envelopes of holomorphy] 84i:32018

Schottenloher, Martin Spectrum and envelope of holomorphy for infinite-dimensional Riemann domains. 84h:32015

Takase, Masahito Nouvelle construction des enveloppes d'holomorphic des domaines intérieurement ramifiés. [New construction for envelopes of holomorphy of interiorly ramified domains] 84m:32019

Webster, Sidney M. See Kenig, Carlos E., 84c:32014

Zame, William R. See Fornæss, John Erik, 84i:32017

secondary classifications:

Boggers, Al The extension of CR functions to one side of a submanifold of C^n . (84k:32017)

Ivashkovich, S. M. Extension of locally biholomorphic mappings of domains into a complex projective space. (Russian) (84i:32038)

Matsugu, Yasuo Pluriharmonic functions as the real parts of holomorphic functions. (84d:32025)

32D15 Continuation of analytic objects

- Abdulkarimov, A.** A problem of analytic continuation from a discrete set for functions of complex variables. (Russian) **84c:32009**
- Abrahamsson, Leif** Meromorphic extension of holomorphic functions with growth conditions. (French summary) **84c:32019**
- Bogges, Al** (with Polking, John C.) Holomorphic extension of CR functions. **84j:32018**
The extension of CR functions to one side of a submanifold of C^n . **84k:32017**
- Derridj, M.** Inégalités de Carleman et extension locale des fonctions holomorphes. [Carleman inequalities and local extension of holomorphic functions] **84m:32020**
- El Mir, Hassine** Sur le prolongement des courants positifs fermés à travers des sous-variétés réelles. (English summary) [The extension of positive d -closed currents across real submanifolds] **84f:32013**
- Globevnik, Josip** (with Stout, Edgar Lee) Holomorphic functions with highly noncontinuable boundary behavior. **84k:32016**
On holomorphic extensions from spheres in C^2 . **84k:32018**
- Grauert, Hans** Kontinuitätssatz und Hüllen bei speziellen Hartogsschen Körpern. [Continuity theorem and hulls for special Hartogs bodies] **84j:32019**
- Ivashkovich, S. M.** See **Vitushkin, A. G.**, **84f:32015**
- Jarnicki, Marek** Holomorphic functions with restricted growth on complex manifolds. **84c:32015**
Holomorphic continuation of functions with restricted growth. **84c:32010**
- Pinchuk, S. I.** Analytic continuation of holomorphic mappings and problems of holomorphic classification of multidimensional domains. (Russian) **84f:32014**
- Polking, John C.** See **Bogges, Al**, **84j:32018**
- Polyakov, P. L.** Continuation of bounded holomorphic functions from an analytic curve in general position into the polydisc. (Russian) **84c:32019**
- Rea, Claudio** The Cauchy problem for the $\bar{\partial}$ operator. (Italian summary) **84b:32019**
- Skoda, Henri** Prolongement des courants, positifs, fermés de masse finie. [Extension of closed, positive currents of finite mass] **84c:32020**
- Stout, Edgar Lee** See **Globevnik, Josip**, **84k:32016**
- Vitushkin, A. G.** (with Ivashkovich, S. M.) Extension of holomorphic mappings of a real-analytic hypersurface to a complex projective space. (Russian) **84f:32015**
- Yoshioka, Tsunéo** Cohomologie à estimation L^2 avec poids plurisubharmoniques et extension des fonctions holomorphes avec contrôle de la croissance. [Cohomology with L^2 bounds with plurisubharmonic weights, and extension of holomorphic functions with control on growth] **84c:32011**
- Zeriahi, Ahmed** Bases communes dans certains espaces de fonctions harmoniques et fonctions séparément harmoniques sur certains ensembles de C^n . (English summary) [Common bases in certain spaces of harmonic and separately harmonic functions on certain sets of C^n] **84i:32020**

secondary classifications:

- Avanissian, V.** Sur les fonctions harmoniques d'ordre quelconque et leur prolongement analytique dans C^n . [On harmonic functions of arbitrary order and their analytic continuation in C^n] **(84c:32004)**
- Baouendi, M. S.** Microlocalisation hypo-analytique et extension holomorphe de fonctions CR. [Hypoanalytic microlocalization and holomorphic extension of CR functions] **(84c:32029)**
(with Trèves, François) A microlocal version of Bochner's tube theorem. **(84b:35025)**
- Beloshapka, V. K.** Example of a noncontinuable holomorphic transformation of an analytic hypersurface. (Russian) **(84a:32030)**
- Cerrone, Paolo** Nonramified Riemann domains over a complex space: examples and counterexamples. (Italian. English summary) **(84d:32020)**
- Chee, P. S.** On the extension of H^p -functions in polydiscs. **(84g:32005)**
- Drużkowski, Ludwik M.** Malgrange-Zerner theorem in infinite-dimensional case. **(84d:46065)**
- LeBrun, Claude** Spaces of complex null geodesics in complex-Riemannian geometry. **(84c:32023)**
- Lê Hùng Sơn** Fortsetzungssatz für räumliche holomorphe Funktionen. [Continuation theorem for three-dimensional holomorphic functions] **(84b:35024)**
- Meise, Reinhold G.** (with Vogt, Dietmar) Counterexamples in holomorphic functions on nuclear Fréchet spaces. **(84m:46048)**
- Noguchi, Junjiro** Lemma on logarithmic derivatives and holomorphic curves in algebraic varieties. **(84a:32040)**
- Ogievetskii, O. V.** $\bar{\partial}$ -cohomology on infinitesimal neighborhoods. (Russian) **(84f:32036)**
- Pemrose, Roger** Physical space-time and nonrealizable CR-structures. **(84c:32022)**
- Peternell, Thomas** Vektorraumbündel in der Nähe von exzeptionellen Unterräumen—das Modulproblem. [Vector bundles in the neighborhood of exceptional subspaces—the moduli problem] **(84c:32021)**
- Rea, Claudio** Erratum: "Holomorphic two-sided extension of a CR-function defined on a differentiable hypersurface in C^2 " [C. R. Acad. Sci. Paris Sér. I Math. **294** (1982), no. 17, 577–579; MR **83f:32018**]. **(84b:32030)**
- Schottenloher, Martin** Cartan-Thullen theorem for domains spread over \mathbb{Q}^n/\mathbb{R} -spaces. **(84c:46039)**
- Trèves, François** See **Baouendi, M. S.**, **(84b:35025)**
- Vogt, Dietmar** See **Meise, Reinhold G.**, **(84m:46048)**
- Zharinov, V. V.** Distributive lattices and the "edge of the wedge" theorem of Bogolyubov. **(84d:32010)**

32D20 Removable singularities

- Battelli, Flaviano** Removable singularities for the traces of pluriharmonic functions. (Italian. English summary) **84c:32012**
- Cegrell, Urban** Removable singularity sets for analytic functions having modulus with bounded Laplace mass. **84g:32024**
- Kazaryan, M. V.** Holomorphic continuation of functions with special singularities in C^n . (Russian. Armenian summary) **84m:32021**

- Øksendal, Bernt** A stochastic proof of an extension of a theorem of Rado. **84k:32021**
- Riihentaus, Juhani** A note concerning Rado's theorem. **84f:32016**

secondary classifications:

- Graham, Ian** Zero sets and extension theorems for the H^p and Nevanlinna classes on the unit ball and polydisc in C^n . **(84j:32001)**
- Skoda, Henri** Prolongement des courants, positifs, fermés de masse finie. [Extension of closed, positive currents of finite mass] **(84c:32020)**

32D25 Non-Archimedean function theory

- Stawski, M. S.** On the theorem of Hartogs in non-Archimedean valued fields. **84b:32017**

32D99 None of the above, but in this section

secondary classifications:

- Globevnik, Josip** On holomorphic extensions from spheres in C^2 . **(84k:32018)**
- Jimbo, Michio** See **Sato, Mikio**; et al., **(84m:81124)**
- Leinartas, E. K.** A generalization of the Hadamard product in C^n . (Russian) **(84c:32002)**
- Miwa, Tetsuji** See **Sato, Mikio**; et al., **(84m:81124)**
- Sato, Mikio** (with Miwa, Tetsuji; Jimbo, Michio) Holonomic quantum fields. II. The Riemann-Hilbert problem. **(84m:81124)**

32Exx Holomorphic convexity

32E05 Holomorphically convex complex spaces, reduction theory

- Bassanelli, Giovanni** Holomorphic convexity of locally analytic subsets of some complex space. **84c:32016**
- Nardelli, G.** Holomorphically convex compact sets. (Italian. English summary) **84g:32025**

secondary classifications:

- Berg, Gunnar Torsten** Bounded holomorphic functions of several variables. **(84c:32002)**
- Buchner, Michael A.** (with Fritzsche, Klaus) The cohomological and analytic completeness of $P(\Delta^2 C_n) \cdot G_{2,n}$. **(84c:32018)**
- Fritzsche, Klaus** See **Buchner, Michael A.**, **(84c:32018)**

32E10 Stein spaces, Stein manifolds

- Abe, Makoto** (with Furushima, Mikio) Note on the theorem of Cartan-Behnke-Stein. **84b:32018**
- Anjō, Ken-ichi** (with Furushima, Mikio) On Cousin I space and Nullstellensatz. **84c:32017**
- Berg, Gunnar Torsten** Complex spaces with plenty of Stein subvarieties. **84c:32013**
- Furushima, Mikio** Algebras of holomorphic functions. **84b:32020**
See also **Anjō, Ken-ichi**, **84c:32017** and **Abe, Makoto**, **84b:32018**
- Gurjar, Rajendra V.** Varieties dominated by C^n . **84a:32024**
- Hamm, Helmut A.** Zur Homotopietyp Steinscher Räume. [On the homotopy type of Stein spaces] **84c:32021**
- Kajiwarra, Joji** Characterization of Stein subdomains of a complex projective space through Oka's principle. **84c:32022**
- Kosarew, Siegmund** Zwei Bemerkungen über Steinsche Mannigfaltigkeiten. [Two remarks on Stein manifolds] **84g:32026**
- Ohsawa, Takeo** A Stein domain with smooth boundary which has a product structure. **84c:32022**
- Schottenloher, Martin** Embedding of Stein spaces into sequence spaces. **84f:32017**

secondary classifications:

- Akhiezer, D. N.** Compact groups of automorphisms of Stein manifolds. **(84b:32039)**
- Alessandrini, Lucia** On the cohomology of a holomorphically separable complex analytic space. (Italian summary) **(84g:32014)**
- Bedford, Eric** (with Bell, Steven R.; Catlin, David) Boundary behavior of proper holomorphic mappings. **(84b:32032)**
- Bell, Steven R.** See **Bedford, Eric**; et al., **(84b:32032)**
- Catlin, David** See **Bedford, Eric**; et al., **(84b:32032)**
- (Dürr, Hans-Peter)** See **Trimis, Aristotelis**, **(84b:32036)**
- Golovin, V. D.** On a topological property of holomorphically complete complex spaces. (Russian) **(84c:32010)**
- Gómez Mont, Xavier** Locally determined ideals in analytic spaces. (Spanish) **(84j:32014)**
- Jarnicki, Marek** Holomorphic continuation of functions with restricted growth. **(84c:32010)**
- Kajiwarra, Joji** (with Koyanagi, Ryohci) Erratum: "Stein property and the existence of holomorphic global solutions of a system of differential equations with complex parameters" [Funkcial. Ekvac. **23** (1980), no. 2, 123–133; MR **82k:32032**]. **(84f:32008)**
(with Koyanagi, Ryohci) Correction: "The Stein property and the existence of holomorphic global solutions of a system of differential equations with complex parameters" [Funkcial. Ekvac. **23** (1980), no. 2, 123–133; MR **82k:32032**]. **(84m:32017)**
- Koyanagi, Ryohci** See **Kajiwarra, Joji**, **(84f:32008)** and **(84m:32017)**
- Laurent-Thiebaut, Christine** Formules intégrales et théorèmes du type "Bochner" sur une variété de Stein. (English summary) [Integral formulas and theorems of "Bochner" type on a Stein manifold] **(84c:32003)**
- Nguyen Van Khue** On meromorphic functions with values in locally convex spaces. **(84c:32007)**
- Rudolph, Lee** Braided surfaces and Seifert ribbons for closed braids. **(84j:57006)**
- Sasaki, Takeshi** Classification of left invariant complex structures on $GL(2, R)$ and $U(2)$. **(84b:53050)**

Schneider, Michael Vollständige, fast-vollständige und mengen-theoretisch-vollständige Durchschnitte in Steinschen Mannigfaltigkeiten. [Complete, almost-complete and set-theoretic complete intersections in Stein manifolds] (84i:32013)

(Schottenloher, Martin) See Trimis, Aristotelis, (84h:32036)

Trimis, Aristotelis ★ Beiträge zum Serre-Problem. (German) [Contributions to the Serre problem] (84h:32036)

(Trimis, Dimitrios) See Trimis, Aristotelis, (84h:32036)

(Trimis, Maria) See Trimis, Aristotelis, (84h:32036)

Biography:

Trimis, Aristotelis See Trimis, Aristotelis, (84h:32036)

32E15 Runge pairs

32E20 Polynomial convexity

Wermer, John Polynomially convex hulls and analyticity. 84h:32021

secondary classifications:

Alexander, Herbert (with Wermer, John) On the approximation of singularity sets by analytic varieties. (84e:32016)

Klimek, Maciej Extremal plurisubharmonic functions and L -regular sets in \mathbb{C}^n . (84f:32019)

Wermer, John See Alexander, Herbert, (84e:32016)

32E25 Algebras of holomorphic functions [See also 30H05, 46J10, 46J15.]

Adachi, Kenzō (with Nishihara, Masaru) Finitely generated ideals in $A^n(D)$ in pseudoconvex domains. 84m:32022

Amar, Eric Non division dans $A^n(\Omega)$. (English summary) [Nondivisibility in $A^n(\Omega)$] 84g:32027

de Bartolomeis, Paolo (with Tomassini, Giuseppe) Finitely generated ideals in $A^n(D)$. 84a:32025

Chollet, Anne-Marie Ensembles de zéros et ensembles pics pour des classes de fonctions analytiques à régularité imposée dans un domaine strictement pseudo-convexe. [Zero sets and peak sets for some classes of analytic functions with given regularity in a strictly pseudoconvex domain] 84e:32014

Emerson, William D. On the spectra of holomorphic function algebras. 84j:32020

Forness, John Erik (with Ørvid, N.) Finitely generated ideals in $A(\Omega)$. (French summary) 84h:32019

Hayes, Sandra The weak Nullstellensatz for finite-dimensional complex spaces. 84b:32022

Nishihara, Masaru See Adachi, Kenzō, 84m:32022

Ørvid, N. See Forness, John Erik, 84h:32019

Rudin, Walter Möbius-invariant algebras in balls. 84m:32023

Stout, Edgar Lee The dimension of peak-interpolation sets. 84e:32015

Tomassini, Giuseppe See de Bartolomeis, Paolo, 84a:32025

secondary classifications:

Alexander, Herbert On zero sets for the ball algebra. (84i:32002)

Aupetit, Bernard Analytic multivalued functions in Banach algebras and uniform algebras. (84b:46059)

Bassanelli, Giovanni Holomorphic convexity of locally analytic subsets of some complex space. (84c:32016)

van den Dries, Lou A specialization theorem for analytic functions on compact sets. (84f:14003)

Helton, J. William Non-Euclidean functional analysis and electronics. (84c:94001)

Kane, Jonathan M. Maximal ideal spaces of U -algebras. (84e:46052)

Kolaski, Clinton J. Isometries of weighted Bergman spaces. (84a:46054)

Korobeynik, Yu. F. On a class of linear operators. (Russian) (84d:46077)

Nardelli, G. Holomorphically convex compact sets. (Italian. English summary) (84g:32025)

Nikić, M. $T(\mathbb{R})$ -bundles over domains in \mathbb{C}^n . (Serbo-Croatian. Russian summary) (84d:32019)

Ochiai, Hiroji (with Yanagihara, Niro) Homomorphisms and maximal ideals in the algebra of holomorphic functions. (84m:46056)

Stanton, Charles M. Polydiscs in the spectra of uniform algebras. (84m:46055)

Uluçay, Cengiz On the restricted ideal sheaves. (Turkish summary) (84m:32016)

Yanagihara, Niro See Ochiai, Hiroji, (84m:46056)

32E27 Krasner-Tate algebras, etc. (algebras of holomorphic functions over non-Archimedean fields)

Perrin, Yvette Fonctions analytiques dans les corps valués de rang supérieur à un. [Analytic functions in fields with valuation of rank greater than one] 84j:32021

secondary classifications:

Rush, David E. Rings which resemble rings of entire functions. (84d:13019)

Stawski, M. S. On the theorem of Hartogs in non-Archimedean valued fields. (84h:32017)

Woodcock, C. F. A spectral valuation on the ring of p -adic integers. (84b:46092)

32E30 Holomorphic and polynomial approximation

Alexander, Herbert (with Wermer, John) On the approximation of singularity sets by analytic varieties. 84e:32016

de Bartolomeis, Paolo Some constructions for relative approximation of holomorphic functions. 84b:32023

Klimek, Maciej A note on the L -regularity of compact sets in \mathbb{C}^n . (Russian summary) 84c:32018

Plesniak, Wiesław Invariance of some polynomial conditions for compact subsets of \mathbb{C}^N under holomorphic mappings. 84h:32023

Sakai, Akira Uniform approximation by entire functions of several complex variables. 84f:32018

Shi, Ji Hui Approximating univalent analytic mappings of several complex variables by chains of subordinate polynomial mappings. (Chinese. English summary) 84h:32020

Wermer, John See Alexander, Herbert, 84e:32016

secondary classifications:

Chaumat, Jacques (with Chollet, Anne-Marie) Ensembles de zéros et d'interpolation le long de courbes. (English summary) [Zero sets and interpolation sets along curves] (84i:32027)

Chollet, Anne-Marie See Chaumat, Jacques, (84i:32027)

Farkov, Yu. A. Faber-Erokhin basis functions of several variables and estimates of e -entropy. (Russian) (84j:32004)

Sadullaev, A. Rational approximations and pluripolar sets. (Russian) (84d:32026)

Valashek, Ya. Approximation in multidimensional Hardy spaces H^p , $0 < p < 1$. (Russian. English and Georgian summaries) (84i:32004)

32E35 Global boundary behavior of holomorphic functions

Ahern, Patrick On the behavior near a torus of functions holomorphic in the ball. 84i:32023

secondary classifications:

Saburi, Yutaka Vanishing theorems of cohomology groups with values in the sheaves $\mathcal{O}_{\text{int}, \varphi}$ and $\mathcal{O}_{\text{ext}, \varphi}$. (84g:32017)

32E99 None of the above, but in this section

Alexander, Herbert A note on projective capacity. 84d:32021

Timoney, Richard M. Maximal invariant spaces of analytic functions. 84d:32022

secondary classifications:

Camacho, César (with Sad, Paulo) Topological classification and bifurcations of holomorphic flows with resonances in \mathbb{C}^2 . (84k:58177)

Forness, John Erik (with Zame, William R.) Riemann domains and envelopes of holomorphy. (84c:32017)

Jarnicki, Marek Holomorphic continuation of functions with restricted growth. (84e:32010)

Sad, Paulo See Camacho, César, (84k:58177)

Zame, William R. See Forness, John Erik, (84c:32017)

32Fxx Geometric convexity

32F05 Plurisubharmonic functions and generalizations [See also 31C10.]

de Bartolomeis, Paolo (with Tomassini, Giuseppe) Traces of plurisubharmonic functions. 84d:32023

Bedford, Eric (with Taylor, B. A.) A new capacity for plurisubharmonic functions. 84d:32024

Biel, Mongi Fonctions plurisousharmoniques et idéal définissant un ensemble analytique. [Plurisubharmonic functions and ideal defining an analytic set] 84a:32026

Cegrell, Urban Discontinuité de l'opérateur de Monge-Ampère complexe. (English summary) [Discontinuity of the complex Monge-Ampère operator] 84j:32022

Fichera, Gaetano (with Snider, Maria Adelaide) Plurisubharmonic functions in the unit ball of \mathbb{R}^n . (Italian summary) 84i:32024

Kalina, Jerzy Some remarks on variational properties of inhomogeneous complex Monge-Ampère equation. (Russian summary) 84j:32023

Klimek, Maciej Extremal plurisubharmonic functions and L -regular sets in \mathbb{C}^n . 84f:32019

Laville, Guy Étude de deux opérateurs du quatrième ordre en analyse complexe. (English summary) [Two fourth-order partial differential operators appearing in complex analysis] 84c:32017

Lempert, László Solving the degenerate complex Monge-Ampère equation with one concentrated singularity. 84k:32024

Matsugu, Yasuo Plurisubharmonic functions as the real parts of holomorphic functions. 84d:32025

Patrizio, Giorgio (with Wong, Pit Mann) Stability of the Monge-Ampère foliation. 84f:32020

Sadullaev, A. A class of plurisubharmonic functions. (Russian) 84b:32024

Rational approximations and pluripolar sets. (Russian) 84d:32026

Snider, Maria Adelaide See Fichera, Gaetano, 84i:32024

Taylor, B. A. See Bedford, Eric, 84d:32024

Tomassini, Giuseppe See de Bartolomeis, Paolo, 84d:32023

Wong, Pit Mann See Patrizio, Giorgio, 84f:32020

secondary classifications:

Alexander, Herbert A note on projective capacity. (84d:32021)

Battelli, Flaviano Removable singularities for the traces of plurisubharmonic functions. (Italian. English summary) (84c:32012)

Bedford, Eric (with Gaveau, Bernard) Envelopes of holomorphy of certain 2-spheres in \mathbb{C}^2 . (84k:32016)

Dineen, Seán (with Meise, Reinhold G.; Vogt, Dietmar) Caractérisation des espaces de Fréchet nucléaires dans lesquels tous les bornés sont pluripolaires. (English summary) [Characterization of the nuclear Fréchet spaces in which every bounded set is pluripolar] (84b:46004)

- Fujiki, Akira Kählerian normal complex surfaces. (84c:32035)
 Gaveau, Bernard *See* Bedford, Eric, (84c:32016)
 Kumagai, Donna Plurisubharmonic functions associated with uniform algebras. (84c:46053)
 Manolitsakis, I. Two-dimensional scattered fields: a description in terms of the zeros of entire functions. (84b:78020)
 Meise, Reinhold G. *See* Dineen, Seán; et al., (84b:46004)
 Vogt, Dietmar *See* Dineen, Seán; et al., (84b:46004)

32F10 q -convexity, q -concavity

- Ballico, Edoardo Complements of analytic subvarieties and q -complete spaces. (Italian summary) 84c:32025
 Coverings of complex spaces and q -completeness. (Italian. English summary) 84c:32019
 (with Bolondi, Giorgio) On the homology groups of q -complete spaces. (Italian summary) 84c:32025
 Bolondi, Giorgio *See* Ballico, Edoardo, 84c:32025
 Buchner, Michael A. (with Fritzsche, Klaus) The cohomological and analytic completeness of $P(A^2\mathbb{C}_n) \setminus G_{n-1}$. 84c:32018
 Fritzsche, Klaus *See* Buchner, Michael A., 84c:32018
 Takegoshi, Kenshō On weakly 1-complete surfaces without nonconstant holomorphic functions. 84c:32026
 Wu, Hung Hsi Hyper- q -convex domains in Kähler manifolds. 84c:32027

secondary classifications:

- Derridj, M. Inégalités de Carleman et extension locale des fonctions holomorphes. [Carleman inequalities and local extension of holomorphic functions] (84m:32020)
 Fujiki, Akira A coherency theorem for direct images with proper supports in the case of a 1-convex map. (84c:32015)
 Grauert, Hans Kontinuitätssatz und Hüllen bei speziellen Hartogschen Körpern. [Continuity theorem and hulls for special Hartogs bodies] (84j:32019)
 Kosarew, Siegmund Das Modulproblem für holomorphe Einbettungen mit konkaver Umgebungsstruktur. [The moduli problem for holomorphic imbeddings with concave neighborhood structure] (84j:32027)
 Ohsawa, Takeo Isomorphism theorems for cohomology groups of weakly 1-complete manifolds. (84c:32031)

32F15 Pseudoconvex domains

- Barth, Theodore J. The Kobayashi indicatrix at the center of a circular domain. 84f:32021
 Bedford, Eric (with Fornæss, John Erik) Complex manifolds in pseudoconvex boundaries. 84c:32020
 Chaumat, Jacques (with Chollet, Anne-Marie) Ensembles de zéros et d'interpolation le long de courbes. (English summary) [Zero sets and interpolation sets along curves] 84c:32027
 Chollet, Anne-Marie *See* Chaumat, Jacques, 84c:32027
 Diederich, Klas (with Lieb, Ingo) ★Konvexität in der komplexen Analysis. (German) [Convexity in complex analysis] 84h:32021
 Donnelly, Harold (with Fefferman, Charles) L_2 cohomology of the Bergman metric. 84g:32028
 Fefferman, Charles *See* Donnelly, Harold, 84g:32028
 Fornæss, John Erik *See* Bedford, Eric, 84c:32020
 Lieb, Ingo *See* Diederich, Klas, 84h:32021
 Patrizio, Giorgio Characterization of strictly convex domains biholomorphic to a circular domain. 84m:32024
 Sadullaev, A. Solution of the Dirichlet problem in a polydisc for the complex Monge-Ampère equation. (Russian) 84g:32029
 Wong, Pit Mann Geometry of the complex homogeneous Monge-Ampère equation. 84b:32025

secondary classifications:

- Amar, Éric Non division dans $A^n(\Omega)$. (English summary) [Nondivisibility in $A^n(\Omega)$] (84g:32027)
 de Bartolomeis, Paolo (with Tomassini, Giuseppe) Finitely generated ideals in $A^n(D)$. (84a:32025)
 Bedford, Eric Proper holomorphic mappings from strongly pseudoconvex domains. (84b:32036)
 (with Bell, Steven R.) Proper self-maps of weakly pseudoconvex domains. (84c:32026)
 Bell, Steven R. (with Catlin, David) Boundary regularity of proper holomorphic mappings. (84b:32037a)
See also Bedford, Eric, (84c:32026)
 Catlin, David *See* Bell, Steven R., (84b:32037a)
 Colombeau, Jean-François (with Perrot, B.) L'équation $\bar{\partial}$ dans les ouverts pseudo-convexes des espaces DFN. (English summary) [The equation $\bar{\partial}$ in pseudoconvex open subsets of DFN spaces] (84a:46102)
 Diederich, Klas (with Fornæss, John Erik) Boundary regularity of proper holomorphic mappings. (84b:32037b)
 Fornæss, John Erik (with Øvrelid, N.) Finitely generated ideals in $A(\Omega)$. (French summary) (84c:32019)
See also Diederich, Klas, (84b:32037b)
 Fridman, B. L. One example of the boundary behaviour of biholomorphic transformations. (84c:32037)
 Biholomorphic invariants of a hyperbolic manifold and some applications. (84c:32034)
 Graham, Ian Zero sets and extension theorems for the H^p and Nevanlinna classes on the unit ball and polydisc in \mathbb{C}^n . (84j:32001)

- Greene, Robert Everist (with Krantz, Steven G.) The automorphism groups of strongly pseudoconvex domains. (84c:32032)
 Herbot, Gregor ★Über die Geodäsiken der Bergmanmetrik. (German) [On the geodesics of the Bergman metric] (84b:58036)
 Jarnicki, Marek Holomorphic functions with restricted growth on complex manifolds. (84c:32015)
 Komatsu, Gen Hadamard's variational formula for the Bergman kernel. (84g:32037)
 Kori, Tosiaki Théorèmes de dualité du type Serre et du type Poincaré-Lefschetz sur la frontière fortement pseudoconvexe. [Duality theorems of Serre and Poincaré-Lefschetz type on the strongly pseudoconvex boundary] (84h:32013)
 Krantz, Steven G. *See* Greene, Robert Everist, (84c:32032)
 Lee, John (with Melrose, Richard B.) Boundary behaviour of the complex Monge-Ampère equation. (84c:58078)
 Lempert, László Solving the degenerate complex Monge-Ampère equation with one concentrated singularity. (84c:32024)
 Law, Erik An explicit holomorphic map of bounded domains in \mathbb{C}^n with C^2 -boundary onto the polydisc. (84f:32029)
 Melrose, Richard B. *See* Lee, John, (84c:58078)
 Øvrelid, N. *See* Fornæss, John Erik, (84h:32019)
 Perrot, B. *See* Colombeau, Jean-François, (84a:46102)
 Pinchuk, S. I. Analytic continuation of holomorphic mappings and problems of holomorphic classification of multidimensional domains. (Russian) (84f:32014)
 Sakanishi, Fumitoshi On the invariance of a uniform H -convexity by a biholomorphic mapping. (84m:32034)
 Stout, Edgar Lee The dimension of peak-interpolation sets. (84c:32015)
 Tamm, Martin Sur l'image par une fonction holomorphe bornée du bord d'un domaine pseudoconvexe. (English summary) [On the range of a holomorphic function on the boundary of a pseudoconvex domain] (84g:32008)
 Tomassini, Giuseppe *See* de Bartolomeis, Paolo, (84a:32025)
 Trèves, François Sur l'exactitude des complexes différentiels de type de Lewy. [Exactness of differential complexes of Lewy type] (See 84i:35003)
 Vogt, Christian Two remarks concerning toroidal groups. (84h:32014)
 Zorn, Paul Analytic functionals and Bergman spaces. (84d:46057)

32F20 Geometric results on $\bar{\partial}$ -Neumann problems [See also 35N15.]

- Catlin, David Necessary conditions for subellipticity of the $\bar{\partial}$ -Neumann problem. 84c:32021
 D'Angelo, John P. Real hypersurfaces, orders of contact, and applications. 84a:32027
 Dwilewicz, Roman Complexification of smooth Cauchy-Riemann manifolds. 84g:32030
 Gilligan, Bruce On a parametrized Levi problem involving one complex variable. 84h:32022
 Greene, Robert Everist (with Krantz, Steven G.) Deformation of complex structures, estimates for the $\bar{\partial}$ equation, and stability of the Bergman kernel. 84b:32026
 Hachiichi, M. S. Formules explicites pour les solutions de l'équation de Cauchy-Riemann dans certains domaines. [Explicit formulas for solutions of the Cauchy-Riemann equation in certain domains] 84i:32028
 Han, C. K. Analyticity of CR equivalences between some real hypersurfaces in \mathbb{C}^n with degenerate Levi forms. 84i:32029
 Kohn, J. J. Subelliptic estimates. 84a:32028
 Krantz, Steven G. *See* Greene, Robert Everist, 84b:32026
 Range, R. Michael On Hölder estimates for $\bar{\partial}u=f$ on weakly pseudoconvex domains. 84b:32027
 An elementary integral solution operator for the Cauchy-Riemann equations on pseudoconvex domains in \mathbb{C}^n . 84b:32028
 Talhaoui, Abdallah Conditions suffisantes de sous-ellipticité pour $\bar{\partial}$. (English summary) [Sufficient conditions of subellipticity for $\bar{\partial}$] 84m:32025

secondary classifications:

- Andersson, Mats Erik Lennart *See* Berndtsson, B., (84j:32003)
 Aubin, Thierry Équations de Monge-Ampère réelles. [Real Monge-Ampère equations] (84a:58080)
 Berndtsson, B. (with Andersson, Mats Erik Lennart) Henkin-Ramirez formulas with weight factors. (French summary) (84j:32003)
 Derridj, M. Inégalités de Carleman et extension locale des fonctions holomorphes. [Carleman inequalities and local extension of holomorphic functions] (84m:32020)
 Le problème de Cauchy pour $\bar{\partial}$. Application. [The Cauchy problem for $\bar{\partial}$. Application] (See 84i:35006)
 Diederich, Klas (with Lieb, Ingo) ★Konvexität in der komplexen Analysis. (German) [Convexity in complex analysis] (84h:32021)
 Ermine, Jean-Louis Sur un problème de $\bar{\partial}$ avec estimées. [On a $\bar{\partial}$ -problem with bounds] (84f:35106)
 Frumin, I. D. Estimate of the solution of the $\bar{\partial}$ -equation in analytic polyhedra in general position. (Russian) (84j:35126)
 Greiner, P. C. (with Stein, Erwin) On the solvability of some differential operators of type \square_{λ} . (84d:35111)
 Jerison, David S. Boundary regularity in the Dirichlet problem for \square_{λ} on CR manifolds. (84g:35134)
 Jones, Peter Wilcox L^∞ estimates for the $\bar{\partial}$ problem in a half-plane. (84g:35135)
 Kohn, J. J. Lectures on degenerate elliptic problems. (84a:35059)
 Several complex variables from the point of view of linear partial differential equations. (84j:35127)
 Korányi, Adam Kelvin transforms and harmonic polynomials on the Heisenberg group. (84f:43014)
 Kuramishi, Masatake Strongly pseudoconvex CR structures over small balls. I. An a priori estimate. (84h:32023a)
 Strongly pseudoconvex CR structures over small balls. II. A regularity theorem. (84h:32023b)
 Strongly pseudoconvex CR structures over small balls. III. An embedding theorem. (84h:32023c)

- Lieb, Ingo See Diederich, Klas, (84h:32021)
- Mikhailov, L. G. Construction of a homeomorphism of a system of Beltrami differential equations with several variables. (Russian. Tajiki summary) (84h:35117)
- Nacinovich, Mauro Complex analysis and complexes of differential operators. (84c:58139)
- Nourigat, J. Hypocoellipticité maximale pour le système de Cauchy-Riemann induit. [Maximal hypoellipticity for the induced Cauchy-Riemann system] (84c:35028)
- Rea, Claudio The Cauchy problem for the $\bar{\partial}$ operator. (Italian summary) (84h:32019)
- Stein, Erwin An example on the Heisenberg group related to the Lewy operator. (84c:35031)
- See also Greiner, P. C., (84c:35111)
- Wong, Philip P. A construction of normal forms for weakly pseudoconvex CR manifolds in \mathbb{C}^2 . (84c:32020a)
- Erratum: "A construction of normal forms for weakly pseudoconvex CR manifolds in \mathbb{C}^2 ". (84c:32020b)

32F25 Real submanifolds in complex manifolds

- Abe, Yukitaka A remark on Levi foliations. 84d:32028
- Baouendi, M. S. Microlocalisation hypo-analytique et extension holomorphe de fonctions C.R. [Hypoanalytic microlocalization and holomorphic extension of CR functions] 84a:32029
- Beloshapka, V. K. Example of a noncontinuous holomorphic transformation of an analytic hypersurface. (Russian) 84c:32030
- Bloom, Thomas Remarks on type conditions for real hypersurfaces in \mathbb{C}^n . 84f:32022
- Chern, S. S. (with Moser, J. K.) Real hypersurfaces in complex manifolds. (Russian) 84g:32031
- D'Angelo, John P. A Bézout type theorem for points of finite type on real hypersurfaces. 84i:32030
- Graham, Ian "Type" conditions for generic real submanifolds of codimension 2. 84h:32029
- Kuranishi, Masatake Strongly pseudoconvex CR structures over small balls. I. An a priori estimate. 84d:32023a
- Strongly pseudoconvex CR structures over small balls. II. A regularity theorem. 84d:32023b
- Strongly pseudoconvex CR structures over small balls. III. An embedding theorem. 84d:32023c
- Markowitz, Michael J. CR-hypersurfaces in a space with a pseudoconformal connection. 84d:32029
- (with Schaffly, Roger) Rigidity of pseudoconformal connections. 84c:32019
- Moser, J. K. See Chern, S. S., 84g:32031
- Rea, Claudio Erratum: "Holomorphic two-sided extension of a CR-function defined on a differentiable hypersurface in \mathbb{C}^2 ". [C. R. Acad. Sci. Paris Sér. I Math. 294 (1982), no. 17, 577-579; MR 83f:32018]. 84h:32030
- Schaffly, Roger See Markowitz, Michael J., 84c:32019
- (Shcherbak, I. G.) See Chern, S. S.; et al., 84g:32031
- (Shcherbak, O. P.) See Chern, S. S.; et al., 84g:32031
- Tajima, Shinichi Analyse microlocale sur les variétés de Cauchy-Riemann et problème du prolongement des solutions holomorphes des équations aux dérivées partielles. [Microlocal analysis on Cauchy-Riemann manifolds and the extension problem for holomorphic solutions of partial differential equations] 84i:32031
- Wong, Philip P. A construction of normal forms for weakly pseudoconvex CR manifolds in \mathbb{C}^2 . 84c:32020a
- Erratum: "A construction of normal forms for weakly pseudoconvex CR manifolds in \mathbb{C}^2 ". 84c:32020b

secondary classifications:

- Bailey, Toby Nicholas (with Ehrenpreis, Leon; Wells, R. O., Jr.) Weak solutions of the massless field equations. (84d:81021)
- Bedford, Eric (with Gaveau, Bernard) Envelopes of holomorphy of certain 2-spheres in \mathbb{C}^2 . (84c:32016)
- Bogge, Al (with Polking, John C.) Holomorphic extension of CR functions. (84j:32018)
- The extension of CR functions to one side of a submanifold of \mathbb{C}^n . (84k:32017)
- Droste, Bernd Extension of analytic functional calculus mappings and duality by $\bar{\partial}$ -closed forms with growth. (84c:46056)
- Dwilewicz, Roman Complexification of smooth Cauchy-Riemann manifolds. (84g:32030)
- Ehrenpreis, Leon See Bailey, Toby Nicholas; et al., (84d:81021)
- Gaveau, Bernard (with Laville, Guy) Fonctions holomorphes et particule chargée dans un champ magnétique uniforme. [Holomorphic functions and a charged particle in a uniform magnetic field] (84h:58041)
- See also Bedford, Eric, (84c:32016)
- Han, C. K. Analyticity of CR equivalences between some real hypersurfaces in \mathbb{C}^n with degenerate Levi forms. (84i:32029)
- Huang, Wu Hsiung Rigidity of closed minimal hypersurfaces in complex projective spaces. (84c:53074)
- Ivashkovich, S. M. Extension of locally biholomorphic mappings of domains into a complex projective space. (Russian) (84i:32038)
- See also Vitushkin, A. G., (84f:32015)
- Jerison, David S. Boundary regularity in the Dirichlet problem for \square_b on CR manifolds. (84g:35134)
- Laville, Guy See Gaveau, Bernard, (84h:58041)
- Lugo, Gabriel Structure of asymptotic twistor space. (84i:83036)
- Nacinovich, Mauro Complex analysis and complexes of differential operators. (84c:58139)
- Naitoh, Hiroo (with Takeuchi, Masaru) Totally real submanifolds and symmetric bounded domains. (84d:53058)
- Polking, John C. See Bogge, Al, (84j:32018)
- Rea, Claudio The Cauchy problem for the $\bar{\partial}$ operator. (Italian summary) (84h:32019)

- Se-Ashi, Yutaka On holomorphic vector fields on compact nondegenerate real hypersurfaces of complex manifolds. (84c:53059)
- Shvarts, A. S. Supergravity, complex geometry and G-structures. (84d:83036)
- Takeuchi, Masaru See Naitoh, Hiroo, (84d:53058)
- Vitushkin, A. G. (with Ivashkovich, S. M.) Extension of holomorphic mappings of a real-analytic hypersurface to a complex projective space. (Russian) (84f:32015)
- Wells, R. O., Jr. See Bailey, Toby Nicholas; et al., (84d:81021)

32F30 Pseudoconvex manifolds

- Burns, Dan Curvatures of Monge-Ampère foliations and parabolic manifolds. 84a:32031
- Nishikawa, Seiki (with Shiga, Kiyoshi) On the holomorphic equivalence of bounded domains in complete Kähler manifolds of nonpositive curvature. 84i:32032
- Peternell, Thomas On strongly pseudoconvex Kähler manifolds. 84c:32022
- Shiga, Kiyoshi See Nishikawa, Seiki, 84i:32032

secondary classifications:

- Kori, Tosiaki Théorème de dualité pour la cohomologie locale au bord des ouverts fortement pseudoconvexes. [Duality theorem for local cohomology at the boundary of strongly pseudoconvex open sets] (84g:32019)
- Lafer, Henry B. Deformations of two-dimensional pseudoconvex manifolds. (84c:32032)
- Takegoshi, Kenbō Representation theorems of cohomology on weakly 1-complete manifolds. (84c:32030)
- Ueda, Tetsuo On the neighborhood of a compact complex curve with topologically trivial normal bundle. (84g:32043)
- Yau, Stephen S.-T. Deformations and equitopological deformations of strongly pseudoconvex manifolds. (84g:32023)

32F99 None of the above, but in this section

secondary classifications:

- Blair, David E. On the relation between pseudoconformal and Kähler geometry. (84m:53065)
- Mok, Ngaiming (with Siu, Yum Tong; Yau, Shing Tung) The Poincaré-Lelong equation on complete Kähler manifolds. (84g:32011)
- Siu, Yum Tong See Mok, Ngaiming; et al., (84g:32011)
- Yau, Shing Tung See Mok, Ngaiming; et al., (84g:32011)

32Gxx Deformations of analytic structures

32G05 Deformations of complex structures [See also 13D10, 16A58, 58H10, 58H15.]

- Bănică, Constantin Sur les Ext-globaux dans une déformation. [On the global Ext in a deformation] 84g:32032
- Campana, Frédéric ★Application de l'espace des cycles à la classification bi-méromorphe des espaces analytiques kähleriens compacts. (French) [Application of the space of cycles to the bimeromorphic classification of Kähler compact analytic spaces] 84d:32030
- Application de l'espace des cycles à la classification bi-méromorphe des espaces analytiques kähleriens compacts. [Application of the space of cycles to the bimeromorphic classification of Kählerian compact analytic spaces] 84c:32024
- Jurchescu, M. A theorem on C^∞ -families of complex manifolds. 84d:32031
- Miyajima, Kimio (with Tsuboi, Syoji) Logarithmic deformations of holomorphic maps and equisingular displacements of surfaces with ordinary singularities. 84c:32026
- Morgan, John W. Topological triviality of various analytic families. 84j:32024
- Peternell, Thomas Vektorraumbündel in der Nähe von exceptionellen Unterräumen—das Modulproblem. [Vector bundles in the neighborhood of exceptional subspaces—the moduli problem] 84c:32021
- Tsuboi, Syoji See Miyajima, Kimio, 84c:32026
- Ueno, Kenji On non-Kähler degenerations of complex tori. 84j:32025

secondary classifications:

- Barlet, D. Développement asymptotique des fonctions obtenues par intégration sur les fibres. [Asymptotic expansion of functions obtained by integration on the fibers] (84c:32021)
- Carrell, James B. (with Sommese, Andrew John) $SL(2, \mathbb{C})$ actions on compact Kähler manifolds. (84c:32031)
- Commichau, Michael (with Grauert, Hans) Das formale Prinzip für kompakte komplexe Untermannigfaltigkeiten mit 1-positivem Normalenbündel. [The formal principle for compact complex submanifolds with 1-positive normal bundles] (84c:32018)
- Escobales, Richard H., Jr. Bundle-like foliations with Kählerian leaves. (84m:53043)
- Friedman, Robert David Base change, automorphisms, and stable reduction for type III $K3$ surfaces. (84m:14039)
- A degenerating family of quintic surfaces with trivial monodromy. (84c:14027)
- Grauert, Hans See Commichau, Michael, (84c:32018)
- Greene, Robert Everist (with Krantz, Steven G.) Deformation of complex structures, estimates for the $\bar{\partial}$ equation, and stability of the Bergman kernel. (84h:32026)
- Ismenberg, James A. See Yasskin, Philip B., (84b:83023)
- Kil, K. I. A local Torelli theorem for bundles over a manifold with $K=0$. (Russian) (84i:14009)
- Kosarew, Siegmund Konvergenz formaler komplexer Räume mit konvexem oder konkavem Normalenbündel. [Convergence of formal complex spaces with convex or concave normal bundle] (84c:14007)
- Krantz, Steven G. See Greene, Robert Everist, (84h:32026)

- Nishiguchi, Kenji Kodaira dimension is not necessarily lower semicontinuous under degenerations of surfaces. (84m:14038)
- Persson, Ulf (with Pinkham, Henry) Some examples of nonsmoothable varieties with normal crossings. (84k:14010)
- Pinkham, Henry See Persson, Ulf, (84k:14010)
- Shepherd-Barron, N. I. Extending polarizations on families of $K3$ surfaces. (84m:14040)
- Sommese, Andrew John See Carrell, James B., (84c:32031)
- Wehler, Joachim Versal deformation of Hopf surfaces. (84h:32025)
- Yasskin, Philip B. (with Isenberg, James A.) Non-self-dual nonlinear gravitons. (84b:83023)

32G07 Deformations of special (e.g. CR) structures

- Girbau, Joan (with Haefliger, André; Sundararaman, D.) On deformations of transversely holomorphic foliations. 84j:32026
- Haefliger, André See Girbau, Joan; et al., 84j:32026
- Laville, Guy Spectre d'opérateurs sur certaines variétés de Cauchy-Riemann et champ magnétique. (Italian summary) [Spectrum of operators on certain Cauchy-Riemann manifolds and magnetic field] 84k:32027
- Miyajima, Kimio Completion of Akahori's construction of the versal family of strongly pseudoconvex CR structures. 84k:32028
- Penrose, Roger Physical space-time and nonrealizable CR-structures. 84c:32022
- Porter, R. Michael Prescribed monodromy on noncompact surfaces. 84f:32023
- Sundararaman, D. See Girbau, Joan; et al., 84j:32026

secondary classifications:

- Abe, Yukitaka A remark on Levi foliations. (84d:32028)
- Kuranishi, Masatake Strongly pseudoconvex CR structures over small balls. I. An a priori estimate. (84h:32023a)
- Strongly pseudoconvex CR structures over small balls. II. A regularity theorem. (84h:32023b)
- Strongly pseudoconvex CR structures over small balls. III. An embedding theorem. (84h:32023c)
- On a construction of the normal Cartan connections for CR-structures. (See 84i:35006)
- Mihut, I. Remarks about complex analytic foliate manifolds. (84i:32040)
- Patrizio, Giorgio (with Wong, Pit Mann) Stability of the Monge-Ampère foliation. (84f:32020)
- Tod, K. P. The singularities of \mathbb{C} -space. (84m:32043)
- Wong, Pit Mann See Patrizio, Giorgio, (84f:32020)

32G10 Deformations of submanifolds and subspaces

- Barlet, D. Variations analytiques de cycles. [Analytic variations of cycles] 84m:32026
- Hirschowitz, André On the convergence of formal equivalence between embeddings. 84k:32027
- LeBrun, Claude Spaces of complex null geodesics in complex-Riemannian geometry. 84c:32023

secondary classifications:

- Campana, Frédéric Réduction algébrique d'un morphisme faiblement Kählérien propre et applications. [Algebraic reduction of a proper weakly Kähler morphism and applications] (84i:32014)
- Fujiki, Akira On the Douady space of a compact complex space in the category \mathcal{C} . (84g:32034)
- Kosarew, Siegmund Zwei Bemerkungen über Steinsche Mannigfaltigkeiten. [Two remarks on Stein manifolds] (84g:32026)
- Miyajima, Kimio (with Tsuboi, Syoji) Logarithmic deformations of holomorphic maps and equisingular displacements of surfaces with ordinary singularities. (84k:32026)
- Tsuboi, Syoji See Miyajima, Kimio, (84k:32026)

32G11 Deformations of singularities

- Aleksandrov, A. G. Deformations of bouquets of quasihomogeneous one-dimensional singularities. (Russian) 84m:32028
- Hauser, Herwig An algorithm of construction of the semiuniversal deformation of an isolated singularity. 84k:32029
- Lauffer, Henry B. Deformations of two-dimensional pseudoconvex manifolds. 84a:32032
- Weak simultaneous resolution for deformations of Gorenstein surface singularities. 84k:32030
- Saito, Kyoji Primitive forms for a universal unfolding of a function with an isolated critical point. (84k:32031)
- On the identification of the intersection form on the middle homology group with the flat function via period mapping. 84f:32024
- Varchenko, A. N. A lower bound for the codimension of the $\mu = \text{const}$ stratum in terms of the mixed Hodge structure. (Russian. English summary) 84g:32033

secondary classifications:

- Chmutov, S. V. Monodromy groups of critical point of functions. (84h:32007)
- Damon, James Topological triviality in versal unfoldings. (84k:58033)
- Dolgachev, Igor V. Cohomologically insignificant degenerations of algebraic varieties. (84g:14010)
- O'Shea, Donal B. Finite jumps in Milnor number imply vanishing folds. (84d:14001)
- Perron, Bernard "μ constant" implique "type topologique constant" en dimension complexe trois. (English summary) ["μ constant" implies "constant topological type" in complex dimension three] (84g:32020)

- Sebastiani, Marcos Variation du nombre de Lefschetz dans une famille d'automorphismes analytiques. [Variation of the Lefschetz number in a family of analytic automorphisms] (84g:32021)
- Steenbrink, J. H. M. Cohomologically insignificant degenerations. (84g:14011)
- Hodge theory: analysis or geometry? (84c:58012)
- Ueno, Kimio The application of monodromy preserving deformation to the gravitational field equation. (84d:83016)
- Wahl, Jonathan M. Derivations of negative weight and nonsmoothability of certain singularities. (84k:14043)
- Yau, Stephen S.-T. Deformations and equitopological deformations of strongly pseudoconvex manifolds. (84g:32023)
- $s^{(n-1)}$ invariant for isolated n -dimensional singularities and its application to moduli problem. (84h:32011)

32G13 Analytic moduli problems [For algebraic moduli problems, see 14D20.]

- Fujiki, Akira On the Douady space of a compact complex space in the category \mathcal{C} . 84g:32034
- Kosarew, Siegmund Das Modulproblem für holomorphe Einbettungen mit konkaver Umgebungsstruktur. [The moduli problem for holomorphic imbeddings with concave neighborhood structure] 84j:32027
- Wehler, Joachim Versal deformation of Hopf surfaces. 84h:32025

secondary classifications:

- Campana, Frédéric ★ Application de l'espace des cycles à la classification biéromorphe des espaces analytiques kählériens compacts. (French) [Application of the space of cycles to the biéromorphe classification of Kähler compact analytic spaces] (84d:32030)
- Erugin, N. P. ★ Проблема Римана. (Russian) [The Riemann problem] (84h:34015)
- Hirschowitz, André On the convergence of formal equivalence between embeddings. (84m:32027)
- Itoh, Mitsuhiro On the moduli space of anti-self-dual Yang-Mills connections on Kähler surfaces. (84k:58209)
- Mabuchi, Toshiki Invariant β and uniruled threefolds. (84e:14030)
- Siu, Yum Tong Every $K3$ surface is Kähler. (84j:32036)

32G15 Moduli of Riemann surfaces, Teichmüller theory [See also 14H15, 30Fxx.]

- Bers, Lipman On iterates of hyperbolic transformations of Teichmüller space. 84g:32035
- Chueshev, V. V. Spaces of compact Riemann surfaces and Koebe groups. (Russian) 84i:32033
- Duma, Andrei Die 3-Weierstrass-Punkte über dem Teichmüller-Raum T_2 . (English summary) [The 3-Weierstrass points over the Teichmüller space T_2] 84a:32033
- Gardiner, Frederick P. The Teichmüller-Kobayashi metric for infinite-dimensional complex Teichmüller spaces. 84f:32025
- Harris, Bruno Harmonic volumes. 84k:32032
- Nag, Subhashish The Torelli spaces of punctured tori and spheres. 84h:32031
- Seppälä, Mika Real structures of Teichmüller spaces. 84d:32032
- Sipe, Patricia L. Roots of the canonical bundle of the universal Teichmüller curve and certain subgroups of the mapping class group. 84a:32034
- Wolpert, Scott On the Kähler form of the moduli space of once punctured tori. 84j:32028
- Yamamoto, Hiro-o Boundaries of the Teichmüller spaces of finitely generated Fuchsian groups of the second kind. 84m:32029

secondary classifications:

- Bujalance, Emilio Normal N.E.C. signatures. (84i:20049)
- Jørgensen, Troels Simple geodesics on Riemann surfaces. (84f:30053)
- Kulkarni, Ravi S. Surface-symmetries, holomorphic maps, and tessellations. (See 84d:53002)
- Lax, R. F. Independence of normal Weierstrass points under deformation. (84a:14013)
- Oikawa, Kōtarō A problem on the deformation and extension of Riemann surfaces. (84c:30063)
- Shiga, Hiroshige On the quasiconformal deformation of open Riemann surfaces and variations of some conformal invariants. (84j:30082)
- Tataru-Mihai, P. Polyakov's string theory and Teichmüller spaces. (Italian and Russian summaries) (84i:81074)

32G20 Period matrices [See also 14H05.]

- Livshits, I. S. A property of hyperelliptic curves. (Russian) 84d:32033
- Ma, Shu Ying Quadratic periods of holomorphic forms on a compact Riemann surface. 84c:32023

secondary classifications:

- Clemens, C. Herbert Degeneration techniques in the study of threefolds. (84g:14048)
- Friedman, Robert David (with Smith, Roy Campbell) Singularities of period maps and the weak global Torelli problem. (84i:14020)
- Gerritzen, L. Die Jacobi-Abbildung über dem Raum der Mumfordkurven. [The Jacobi mapping over the space of Mumford curves] (84f:14021)
- Hoffman, Jerome William An example in the theory of degenerating algebraic curves. (Italian summary) (84g:14026)
- Looienga, Eduard A Torelli theorem for Kähler-Einstein $K3$ surfaces. (84a:32045)
- Saito, Kyoji On the identification of the intersection form on the middle homology group with the flat function via period mapping. (84f:32024)
- Smith, Roy Campbell See Friedman, Robert David, (84i:14020)

- Usui, Sampei Torelli theorem for surfaces with $p_g = c_2^2 = 1$ and K ample and with certain type of automorphism. (84d:14021)
 Vogt, Christian Two remarks concerning toroidal groups. (84h:32041)
 Watanabe, Osamu Some remarks on theta functions of infinitely many variables. II. (84m:14052)

32G99 None of the above, but in this section

- Schumacher, Georg Deformationen von Keimen eigentlicher, holomorpher Abbildungen. (English summary) [Deformations of germs of proper, holomorphic mappings] 84g:32036
 Eine Anwendung des Satzes von Calabi-Yau auf Familien kompakter komplexer Mannigfaltigkeiten. [An application of the Calabi-Yau theorem to families of compact complex manifolds] 84j:32029

secondary classifications:

- Campana, Frédéric Application de l'espace des cycles à la classification bi-méromorphe des espaces analytiques kählériens compacts. [Application of the space of cycles to the bimeromorphic classification of Kählerian compact analytic spaces] (84h:32024)
 Réduction d'Albanese d'un morphisme propre et faiblement kählérien. (English summary) [Albanese reduction of a proper and weakly Kähler morphism] (84c:32027)
 Heins, Maurice Semigroups of holomorphic maps of a Riemann surface into itself which are homomorphisms of the set of positive reals considered additively. (84f:30012)

32Hxx Holomorphic mappings

32H05 Representative domains

- Fornæss, John Erik (with Stout, Edgar Lee) Regular holomorphic images of balls. (French summary) 84h:32026
 Kanemaru, Tadayoshi Bergman representative domains. 84h:32032
 Stout, Edgar Lee See Fornæss, John Erik. 84h:32026

secondary classifications:

- Azukawa, Kazuo (with Suzuki, Masaaki) The Bergman metric on a Thullen domain. (84m:32030)
 Békollé, David Inégalités L^p pour les projecteurs de Bergman de certains domaines de C^2 . (English summary) [L^p -inequalities for Bergman projections of some domains of C^2] (84h:32027)
 Nishikawa, Seiki (with Shiga, Kiyoshi) On the holomorphic equivalence of bounded domains in complete Kähler manifolds of nonpositive curvature. (84i:32032)
 Shiga, Kiyoshi See Nishikawa, Seiki. (84i:32032)
 Suzuki, Masaaki See Azukawa, Kazuo. (84m:32030)

32H10 Bergman kernel function

- Békollé, David Inégalités L^p pour les projecteurs de Bergman de certains domaines de C^2 . (English summary) [L^p -inequalities for Bergman projections of some domains of C^2] 84h:32027
 Bell, Steven R. Regularity of the Bergman projection in certain nonpseudoconvex domains. 84e:32024
 Burbea, Jacob Inequalities for holomorphic functions of several complex variables. 84j:32030
 Hengartner, Walter (with Schober, Glenn) Interpolation, continuation, and quadratic inequalities. 84h:32033
 Kanemaru, Tadayoshi A remark on the Lu Qi Keng conjecture. 84d:32034
 Komatsu, Gen Hadamard's variational formula for the Bergman kernel. 84g:32037
 Luecking, Daniel H. A technique for characterizing Carleson measures on Bergman spaces. 84e:32025
 Schober, Glenn See Hengartner, Walter. 84h:32033

secondary classifications:

- Bell, Steven R. Proper holomorphic mappings between circular domains. (84m:32032)
 Burbea, Jacob On metrics and distortion theorems. (84e:32024)
 Donnelly, Harold (with Fefferman, Charles) L_2 cohomology of the Bergman metric. (84g:32028)
 Fefferman, Charles See Donnelly, Harold. (84g:32028)
 Kanemaru, Tadayoshi Bergman representative domains. (84h:32032)
 Yin, Wei Ping The unitary geometry of nonsymmetric homogeneous Siegel domains of the first type. I, II. (Chinese) (84e:32032a)
 The unitary geometry of nonsymmetric homogeneous Siegel domains of the first type. III. (Chinese) (84e:32032b)

32H15 Invariant metrics and pseudodistances

- Azukawa, Kazuo (with Suzuki, Masaaki) The Bergman metric on a Thullen domain. 84m:32030
 Ball, Joseph A. (with Helton, J. William) Subinvariants for analytic mappings on matrix balls. 84d:32035
 Burbea, Jacob On metrics and distortion theorems. 84e:32024
 Franzoni, Tullio Some properties of invariant distances on convex cones. 84h:32034
 Gentili, Graziano A class of invariant distances on convex cones. 84h:32028
 Goebel, Kazimierz Uniform convexity of Carathéodory's metric on the Hilbert ball and its consequences. 84a:32035
 Helton, J. William See Ball, Joseph A. 84d:32035
 Kalka, Morris Measures associated to Chern, Levine and Nirenberg norms. 84h:32029
 Kobayashi, Shoshichi Projective structures and invariant distances. (Japanese) 84h:32030

- Lempert, László La métrique de Kobayashi et la représentation des domaines sur la boule. (English summary) [The Kobayashi metric and the representation of domains on the ball] 84d:32036

Holomorphic retracts and intrinsic metrics in convex domains. (Russian summary) 84f:32026

- O'Connor, Michael A. Affinely invariant metrics on cones. 84a:32036

- Suzuki, Masaaki See Azukawa, Kazuo. 84m:32030

- Vesentini, Edoardo Complex geodesics. 84a:32037

Complex geodesics and holomorphic maps. 84g:32038

secondary classifications:

- Barth, Theodore J. The Kobayashi indicatrix at the center of a circular domain. (84f:32021)
 Geatti, Laura Holomorphic automorphisms of a nonsymmetric homogeneous bounded domain. (Italian. English summary) (84g:32046)
 Stanton, Charles M. Polydiscs in the spectra of uniform algebras. (84m:46055)
 Vigüé, Jean-Pierre Sur les applications holomorphes isométriques pour la distance de Carathéodory. [On isometric holomorphic maps for the Carathéodory distance] (84c:32050)

32H20 Hyperbolic complex manifolds

- Babets, V. A. Geometry of logarithmically tangent bundles and hyperbolic manifolds. (Russian) 84a:32038
 Fridman, B. L. Biholomorphic invariants of a hyperbolic manifold and some applications. 84i:32034
 Ohgai, Seiko On the relative hyperbolicity of complex analytic spaces. 84a:32039
 Riebeschl, Dieter Hyperbolische komplexe Räume und die Vermutung von Mordell. [Hyperbolic complex spaces and Mordell's conjecture] 84h:32035
 Simha, R. R. Holomorphic maps into compact complex spaces. 84c:32025
 Urata, Toshio The hyperbolicity of complex analytic spaces. 84h:32031

secondary classifications:

- Chen, Zhi Hua See Yang, Hong Cang. (84f:53058)
 Kodama, Akio On boundedness of circular domains. (84c:32036)
 Remarks on homogeneous hyperbolic complex manifolds. (84h:32043)
 Lempert, László Holomorphic retracts and intrinsic metrics in convex domains. (Russian summary) (84f:32026)
 Shimizu, Satoru Homogeneous Kähler manifolds of complex dimension two. (84h:32044)
 Yang, Hong Cang (with Chen, Zhi Hua) A Schwarz lemma for a complete manifold whose Ricci curvature is bounded from below. (Chinese) (84f:53058)

32H25 Picard-type theorems and generalizations {For function-theoretic properties, see 32A22.}

- Kwak, Myung H. Meromorphic mappings into compact complex manifolds with a Grauert positive bundle of q -forms. 84f:32027
 Noguchi, Junjiro Lemma on logarithmic derivatives and holomorphic curves in algebraic varieties. 84a:32040
 Savluk, Ya. I. The set of deficient vectors of integral curves. (Russian) 84j:32031

secondary classifications:

- Molzon, Robert Some examples in value distribution theory. (84j:32032)
 Sung, Chen Han Equidimensional holomorphic mappings with maximal hyperplane deficiency sum. (84i:32036)

32H30 Value distribution theory in higher dimensions {For function-theoretic properties, see 32A22.}

- Biancofiore, Aldo A defect relation for meromorphic maps. 84h:32033
 Drouilhet, S. J. Criteria for algebraic dependence of meromorphic mappings into algebraic varieties. 84d:32037
 Molzon, Robert Some examples in value distribution theory. 84j:32032
 Holomorphic mappings in the Nevanlinna class. 84i:32035
 Nochka, E. I. Defect relations for meromorphic curves. (Russian) 84g:32039
 Patrizio, Giorgio Boundary behavior of meromorphic maps. 84m:32031
 Shiffman, Bernard Introduction to the Carlson-Griffiths equidistribution theory. 84j:32033
 Stoll, Wilhelm Introduction to value distribution theory of meromorphic maps. 84a:32041

- Sung, Chen Han Equidimensional holomorphic mappings with maximal hyperplane deficiency sum. 84i:32036

secondary classifications:

- Kendall, Wilfrid S. Brownian motion and a generalised little Picard's theorem. (84c:58083)
 Matsugu, Yasuo On a problem of Kujala. (84g:32003)
 Okada, Masami Un théorème de Bézout transcendant sur C^n . [A transcendental Bézout theorem on C^n] (84d:32005)

32H35 Proper mappings, finiteness theorems

- Bedford, Eric Proper holomorphic mappings from strongly pseudoconvex domains. 84h:32036
 (with Bell, Steven R.) Proper self-maps of weakly pseudoconvex domains. 84c:32026
 (with Bell, Steven R.; Catlin, David) Boundary behavior of proper holomorphic mappings. 84h:32032

- Bell, Steven R.** Proper holomorphic mappings between circular domains. **84m:32032**
(with Catlin, David) Boundary regularity of proper holomorphic mappings.

84b:32037a

An extension of Alexander's theorem on proper self-mappings of the ball in \mathbb{C}^n .
84f:32028

See also Bedford, Eric, **84c:32026** and **84h:32032**

- Campana, Frédéric** Réduction d'Albanese d'un morphisme propre et faiblement kählérien. (English summary) [Albanese reduction of a proper and weakly Kähler morphism] **84c:32027**

Catlin, David See **Bell, Steven R.**, **84b:32037a** and **Bedford, Eric**; et al., **84h:32032**

- Cima, J. A.** (with Suffridge, T. J.) A reflection principle with applications to proper holomorphic mappings. **84m:32033**

Diederich, Klas (with Forness, John Erik) Boundary regularity of proper holomorphic mappings. **84b:32037b**

Forness, John Erik See **Diederich, Klas**, **84b:32037b**

Rudin, Walter Proper holomorphic maps and finite reflection groups. **84d:32038**

Suffridge, T. J. See **Cima, J. A.**, **84m:32033**

secondary classifications:

Ballico, Edoardo Coverings of complex spaces and q -completeness. (Italian. English summary) **84c:32019**

Forness, John Erik (with Stout, Edgar Lee) Regular holomorphic images of balls. (French summary) **84h:32026**

Klimek, Maciej Extremal plurisubharmonic functions and L -regular sets in \mathbb{C}^n . **84f:32019**

Pinchuk, S. I. Boundary behavior of analytic sets and algebroid mappings. (Russian) **84g:32041**

Stout, Edgar Lee See **Forness, John Erik**, **84h:32026**

32H99 None of the above, but in this section

Dautov, Sh. A. (with Khudaiberganov, G.) The Carathéodory-Fejér problem in higher-dimensional complex analysis. (Russian) **84g:32040**

Fridman, B. L. One example of the boundary behaviour of biholomorphic transformations. **84c:32037**

Fujiki, Akira A theorem on bimeromorphic maps of Kähler manifolds and its applications. **84a:32042**

Fujimoto, Hirotaka On meromorphic maps into a compact complex manifold. **84a:32043**

Ivashkovich, S. M. Extension of locally biholomorphic mappings of domains into a complex projective space. (Russian) **84i:32038**

Khudaiberganov, G. See **Dautov, Sh. A.**, **84g:32040**

Kopylov, A. P. Stability of classes of multidimensional holomorphic mappings. I. The concept of stability. Liouville's theorem. (Russian) **84a:32044a**

Stability of classes of multidimensional holomorphic mappings. II. Stability of classes of holomorphic mappings. (Russian) **84a:32044b**

Lew, Erik An explicit holomorphic map of bounded domains in \mathbb{C}^n with C^2 -boundary onto the polydisc. **84f:32029**

Pinchuk, S. I. Boundary behavior of analytic sets and algebroid mappings. (Russian) **84g:32041**

Sakanishi, Fumitoshi On the invariance of a uniform H -convexity by a biholomorphic mapping. **84m:32034**

Shi, Ji Hual A new proof of the polydisc's analytic nonequivalence to any ball. **84f:32030**

Wood, J. C. Corrigenda to: "An extension theorem for holomorphic mappings" [Math. Proc. Cambridge Philos. Soc. **88** (1980), no. 1, 125-127; MR **82d:32021**]. **84g:32042**

Yang, P. C. Automorphism of tube domains. **84b:32038**

secondary classifications:

Ball, Joseph A. (with Helton, J. William) Lie groups over the field of rational functions, signed spectral factorization, signed interpolation, and amplifier design. **84j:94033**

Bell, Steven R. Regularity of the Bergman projection in certain nonpseudoconvex domains. **84c:32024**

Goebel, Kazimierz Fixed points and invariant domains of holomorphic mappings of the Hilbert ball. **84j:58027**

Greene, Robert Everist (with Krantz, Steven G.) The automorphism groups of strongly pseudoconvex domains. **84c:32032**

Helton, J. William See **Ball, Joseph A.**, **84j:94033**

Itoh, Mitsuhiro Some geometrical aspects of Riemannian manifolds with a pole. **84g:53067**

Ivashkovich, S. M. See **Vitushkin, A. G.**, **84f:32015**

Karp, Leon Subharmonic functions on real and complex manifolds. **84d:53042**

Klimek, Maciej A note on the L -regularity of compact sets in \mathbb{C}^n . (Russian summary) **84c:32018**

Kovalev, P. I. A class of holomorphic mappings. (Russian) **84j:46076**

Krantz, Steven G. See **Greene, Robert Everist**, **84c:32032**

Kubota, Yoshihisa An extremal problem on the classical Cartan domains. II. **84c:32033a**

An extremal problem on the classical Cartan domains. III. **84c:32033b**

Matsugu, Yasuo A characterization of bounded holomorphic functions. **84a:32010**

Noguchi, Junjiro (with Sunada, Toshikazu) Finiteness of the family of rational and meromorphic mappings into algebraic varieties. **84c:14009**

Patrizio, Giorgio Characterization of strictly convex domains biholomorphic to a circular domain. **84m:32024**

Pinchuk, S. I. Analytic continuation of holomorphic mappings and problems of holomorphic classification of multidimensional domains. (Russian) **84f:32014**

Seleznev, V. A. Overdetermined systems for homeomorphisms in \mathbb{C}^n . (Russian) **84i:35105**

Sunada, Toshikazu See **Noguchi, Junjiro**, **84c:14009**

Travaglini, Giancarlo An analogue of the Schwarz lemma for bounded symmetric domains. **84g:32048**

Vitushkin, A. G. (with Ivashkovich, S. M.) Extension of holomorphic mappings of a real-analytic hypersurface to a complex projective space. (Russian) **84f:32015**

Waelbroeck, Lucien Galbs, tensor products, and convex-holomorphic mappings. **84b:46052**

32Jxx Compact analytic spaces (For Riemann surfaces, see 14Hxx, 30Fxx.)

32J05 Compactification

Brenton, Lawrence (with Drucker, Daniel S.; Prins, Geert C. E.) Graph theoretic techniques in algebraic geometry. I. The extended Dynkin diagram \bar{E}_8 and minimal singular compactifications of \mathbb{C}^2 . **84c:32026a**

Drucker, Daniel S. See **Brenton, Lawrence**; et al., **84c:32026a**

Enoki, Ichiro On compactifiable complex analytic surfaces. **84h:32033**

Fujiki, Akira Relative algebraic reduction and relative Albanese map for a fiber space in \mathbb{C} . **84m:32035**

Prins, Geert C. E. See **Brenton, Lawrence**; et al., **84c:32026a**

secondary classifications:

Berndt, Rolf Meromorphe Funktionen auf Mumfords Kompaktifizierung der universellen elliptischen Kurve N -ter Stufe. [Meromorphic functions on Mumford's compactification of the universal level N elliptic curve] **84h:10029b**

Fujiki, Akira On a holomorphic fiber bundle with meromorphic structure. **84m:32038**

van der Geer, G. (with Ueno, Kenji) Families of abelian surfaces with real multiplication over Hilbert modular surfaces. **84g:14045**

Gieseker, D. ★ Lectures on moduli of curves. **84h:14035**

Ueno, Kenji See **van der Geer, G.**, **84g:14045**

32J10 Algebraic dependence theorems

secondary classifications:

Drouilhet, S. J. Criteria for algebraic dependence of meromorphic mappings into algebraic varieties. **84d:32037**

32J15 Compact surfaces

Barthel, Gottfried (with Kaup, Ludger) Topologie des surfaces complexes compactes singulières. [Topology of singular compact complex surfaces] **84j:32035**

Bogomolov, F. A. Surfaces of class VII_0 and affine geometry. (Russian) **84k:32034**

Brenton, Lawrence (with Drucker, Daniel S.; Prins, Geert C. E.) Graph theoretic techniques in algebraic geometry. II. Construction of singular complex surfaces of the rational cohomology type of $\mathbb{C}P^2$. **84c:32026b**

Drucker, Daniel S. See **Brenton, Lawrence**; et al., **84c:32026b**

Fujiki, Akira Kählerian normal complex surfaces. **84c:32035**

Kaup, Ludger See **Barthel, Gottfried**, **84j:32035**

Kilambi, Srinivasacharyulu Classification de certaines surfaces complexes compactes non singulières. [Classification of certain nonsingular compact complex surfaces] **84j:32034**

Kobayashi, Shoshichi (with Ochiai, Takushiro) Holomorphic structures modeled after hyperquadrics. **84b:32039**

Looijenga, Eduard A Torelli theorem for Kähler-Einstein $K3$ surfaces. **84a:32045**

Nakamura, Iku On surfaces of class VII_0 with curves. **84c:32027**

Ochiai, Takushiro See **Kobayashi, Shoshichi**, **84b:32039**

Prins, Geert C. E. See **Brenton, Lawrence**; et al., **84c:32026b**

Siu, Yum Tong Every $K3$ surface is Kähler. **84j:32036**

On the topology of compact complex surfaces ★ Sur la topologie des surfaces complexes compactes. (French) [On the topology of compact complex surfaces] **84m:32036**

Sur la topologie des surfaces complexes compactes ★ Sur la topologie des surfaces complexes compactes. (French) [On the topology of compact complex surfaces] **84m:32036**

secondary classifications:

Friedman, Robert David (with Morrison, David R.) The birational geometry of degenerations: an overview. **84g:14032**

Harper, John R. See **Mandelbaum, Richard**, **84f:14028**

Mabuchi, Toshiki Invariant β and uniruled threefolds. **84e:14030**

Mandelbaum, Richard (with Harper, John R.) Global monodromy of elliptic Lefschetz fibrations. **84f:14028**

Some new surfaces of general type. **84k:14029**

Matsumoto, Yukio On 4-manifolds fibered by tori. **84j:57010a**

On 4-manifolds fibered by tori. II. **84j:57010b**

Morrison, David R. See **Friedman, Robert David**, **84g:14032**

Morrow, Jim (with Rossi, Hugo) Pluricanonical embeddings. **84a:32020**

Neumann, Walter D. A calculus for plumbing applied to the topology of complex surface singularities and degenerating complex curves. **84a:32015**

Nishiguchi, Kenji Kodaira dimension is not necessarily lower semicontinuous under degenerations of surfaces. **84m:14038**

Rossi, Hugo See **Morrow, Jim**, **84a:32020**

Sakai, Fumio Normal Gorenstein surfaces and blowing ups. **84k:14013**

Schuster, Hans-Werner Locally free resolutions of coherent sheaves on surfaces. **84c:32030**

Tricerri, Franco Some examples of locally conformal Kähler manifolds. **84j:53073**

Usui, Sampei Torelli theorem for surfaces with $p_g = c_1^2 = 1$ and K ample and with certain type of automorphism. **84d:14021**

Vaisman, Izu Some curvature properties of complex surfaces. **84i:53064**

Wehler, Joachim Versal deformation of Hopf surfaces. **84h:32025**

32J20 Algebraicity criteria

- Bariet, D.** Un théorème d'algebraicité intermédiaire. [An intermediate algebraicity theorem] **84f:32031**
- Campana, Frédéric** Coréduction algébrique d'un espace analytique faiblement kählérien compact. (French) [Algebraic coreduction of a compact weakly Kähler analytic space] **84e:32028**
- Rabinowitz, Joshua H.** Characterizing 2-dimensional Moishezon spaces by weakly positive coherent analytic sheaves. **84f:32032**
- Schneider, Michael** Moishezon spaces and almost positive coherent sheaves. **84j:32037**
- Vo Van Tan** Embedding theorems and Kählerity for 1-convex spaces. **84e:32029**

secondary classifications:

- Ancona, Vincenzo** Faisceaux amples sur les espaces analytiques. (English summary) [Ample sheaves on analytic spaces] **(84c:32029)**
- Bochnak, Jacek** (with Kucharz, Wojciech; Shiota, Masahiro) On algebraicity of global real analytic sets and functions. **(84i:32012)**
- Campana, Frédéric** ★ Application de l'espace des cycles à la classification bi-méromorphe des espaces analytiques kählériens compacts. (French) [Application of the space of cycles to the bimeromorphic classification of Kählerian compact analytic spaces] **(84d:32030)**
- Application de l'espace des cycles à la classification bi-méromorphe des espaces analytiques kählériens compacts. [Application of the space of cycles to the bimeromorphic classification of Kählerian compact analytic spaces] **(84h:32024)**
- Réduction algébrique d'un morphisme faiblement kählérien propre et applications. [Algebraic reduction of a proper weakly Kähler morphism and applications] **(84i:32014)**
- Fujiki, Akira** On the Douady space of a compact complex space in the category \mathcal{C} . **(84g:32034)**
- On a compact complex manifold in \mathcal{C} without holomorphic 2-forms. **(84m:32037)**
- Kählerian normal complex surfaces. **(84k:32035)**
- Kucharz, Wojciech** See **Bochnak, Jacek**; et al., **(84i:32012)**
- Peternell, Thomas** On strongly pseudoconvex Kähler manifolds. **(84c:32022)**
- Shiota, Masahiro** See **Bochnak, Jacek**; et al., **(84i:32012)**

32J25 Transcendental methods of algebraic geometry [See also 14C30.]

- Cattani, Eduardo** (with Kaplan, Aroldo) Polarized mixed Hodge structures and the local monodromy of a variation of Hodge structure. **84a:32046**
- Clemens, C. Herbert** Applications of mixed Hodge theory to the study of threefolds. **84h:32040**
- Fujiki, Akira** On a compact complex manifold in \mathcal{C} without holomorphic 2-forms. **84m:32037**
- Hoffman, Jerome William** The Hodge theory of flat vector bundles on a complex torus. **84j:32038**
- Kaplan, Aroldo** See **Cattani, Eduardo**, **84a:32046**

secondary classifications:

- Cheeger, Jeff** (with Goresky, R. Mark; MacPherson, Robert D.) L^2 -cohomology and intersection homology of singular algebraic varieties. **(84f:58005)**
- Fujita, Takao** On the topology of noncomplete algebraic surfaces. **(84g:14035)**
- Goresky, R. Mark** See **Cheeger, Jeff**; et al., **(84f:58005)**
- MacPherson, Robert D.** See **Cheeger, Jeff**; et al., **(84f:58005)**
- Shioda, Tetsuji** What is known about the Hodge conjecture? **(84k:14007)**
- Tu, Loring W.** Hodge theory and the local Torelli problem. **(84k:14008)**

32J99 None of the above, but in this section

- Campana, Frédéric** Sur les diviseurs non-polaires d'un espace analytique compact. [On the nonpolar divisors of a compact analytic space] **84d:32039**
- Kato, Masahide** Examples of simply connected compact complex 3-folds. **84f:32033**
- Sommese, Andrew John** Complex subspaces of homogeneous complex manifolds. II. Homotopy results. **84d:32040**

secondary classifications:

- Fujimoto, Hirotaka** On meromorphic maps into a compact complex manifold. **(84a:32043)**
- Futaki, A.** An obstruction to the existence of Einstein Kähler metrics. **(84j:53072)**
- Goldstein, Norman** Conull hypersurfaces in Minkowski space. **(84i:32043)**
- Kobayashi, Shoshichi** (with Ochiai, Takushiro) Holomorphic structures modeled after compact Hermitian symmetric spaces. **(84i:53051)**
- Mabuchi, Toshiki** Invariant β and uniruled threefolds. **(84e:14030)**
- Ochiai, Takushiro** See **Kobayashi, Shoshichi**, **(84i:53051)**
- Ohtsuki, Makoto** A residue formula for Chern classes associated with logarithmic connections. **(84h:32037)**
- Simha, R. R.** Holomorphic maps into compact complex spaces. **(84c:32025)**
- Ueda, Tetsuo** On the neighborhood of a compact complex curve with topologically trivial normal bundle. **(84g:32043)**
- Ueno, Kenji** On non-Kähler degenerations of complex tori. **(84j:32025)**

32Kxx Generalizations of analytic spaces (should also be assigned at least one other classification number in this section)

32K05 Banach analytic spaces [See also 58Bxx.]

- Reiffen, Hans-Jörg** (with Trapp, Heinz Wilhelm) Ein Beitrag zur Lipschitz-Saturation im unendlichdimensionalen Fall. (English summary) [A contribution to Lipschitz-saturation in the infinite-dimensional case] **84k:32036**
- Trapp, Heinz Wilhelm** See **Reiffen, Hans-Jörg**, **84k:32036**

secondary classifications:

- Hauser, Herwig** An algorithm of construction of the semiuniversal deformation of an isolated singularity. **(84k:32029)**
- Kaup, Wilhelm** Über die Klassifikation der symmetrischen hermiteschen Mannigfaltigkeiten unendlicher Dimension. II. [On the classification of symmetric Hermitian manifolds of infinite dimension. II] **(84d:32045)**
- Vigué, Jean-Pierre** Domaines bornés symétriques dans un espace de Banach complexe. [Bounded symmetric domains in a complex Banach space] **(84c:32033)**

32K10 Non-Archimedean analytic spaces

secondary classifications:

- Bartenwerfer, Wolfgang** k -holomorphe Vektorraumbündel auf offenen Polyzylindern. [k -holomorphic vector space bundles on open polycylinders] **(84c:32028)**
- Prolla, João B.** On the Stone-Weierstrass theorem for modules over non-Archimedean valued fields. **(84c:46078)**

32K15 Differentiable functions on analytic spaces, differentiable spaces [See also 58C25.]

secondary classifications:

- Colombeau, Jean-François** ★ Differential calculus and holomorphy. **(84i:46005)**
- Meise, Reinhold G.** (with Vogt, Dietmar) Analytic isomorphisms of infinite-dimensional polydiscs and an application. (French summary) **(84h:46056)**
- Ogievetskii, O. V.** $\hat{\alpha}$ -cohomology on infinitesimal neighborhoods. (Russian) **(84f:32036)**
- Vogt, Dietmar** See **Meise, Reinhold G.**, **(84h:46056)**

32K99 None of the above, but in this section

secondary classifications:

- Gardiner, Frederick P.** The Teichmüller-Kobayashi metric for infinite-dimensional complex Teichmüller spaces. **(84f:32025)**
- Knebusch, Manfred** Isoalgebraic geometry: first steps. **(84i:14017)**
- Palamodov, V. P.** Invariants of analytic Z_2 -manifolds. (Russian) **(84j:58008)**

32Lxx Holomorphic fiber spaces [See also 55Rxx.]

32L05 Holomorphic fiber bundles and generalizations

- Bartenwerfer, Wolfgang** k -holomorphe Vektorraumbündel auf offenen Polyzylindern. [k -holomorphic vector space bundles on open polycylinders] **84c:32028**
- (Dürr, Hans-Peter)** See **Trimis, Aristotelis**, **84h:32036**
- Elençwajg, G.** (with Narasimhan, M. S.) Projective bundles on a complex torus. **84h:32034**
- Fujiki, Akira** On a holomorphic fiber bundle with meromorphic structure. **84m:32038**
- Morimoto, Hiroshi** On certain complex analytic cobordism between subvarieties realizing Chern classes of bundles. **84h:32035**
- Narasimhan, M. S.** See **Elençwajg, G.**, **84h:32034**
- (Schottenloher, Martin)** See **Trimis, Aristotelis**, **84h:32036**
- Selder, Erich** Picard-Zahlen komplexer Tori. (English summary) [Picard numbers of complex tori] **84m:32039**
- Trimis, Aristotelis** ★ Beiträge zum Serre-Problem. (German) [Contributions to the Serre problem] **84h:32036**
- (Trimis, Dimitrios)** See **Trimis, Aristotelis**, **84h:32036**
- (Trimis, Maria)** See **Trimis, Aristotelis**, **84h:32036**
- Vogt, Christian** Line bundles on toroidal groups. **84f:32034**
- Yuan, Hsi Shih** On elliptic fiber bundles. **84a:32047**
- Biography:**
- Trimis, Aristotelis** See **Trimis, Aristotelis**, **84h:32036**

secondary classifications:

- Akyildiz, Ersan** Vector fields and cohomology of G/P . **(84j:14054)**
- (with Carrell, James B.; Lieberman, D. I.; Somme, Andrew John) On the graded rings associated to holomorphic vector fields with exactly one zero. **(84i:14029)**
- Athorne, C.** Cylindrically and spherically symmetric monopoles in $SU(3)$ gauge theory. **(84h:81047)**
- Atiyah, Michael** Solutions of classical equations. (See **84d:81003**)
- Bănică, Constantin** Sur les Ext-globaux dans une déformation. [On the global Ext in a deformation] **(84g:32032)**
- Carrell, James B.** Vector fields and cohomology of G/B . **(84i:32038)**
- See also **Akyildiz, Ersan**; et al., **(84i:14029)**
- Dodson, B.** Fibrations of quasiabelian varieties. **(84g:14044)**
- Fujiki, Akira** Relative algebraic reduction and relative Albanese map for a fiber space in \mathcal{C} . **(84m:32035)**
- Gilligan, Bruce** Ends of complex homogeneous manifolds having nonconstant holomorphic functions. **(84h:32040)**
- Goldberg, Joshua N.** Self-dual fields. (See **84d:83002**)
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- Lukatskii, A. M.** Maximality of the action of an orthogonal group on an affine quadric. (Russian) **(84c:32049)**
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- Somme, Andrew John** See **Akyildiz, Ersan**; et al., **(84i:14029)**
- Stormark, Olle** On the theorem of Frobenius for complex vector fields. **(84c:58082)**

- 32L10 Sheaves and cohomology of sections of holomorphic vector bundles, general results [See also 18F20, 55N30.]

Ancona, Vincenzo Faisceaux amples sur les espaces analytiques. (English summary) [Ample sheaves on analytic spaces] 84c:32029

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Schneider, Michael Vollständige, fast-vollständige und mengen-theoretisch-vollständige Durchschnitte in Steinschen Mannigfaltigkeiten. [Complete, almost-complete and set-theoretic complete intersections in Stein manifolds] (84c:32013)

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- 32L15 Bundle convexity [See also 32F10.]

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Takegoshi, Kenschō On weakly 1-complete surfaces without nonconstant holomorphic functions. (84c:32026)

Wong, Pit Mann Geometry of the complex homogeneous Monge-Ampère equation. (84b:32025)

- 32L20 Vanishing theorems

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Faltings, Gerd Verschwindungssätze und Untermannigfaltigkeiten kleiner Kodimension des komplex-projektiven Raumes. [Vanishing theorems and submanifolds of small codimension of the complex-projective space] (84g:14052)

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Kita, Michitake (with Noumi, Masatoshi) On the structure of cohomology groups attached to the integral of certain many-valued analytic functions. (84m:32040)

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Bailey, Toby Nicholas (with Ehrenpreis, Leon; Wells, R. O., Jr.) Weak solutions of the massless field equations. (84d:81021)

Corrigan, E. F. Monopole solitons. (84k:81071)

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Gruson, Laurent (with Peskine, Christian) Courbes de l'espace projectif: variétés de sécantes. [Curves in projective space: secant varieties] (84m:14061)

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32L99 None of the above, but in this section

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Françoise, Jean-Pierre Domaines de linéarisation asymptotique pour des champs de vecteurs. [Domains of asymptotic linearization for some vector fields] (84c:58067)

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Kodama, Akio On generalized Siegel domains with exponent (c_1, c_2, \dots, c_r) . II. **(84i:32039)**

Meschiari, Mauro The isometry group of a homogeneous convex cone. (Italian) **(84j:53059)**

Naitoh, Hiroo (with Takeuchi, Masaru) Totally real submanifolds and symmetric bounded domains. **(84d:53058)**

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Timoney, Richard M. Maximal invariant spaces of analytic functions. **(84d:32022)**

Xu, Yi Chao Some results on the classification of homogeneous bounded domains. **(84i:32040)**

Yin, Wei Ping See Chen, Wan Xi, **(84i:32042)**

32M99 None of the above, but in this section

32Nxx Automorphic functions [See also 10Dxx, 20H10, 22E40, 30F35.]

32N05 General theory of automorphic functions of several complex variables

secondary classifications:

Bedford, Eric Proper holomorphic mappings from strongly pseudoconvex domains. **(84b:32036)**

Tai, Yung-Sheng On the Kodaira dimension of the moduli space of abelian varieties. **(84h:10040)**

32N10 Automorphic forms

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Endres, R. Multiplikatorsysteme der symplektischen Thetagruppe. (English summary) [Multiplier systems of the symplectic theta group] **(84d:10032)**

Harris, Michael (with Jakobsen, Hans Plesner) Singular holomorphic representations and singular modular forms. **(84h:22023)**

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Kazhdan, David On arithmetic varieties. II. **(84h:22020)**

Lee, Ronnie (with Weintraub, Steven H.) On a generalization of a theorem of Erich Hecke. **(84f:32041)**

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Wang, S. P. See Tong, Yue Lin Lawrence, **(84m:32046)**

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32N15 Automorphic functions in symmetric domains

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secondary classifications:

Garrett, Paul B. Modular curves on arithmetic quotients. **(84a:10027)**

Holzapfel, R.-P. Invariants of arithmetic ball quotient surfaces. **(84i:14025)**

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van Haeringen, H. (with Kok, L. P.) Table errata: *Higher transcendental functions*, Vol. I [McGraw-Hill, New York, 1953; MR 15, 419] by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. **84m:33001a**

(with Kok, L. P.) Table errata: *Higher transcendental functions*, Vol. II [McGraw-Hill, New York, 1953; MR 15, 419] by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. **84m:33001b**

(with Kok, L. P.) Table errata: *Higher transcendental functions*, Vol. III [McGraw-Hill, New York, 1955; MR 16, 586] by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. **84m:33001c**

Kok, L. P. See van Haeringen, H., **84m:33001a**; **84m:33001b** and **84m:33001c** (Magnus, Wilhelm) See van Haeringen, H.; et al., **84m:33001a**; **84m:33001b** and **84m:33001c**

(Oberhettinger, Fritz) See van Haeringen, H.; et al., **84m:33001a**; **84m:33001b** and **84m:33001c**

(Tricomi, Francesco G.) See van Haeringen, H.; et al., **84m:33001a**; **84m:33001b** and **84m:33001c**

secondary classifications:

Lange, L. J. δ -fraction expansions of analytic functions. **(84d:30011)**

33-01 Elementary exposition, textbooks

secondary classifications:

Jänich, Klaus ★ *Analysis für Physiker und Ingenieure*. (German) [Analysis for physicists and engineers] **(84c:00002)**

33-02 Advanced exposition (research surveys, monographs, etc.)

(Bateman, Harry) See Erdélyi, Arthur; et al., **84h:33001a**; **84h:33001b** and **84h:33001c**

Erdélyi, Arthur (with Magnus, Wilhelm; Oberhettinger, Fritz; Tricomi, Francesco G.) ★ *Higher transcendental functions*. Vol. I. **84h:33001a**

(with Magnus, Wilhelm; Oberhettinger, Fritz; Tricomi, Francesco G.) ★ *Higher transcendental functions*. Vol. II. **84h:33001b**

(with Magnus, Wilhelm; Oberhettinger, Fritz; Tricomi, Francesco G.) ★ *Higher transcendental functions*. Vol. III. **84h:33001c**

van Haeringen, H. (with Kok, L. P.) Table errata: *Formulas and theorems for the special functions of mathematical physics* [Springer, New York, 1966; MR 38 #1291] by W. Magnus, F. Oberhettinger and R. P. Soni. **84i:33001**

Kok, L. P. See van Haeringen, H., **84i:33001**

Magnus, Wilhelm See Erdélyi, Arthur; et al., **84h:33001a**; **84h:33001b**; **84h:33001c** and van Haeringen, H.; et al., **84i:33001**

Oberhettinger, Fritz See Erdélyi, Arthur; et al., **84h:33001a**; **84h:33001b**; **84h:33001c** and van Haeringen, H.; et al., **84i:33001**

(Rees, Mina) See Erdélyi, Arthur; et al., **84h:33001a**

(Soni, R. P.) See van Haeringen, H.; et al., **84i:33001**

Tricomi, Francesco G. See Erdélyi, Arthur; et al., **84h:33001a**; **84h:33001b** and **84h:33001c**

(Watson, E. C.) See Erdélyi, Arthur; et al., **84h:33001a**

secondary classifications:

(Gakhov, F. D.) See Marichev, O. I., **(84f:00017)**

Goyal, S. P. See Srivastava, Hari M.; et al., **(84f:33011)**

Gupta, K. C. See Srivastava, Hari M.; et al., **(84f:33011)**

(Longdon, L. W.) See Marichev, O. I., **(84f:00017)**

Marichev, O. I. ★ *Handbook of integral transforms of higher transcendental functions*. **(84f:00017)**

Srivastava, Hari M. (with Gupta, K. C.; Goyal, S. P.) ★ *The H -functions of one and two variables*. **(84f:33011)**

Handbook:

Integral transforms See Marichev, O. I., **(84f:00017)**

Tables:

Integral transforms See Marichev, O. I., **(84f:00017)**

33-03 Historical (must also be assigned at least one classification number from Section 01)

33-04 Explicit machine computation and programs (not the theory of computation or programming)

33-06 Proceedings, conferences, etc.

33A10 Exponential and trigonometric functions

Ainsworth, O. R. (with Neggers, J.) A family of polynomials and powers of the secant. **84k:33001**

Exton, Harold Basic circular functions. **84m:33002**

Massidda, Vittorio Analytical calculation of a class of integrals containing exponential and trigonometric functions. **84k:33002**

Neggers, J. See Ainsworth, O. R., **84k:33001**

secondary classifications:

- Murota, Kazuo. See Sugihara, Masaaki, (84c:05005)
 Ramakrishnan, Dinakar. On the monodromy of higher logarithms. (84b:53049)
 Stolarsky, Kenneth B. Zeros of smallest modulus of functions resembling $\exp(z)$. (84c:30008)
 A family of polynomials with concyclic zeros. (84m:30010)
 Sugihara, Masaaki (with Murota, Kazuo) Multidimensional Bell polynomials. (84c:05005)

33A15 Gamma and beta functions

- Borelli Forti, C. (with Fenyő, István) On a generalization of gamma functional equation. 84c:33001
 Bowman, K. O. (with Shenton, L. R.) Continued fractions and the polygamma functions. 84j:33001
 Fenyő, István. See Borelli Forti, C., 84c:33001
 Kershaw, Donald. Some extensions of W. Gautschi's inequalities for the gamma function. 84m:33003
 Klemmt, Heinz-Jürgen. Ein maßtheoretischer Satz mit Anwendungen auf Funktionalgleichungen. [A measure-theoretic theorem with applications to functional equations] 84a:33001
 Labelle, Gilbert. À propos d'un q -analogue pour la fonction gamma d'Euler. [A q -analogue for the Euler gamma function] 84b:33001
 Luke, Yudel L. On the ratio of two gamma functions. 84g:33001
 Raja Rao, B. On an inequality satisfied by the gamma function and its logarithmic derivatives. 84g:33002
 Roy, Ranjan. On a paper of Ramanujan on definite integrals. 84d:33001
 Shenton, L. R. See Bowman, K. O., 84j:33001
 Vietoris, Leopold. Über gewisse die unvollständige Betafunktion betreffende Ungleichungen. [On certain inequalities concerning the incomplete beta function] 84f:33001

secondary classifications:

- Beatty, Millard F. Finite amplitude oscillations of a simple rubber support system. (84g:73039)
 Berndt, Bruce C. Chapter 8 of Ramanujan's second notebook. (84g:01080)
 Gautschi, Walter. Polynomials orthogonal with respect to the reciprocal gamma function. (84b:65024)
 On the convergence behavior of continued fractions with real elements. (84i:40001)
 van Haeringen, H. Some infinite series of products of Legendre and gamma functions. (84i:33008)
 Koh, E. L. See Nasir, N. E., (84c:05016)
 Kölbig, K. S. On the integral $\int_0^{\infty} e^{-xt} t^{x-1} \log^n t dt$. (84b:33021)
 Kovalevskii, M. A. The asymptotic behavior of functions that generalize the Euler gamma-function. (Russian. English summary) (84j:30062)
 Macdonald, I. G. Some conjectures for root systems. (84b:1706a)
 Nasir, N. E. (with Koh, E. L.) On a binomial coefficient summation. (84c:05016)
 Nowicka, Danuta. Solution of a system of singular integral equations with a Hadamard integral and strongly singular right-hand sides. (Russian. Polish summary) (84c:45010)
 Riekstina, V. Uniform asymptotic expansion of a certain class of contour integrals. (Russian) (84c:41031)

33A20 Error function, probability integral

- Boese, G. An a priori estimate for the truncation error of a continued fraction expansion to the Gaussian error function. (German summary) 84f:33002

33A25 Elliptic functions and integrals

- Bassetti, B. (with Montaldi, E.; Raciti, M.) A simple proof of a transformation formula for elliptic integrals. 84b:33002
 Ferrari, E. A closed formula for the derivatives of elliptic functions with respect to the parameter. (Italian summary) 84j:33002
 Montaldi, E. See Bassetti, B.; et al., 84b:33002
 Raciti, M. See Bassetti, B.; et al., 84b:33002

secondary classifications:

- Baxter, Rodney J. (with Pearce, Paul A.) Hard squares with diagonal attractions. (84j:82096)
 Boon, M. H. (with Glasser, M. L.; Zak, Joshua; Zucker, I. J.) Additive decompositions of θ -functions of multiple arguments. (84b:10035)
 Chen, Chi Cheng (with Gackstatter, Fritz) Elliptische und hyperelliptische Funktionen und vollständige Minimalflächen vom Enneper'schen Typ. [Elliptic and hyperelliptic functions and complete minimal surfaces of Enneper type] (84d:53005)
 Doria, Mauro M. Addition formula for the $Z_N \times Z_N$ symmetric solutions of the factorization equations. (84b:14021)
 Gackstatter, Fritz. See Chen, Chi Cheng, (84d:53005)
 Glasser, M. L. See Boon, M. H.; et al., (84b:10035)
 Labelle, Gilbert. À propos d'un q -analogue pour la fonction gamma d'Euler. [A q -analogue for the Euler gamma function] (84b:33001)
 Pearce, Paul A. See Baxter, Rodney J., (84j:82096)
 Saradha, K. Simultaneous approximation of e^t and $\zeta(t)$. (84b:10049)
 Zak, Joshua. See Boon, M. H.; et al., (84b:10035)
 Zucker, I. J. See Boon, M. H.; et al., (84b:10035)

33A30 Simple hypergeometric functions of one and several variables

- Agarwal, Ashok Kumar (with Manocha, H. L.) A theorem on generating functions. 84c:33002
 Agarwal, Ratan P. A family of basic hypergeometric and combinatorial identities and certain summation formulae. 84c:33001
 Agrawal, B. M. (with Jain, Renu) Dynamical symmetry algebra of ${}_2F_1$ and Jacobi polynomial. 84j:33003
 Andreev, A. A. (with Kilbas, A. A.) Solutions of an inhomogeneous hypergeometric equation and calculation of integrals. (Russian. English summary) 84c:33002
 Arya, J. P. See Joshi, C. M., 84c:33004 and 84c:33002
 Askey, Richard. An elementary evaluation of a beta type integral. 84c:33003
 Bhalerao, S. W. See Mahajan, G. B., 84m:33004
 Bhise, V. M. (with Lagoo, A. G.) Inequality for the Appell function F_4 . (Hindi. English summary) 84c:33003
 Bressoud, D. M. A matrix inverse. 84g:33003
 Chak, A. M. Some generalizations of Laguerre polynomials. III. 84a:33002
 Chandwani, G. N. Generating functions of the polynomial of the form F_1 . (Hindi. English summary) 84f:33003
 Chhabra, S. P. (with Rusia, K. C.) A transformation formula for a general hypergeometric function of three variables. 84c:33003
 Exton, Harold. Hypergeometric functions of three variables. 84d:33002
 The asymptotic behaviour of the inhomogeneous Airy function $Hi(z)$. 84g:33004
 See also Katriel, Jacob, 84a:33005a and Fetti, Henry E., 84a:33005b
 Fetti, Henry E. Remarks on a note by H. Exton: "On the reducibility of the Voigt functions" [J. Phys. A 14 (1981), no. 4, L75-L77; MR 82j:33004]. 84a:33005b
 Gupta, H. L. (with Rusia, K. C.) On the solution of an integral equation involving the hypergeometric function ${}_2F_3$. (Hindi. English summary) 84g:33005
 Jain, Renu. See Agrawal, B. M., 84j:33003
 Jain, S. M. See Parihar, C. L., 84c:33005
 Jain, U. C. A multiple integral involving the product of the H -functions of one and two variables. 84c:33003
 Joshi, C. M. (with Arya, J. P.) Some inequalities for the Appell functions F_1 and F_2 . 84c:33004
 (with Arya, J. P.) Inequalities for certain triple hypergeometric functions. 84c:33002
 Kant, Shri (with Pandey, Ram Nakshatra) Generating functions involving generalized Appell-function of two variables. (Turkish summary) 84f:33004
 Karlsson, Per W. Some reducible generalized Kampé de Fériet functions. 84j:33004
 Katriel, Jacob. A comment: "On the reducibility of the Voigt functions" [J. Phys. A 14 (1981), no. 4, L75-L77; MR 82j:33004] by H. Exton. 84a:33005a
 Khan, B. (with Pathan, M. A.) On certain hypergeometric function of three variables. I. 84g:33006
 (with Pathan, M. A.) Erratum: "On some transformations of Appell's function F_4 " [Tamkang J. Math. 13 (1982), no. 1, 25-35; MR 83m:33006]. 84c:33003
 Kilbas, A. A. See Andreev, A. A., 84c:33002
 Lagoo, A. G. See Bhise, V. M., 84c:33003
 Madhakar, H. C. See Thakare, Nimbakrishna K., 84f:33006
 Mahajan, G. B. (with Bhalerao, S. W.) On generalization of Saalschütz's theorem. (Hindi. English summary) 84m:33004
 Maheshwari, N. K. See Pradhan, K. M., 84c:33007
 Manocha, H. L. See Agarwal, Ashok Kumar, 84c:33002
 Mathur, Renu. See Munot, P. C., 84c:33004
 Moak, Daniel S. F_3 classes and hypergeometric series. 84c:33003
 Modi, G. C. See Saxena, Ram Kishore, 84f:33005
 Mohamed, T. See Nair, V. C., 84m:33005
 Munot, P. C. (with Mathur, Renu) On a multilateral generating function for the extended Jacobi polynomials. 84c:33004
 (with Padmanabham, P. A.) On hypergeometric functions of three variables. (Hindi. English summary) 84c:33004
 Nair, V. C. (with Mohamed, T.) An expansion formula for the H -function of two variables. (Hindi. English summary) 84m:33005
 Nassrallah, B. (with Rahman, Mizan) On the q -analogues of some transformations of nearly-poised hypergeometric series. 84c:33004
 Padmanabham, P. A. See Munot, P. C., 84c:33004
 Pandey, Ram Nakshatra. See Kant, Shri, 84f:33004
 Parihar, C. L. (with Jain, S. M.) On the F -equation for the functions of two variables. 84c:33005
 Pathan, M. A. On transformations of a general triple hypergeometric series $F^{(3)}$. 84c:33006
 (with Qureshi, M. I.) On some transformation and reduction formulae of generalized Horn function $H_1^{(p)}$. I. 84b:33004
 (with Qureshi, M. I.) A note on the reducibility of the triple hypergeometric function F_4 . 84b:33005
 See also Khan, B., 84g:33006 and 84i:33003
 Pradhan, K. M. Some generating functions for generalized hypergeometric polynomials. 84c:33002
 (with Maheshwari, N. K.) A generalized hypergeometric polynomial. 84c:33007
 Prasad, V. N. See Singh, P. S., 84m:33007
 Qureshi, M. I. See Pathan, M. A., 84b:33004 and 84b:33005
 Rahman, Mizan. See Nassrallah, B., 84c:33004
 Raina, R. K. On certain generating relations. 84c:33006
 Rusia, K. C. See Chhabra, S. P., 84c:33003 and Gupta, H. L., 84g:33005
 Saxena, Ram Kishore (with Modi, G. C.) Some results involving Gauss's hypergeometric series and the generalized H -function. (Hindi. English summary) 84f:33005
 Shah, Manilal. On the study of Kampé de Fériet functions. 84c:33007
 Shrivastava, P. N. Generalised Rodrigues' formula and related operational relations. 84b:33003
 Shukla, D. P. A note on new generating relations for functions of several variables. 84m:33006

- Singh, P. S. (with Prasad, Y. N.) On certain generating relations and recurrence formulae for the generalized P -polynomial. (Turkish summary) **84m:33007**
- Srivastava, Hari M. A reducible case of Lauricella's multiple hypergeometric functions of the third kind. (Italian summary) **84g:33007**
- Thakare, Nimbekrishna K. (with Madhekar, H. C.) On functions defined by n th differential formula involving the operator $(\lambda x^2 + x^{n+1}D)$. **84f:33006**
- Upadhyay, Manjari See Verma, Arun, **84c:33005**
- Verma, Arun (with Upadhyay, Manjari) On certain equivalent product relations. **84c:33005**

secondary classifications:

- Abiodun, R. F. A. See Sharma, Bhagirath Lal, (**84d:33017**)
- (Adolphson, Alan) See Dwork, Bernard M., (**84g:12031**)
- Agrawal, B. M. See Jain, Remu, (**84c:33015**)
- Agrawal, Ram Kishor A general class of univariate distributions involving the H -function of several variables. (**84c:62023**)
- de Angulo, M. E. F. On some integral equations. (Spanish. English summary) (**84c:45002**)
- Askey, Richard A q -beta integral associated with BC_1 . (**84h:17006b**)
- Caboz, Régis (with Poletti, Pierre) Calcul rigoureux de la fonction de partition et des moyennes microcanoniques de l'hamiltonien de Barbanis. (English summary) [Rigorous calculation of the microcanonical distribution function for the nonintegrable Barbanis Hamiltonian] (**84d:82010**)
- Carroll, Robert Wayne On a transform theory involving Whittaker functions. (**84d:44004**)
- Dal Fabbro, Florangela (with Furioli Martinoli, Antonella) Analysis of the solutions of a partial differential equation of hypergeometric type with respect to one variable. II. (Italian) (**84i:35011**)
- Deeba, E. Y. (with Koh, E. L.) The continuous Jacobi transform. (**84d:44009**)
- Dwork, Bernard M. ★ Lectures on p -adic differential equations. (**84g:12031**)
- Fields, Jerry L. A linear scheme for rational approximations. II. (**84c:41031**)
- Furioli Martinoli, Antonella See Dal Fabbro, Florangela, (**84i:35011**)
- Goyal, S. P. See Srivastava, Hari M.; et al., (**84f:33011**)
- Gupta, K. C. See Srivastava, Hari M.; et al., (**84f:33011**)
- Jain, Remu (with Agrawal, B. M.) Multiplier representation and generating functions H_2 and ψ_1 . (Hindi. English summary) (**84c:33015**)
- Klein, Felix ★ Vorlesungen über die hypergeometrische Funktion. (German) [Lectures on the hypergeometric function] (**84b:01060**)
- Koh, E. L. See Deeba, E. Y., (**84d:44009**)
- Koul, C. L. See Raina, R. K., (**84c:44002**)
- Nikishin, E. M. Arithmetic properties of the Markov function for the Jacobi weight. (Russian summary) (**84c:10052**)
- Poletti, Pierre See Caboz, Régis, (**84d:82010**)
- Raina, R. K. (with Koul, C. L.) On Laplace transforms and their applications. (**84c:44002**)
- Sharma, Bhagirath Lal (with Abiodun, R. F. A.) New formulae for Hermite polynomials and Appell function F_1 . (**84c:33017**)
- Singh, L. S. See Srivastava, A. N., (**84d:33015**)
- Singh, Surya Narain See Srivastava, A. N., (**84c:33024**)
- Srivastava, A. N. (with Singh, Surya Narain) Unification of classical polynomials. (**84c:33024**)
- (with Singh, L. S.) On a theorem for obtaining bilateral and bilinear generating functions for a sequence of special functions. (**84d:33015**)
- Srivastava, Hari M. (with Gupta, K. C.; Goyal, S. P.) ★ The H -functions of one and two variables. (**84f:33011**)
- Suslov, S. K. Matrix elements of Lorentz boosts and the orthogonality of Hahn polynomials on a contour. (**84m:33024**)
- Temme, N. M. The numerical computation of the confluent hypergeometric function $U(a, b, z)$. (**84g:65030**)
- Varma, V. K. On generating functions for the Jacobi polynomial. (**84c:33020**)
- Villalonga, Patricia M. Some finite integrals involving products of Bessel functions. (Spanish. English summary) (**84c:33009**)
- 33A35 Generalized hypergeometric functions of one and several variables, (E -functions, G -functions, H -functions, etc.)**
- Agal, S. N. (with Koul, C. L.) Integration of certain products associated with the H -function of several variables. **84c:33008**
- Agarwal, Ashok Kumar (with Manocha, H. L.) Operational generating relations for certain functions of several variables. **84c:33006**
- de Amin, L. H. (with Kalla, S. L.) Some expansion formulas for the functions ψ_2 and F_c and the function H of two variables. (Spanish. English summary) **84c:33006**
- Banerji, P. K. (with Sethi, P. L.) Operators of a generalized function of n variables. **84c:33004**
- Bapna, Pramila (with Goyal, A. N.) On a most generalized Fox H -function of three variables. II. (Hindi. English summary) **84i:33005b**
- (with Goyal, A. N.) On a most generalised Fox H -function of three variables. I. (Hindi. English summary) **84i:33005a**
- Bhargava, S. K. See Singh Chandel, R. C., **84m:33012**
- Buschman, R. G. Factorization of H -functions. **84f:33007**
- Analytic domains for multivariable H -functions. **84c:33009**
- Reducible H -functions of two variables. (Spanish summary) **84j:33005**
- Chandel, R. S. (with Jain, U. C.) Certain integral formulas for the multivariable H -function. I. **84d:33003**
- Chaurasia, V. B. L. See Olkha, G. S., **84h:33009**
- Dhami, H. S. (with Joshi, J. M. C.) Addition and multiplication theorems of an E -function. **84c:33010**
- Dixit, A. K. Some results involving generalized Laguerre polynomial and H -functions of several variables. **84b:33004**
- (with Goyal, A. N.) Analogous series. (Hindi. English summary) **84m:33008**
- Dwivedi, B. N. See Singh Chandel, R. C., **84g:33011**
- Garg, Mridula A note on a generating relation for the multivariable H -function. **84c:33005**
- An integral analogue of Taylor's series for the H -function of two variables. (Hindi. English summary) **84g:33008**
- Garg, R. S. Partial derivatives of multivariable H -function with respect to parameters expressed as finite sums. **84c:33011**
- Gasper, George (with Rahman, Mizan) Positivity of the Poisson kernel for the continuous q -ultraspherical polynomials. **84f:33008**
- Gessel, Ira M. (with Stanton, Dennis) Applications of q -Lagrange inversion to basic hypergeometric series. **84f:33009**
- Goyal, A. N. See Bapna, Pramila, **84i:33005a**; **84i:33005b** and Dixit, A. K., **84m:33008**
- Goyal, S. P. See Srivastava, Hari M.; et al., **84f:33011**
- Gupta, K. C. See Srivastava, Hari M.; et al., **84f:33011**
- Jain, U. C. See Chandel, R. S., **84d:33003**
- Joshi, R. S. On the H -function of several complex variables. **84g:33009**
- Joshi, J. M. C. See Dhami, H. S., **84c:33010**
- Joshi, Vinayak Gopal (with Saxena, Rajendra K.) Complex inversion and uniqueness theorem for the generalized H -transform. **84h:33007**
- Kalla, S. L. See de Amin, L. H., **84c:33006**
- Karlsson, Per W. Reduction formulae for some triple hypergeometric functions. **84c:33006**
- Kölbig, K. S. On the integral $\int_0^1 \log^q \cos x \log^p \sin x dx$. **84d:33004**
- Koul, C. L. See Agal, S. N., **84c:33008**
- Kumara Swamy, Y. S. (with Mathur, S. N.) A relation between Gauss's hypergeometric transform and generalized H -function transform. **84c:33007**
- Kumari, Savita See Singhal, J. P., **84c:33014**
- Manocha, H. L. See Agarwal, Ashok Kumar, **84h:33006**
- Mathur, S. N. Certain results involving a generalized function of n variables. **84g:33010**
- Mathur, S. N. See Kumara Swamy, Y. S., **84c:33007**
- Modi, G. C. See Saxena, Ram Kishore, **84c:33007**
- Munot, P. C. (with Padmanabham, P. A.) A generating function for generalized hypergeometric polynomial. (Spanish summary) **84i:33006**
- (with Padmanabham, P. A.) A note on fractional integration. (Hindi. English summary) **84c:33008**
- Olkha, G. S. (with Chaurasia, V. B. L.) Some integral transformations involving the H -function of several variables. **84h:33009**
- Padmanabham, P. A. See Munot, P. C., **84i:33006** and **84i:33006**
- Pandey, Ram Nakshatra See Singh, R. B., **84c:33013**
- Pathak, R. S. Relation between G - and H -functions. **84m:33009**
- Pati, R. See Prasad, Y. N., **84m:33010**
- Pradhan, K. M. On some results of generalized hypergeometric polynomials and generalized H -functions. **84c:33008**
- Prasad, S. K. Basic partial derivatives of basic hypergeometric functions of three variables. **84d:33005**
- Prasad, Y. N. (with Pati, R.) Application of modified multivariable H -function in temperature distribution in a rectangular parallelepiped. **84m:33010**
- (with Singh, P. S.) Some identities for modified H -function of two variables. (Hindi. English summary) **84m:33011**
- Rahman, Mizan See Gasper, George, **84f:33008**
- Raina, R. K. On certain inequalities. **84h:33005**
- Rathie, Arjun K. See Soni, Shanti S., **84g:33012**
- Rathie, Navratna Multiple integrals involving the H -function of two variables. **84c:33012**
- Saran, S. General formulas for a terminating generalised Kampé de Fériet series. **84d:33006**
- Saxena, Rajendra K. See Joshi, Vinayak Gopal, **84h:33007**
- Saxena, Ram Kishore (with Modi, G. C.) Generalized H -function as a symmetrical Fourier kernel. **84j:33007**
- Sethi, P. L. See Banerji, P. K., **84c:33004**
- Siddiqui, A. (with Singh, Awadhesh Kumar) Integral involving the H -function of several variables and an integral function of two complex variables. **84j:33006**
- Singh, Awadhesh Kumar An expansion formula for multivariable H -function in terms of Bessel polynomials. (Hindi. English summary) **84f:33010**
- See also Siddiqui, A., **84j:33006**
- Singh, P. S. See Prasad, Y. N., **84m:33011**
- Singh, R. B. (with Pandey, Ram Nakshatra) Integral representation for the generalized polynomial $\tilde{R}_n(x, y)$. **84c:33013**
- Singh, Sankatha Prasad See Singh, Surya Narain, **84b:33006**
- Singh, Surya Narain (with Singh, Sankatha Prasad) Transformation of Kampé de Fériet function. **84b:33006**
- Singhal, J. P. (with Kumari, Savita) On a unification of the generalized Humbert and Laguerre polynomials. **84c:33014**
- Singh Chandel, R. C. (with Bhargava, S. K.) A problem on the cooling of a heated cylinder. **84m:33012**
- (with Dwivedi, B. N.) Operational representations of hypergeometric functions of four variables. **84g:33011**
- Soni, Shanti S. (with Rathie, Arjun K.) A note involving partial differential equation related to heat conduction. **84g:33012**
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- Ungar, Abraham Generalized hyperbolic functions. **84c:33008**
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- 33A40 Cylindrical functions, Bessel functions
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- Bahar, E. The paths of integration for the new generalized Bessel transform. (84d:44002)
- Carlitz, Leonard Some inversion theorems. (84f:10015)
- Chachibaya, Ts. Sh. See Agrest, M. M.; et al., (84f:65003)
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- Coleman, J. P. (with Monaghan, A. J.) Chebyshev expansions for the Bessel function $J_\nu(z)$ in the complex plane. (84c:65013)
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- González de Galindo, Susana On some integral equations involving Bessel functions. (Spanish. English summary) (84c:45003)
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- Labakhua, S. I. See Agrest, M. M.; et al., (84f:65003)
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- Madhekar, H. C. See Thakare, Nimbakrishna K., (84c:33019)
- Monaghan, A. J. See Coleman, J. P., (84c:65013)
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- Pathak, R. S. (with Singh, O. P.) Finite Hankel transforms of distributions. (84a:44005)
- Rikenglaz, M. M. See Agrest, M. M.; et al., (84f:65003)
- Schell, H.-J. Gleichmäßige asymptotische Darstellungen für Parameterintegrale mit zwei reellen Parametern. (English and Russian summaries) [Uniform asymptotic representations for parameter integrals with two real parameters] (84c:41032)
- Schwartz, Charles A class of discontinuous integrals involving Bessel functions. (84d:44006)
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- Stevens, Harlan Arithmetic periodicities of sequences satisfying a second order difference equation. (84i:10008)
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- Tables:
- Struve functions and their integrals See Agrest, M. M.; et al., (84f:65003)
- 33A45 Spherical functions (Legendre polynomials and functions, spherical harmonics), ultraspherical polynomials
- Antone, T. A. Expression for $y_{1,2}((r_1 \wedge r_2) \wedge r_3)$. 84b:33011
- Arribas, E. (with Navarro, J.; Fabre de la Ripelle, M.) On the higher orders of hyperspherical harmonics. 84j:33008
- Askey, Richard An integral of products of Legendre functions and a Clebsch-Gordan sum. 84c:33018
- Banerjee, Tulshi Das On a generalization of Legendre polynomial. 84c:33007
- Bhatt, Shri Nivas Absolute summability of Legendre series. 84c:33010
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- Benck, Eric C. See Elder, Alexander S.; et al., (84f:65015)

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- Chandra, Jagdish (with Gairola, R. P.; Indu, B. D.) Theory of spherically symmetric potentials. (84b:81148)
- Chang, Jung Yu (with Wang, Mao Ling) Shifted Legendre direct method for variational problems. (84f:49057)
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- Hu, Chuan-Shui See Jen, Lang, (84g:33014)
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- Rai, P. N. A note on bilateral generating functions for generalised Hermite polynomials. **84c:33022**
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- Sharapudinov, I. I. Some properties of polynomials, orthogonal on a finite system of points. (Russian) **84j:33011**
- Sharma, Bhagirath Lal (with Abiodun, R. F. A.) New formulae for Hermite polynomials and Appell function F_1 . **84c:33017**
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- Singh, L. S. See Srivastava, A. N., **84d:33015**
- Singh, O. P. (with Pandey, Ram Nakshatra) On a generating function for the generalized polynomial set $(M_{n,p}(x, y))$. **84c:33016**
- Singh, R. B. (with Tiwari, T. N.) An integral involving a general polynomial set. **84c:33023**
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- Singh, Surya Narain See Srivastava, A. N., **84c:33024**
- Singh Chandel, R. C. (with Yadava, H. C.) Some generating functions for certain polynomial systems of several variables. **84c:33017**
(with Bhargava, S. K.) A class of polynomials and the polynomials related to them. **84m:33018**
- Srivastava, A. N. (with Singh, Surya Narain) Unification of classical polynomials. **84c:33024**
On orthogonal polynomials related to the ultraspherical polynomials. **84b:33018**
(with Singh, L. S.) On a theorem for obtaining bilateral and bilinear generating functions for a sequence of special functions. **84d:33015**
Generating functions for the Konhauser polynomials $Y_n^*(x; k)$. **84b:33019**
- Srivastava, Aruna (with Tomar, R. C.) On a set of polynomials $G_n^*(x, s, p)$. II. (Hindi. English summary) **84j:33012**
- Srivastava, Hari M. An elementary proof of Bailey's bilinear generating function for Jacobi polynomials and of its q -analogue. **84f:33018**
The Weyl fractional integral of a general class of polynomials. (Italian summary) **84c:33018**
- Suslov, S. K. See Nikiforov, A. F.; et al., **84j:33011**
- Thakare, Nimbakrishna K. (with Madhekar, H. C.) Use of Hermite's method to obtain generating functions for classical orthogonal polynomials. **84c:33019**
See also Patil, K. R., **84c:33015**
- Tiwari, T. N. See Singh, R. B., **84c:33023**
- Tomar, R. C. See Prabhakar, T. R., **84c:33015** and Srivastava, Aruna, **84j:33012**
- Uvarov, V. B. See Nikiforov, A. F.; et al., **84j:33011**
- Varma, V. K. On generating functions for the Jacobi polynomial. **84c:33020**
- Verma, Arun (with Jain, Vinod Kumar) Self-reproducing kernels and bilinear formulas for q -orthogonal polynomials. **84c:33018**
See also Al-Salam, W. A., **84c:33010**; **84f:33013** and **84i:33010**
- Victor, J. D. See Azor, Ruth; et al., **84d:33012**
- Wilson, James A. See Ismail, Mourad E. H., **84c:33012**
- Yadava, H. C. See Singh Chandel, R. C., **84c:33017**
- Young, Andrew (with Hamideh, Hassan) The zeros of certain Jacobi polynomials. **84c:33015**
- Zeren, Bedriye Melek Über eine obere Schranke der Koeffizienten einiger in der Theorie der Jacobischen elliptischen Funktionen vorkommender Polynome. (Turkish summary) [On an upper bound of the coefficients of some polynomials occurring in the theory of Jacobian elliptic functions] **84m:33019**
- Ziętak, Krystyna Recursive relations between coefficients of a double Chebyshev series for the function $T_p[x + y]$. (Polish) **84m:33020**
- secondary classifications:
- Agarwal, Ashok Kumar (with Manocha, H. L.) On some new generating functions. **84b:33013**
- Agarwal, B. M. (with Jain, Renu) Dynamical symmetry algebra of ${}_2F_1$ and Jacobi polynomial. **84j:33003**
- Boyd, J. N. (with Raychowdhury, P. N.) Zonal harmonic functions from two-dimensional analogs of Jacobi polynomials. **84b:33010**
- Bultheel, A. (with Dewilde, Patrick) Orthogonal functions related to the Nevanlinna-Pick problem. (See **84g:93005c**)
- Calogero, Francesco Isospectral matrices and classical polynomials. **84b:15018**
- Cartwright, Donald I. Lebesgue constants for Jacobi expansions. **84b:42019**
- Cazzaniga, Franco (with Meaney, Christopher) A local property of absolutely convergent Jacobi polynomial series. **84a:42036**
- Chatterjea, S. K. See Chongdar, A. K., **84a:33026**
- Chongdar, A. K. (with Chatterjea, S. K.) On a class of trilateral generating relations with Chebyshev polynomials from the viewpoint of one-parameter group of continuous transformations. **84a:33026**
- Conde, S. See Kalla, S. L., **84c:65022**
- Deeba, E. Y. (with Koh, E. L.) The continuous Jacobi transform. **84b:44009**
- Dewilde, Patrick See Bultheel, A., (See **84g:93005c**)
- DiDonato, A. R. Recurrence relations for the indefinite integrals of the associated Legendre functions. **84c:33008**
- Dodunova, L. K. See Seleznev, A. I., **84j:30061**
- Dresler, B. (with Sordi, Paolo M.) A Cohen-type inequality for Jacobi expansions and divergence of Fourier series on compact symmetric spaces. **84d:42029**
- Dube, Mahesh See Jain, Rajendra Nath, **84m:33023**
- Dwivedi, A. P. (with Singh, V. B.) N -sequence equations involving orthogonal polynomials. **84c:45004**
(with Gupta, P. M.) Some further triple Fourier-Laguerre series equations. **84d:45018**
(with Gupta, R. G.; Gupta, P. M.) Certain triple series equations involving Jacobi polynomials. **84m:45015**
- Elliott, David Orthogonal polynomials associated with singular integral equations having a Cauchy kernel. **84a:45003**
- Feinsilver, Philip J. Canonical representation of the Bernoulli process. **84f:60090**
- Gautschi, Walter On generating orthogonal polynomials. **84c:65022**
- Geronimo, Jeffrey S. (with Nevai, Paul G.) Necessary and sufficient conditions relating the coefficients in the recurrence formula to the spectral function for orthogonal polynomials. **84d:42037**
- Ghizzetti, Aldo (with Ossicini, A.) ★ Polinomi ortogonali e problema dei momenti. (Italian) [Orthogonal polynomials and the moment problem] **84c:42020**
- Gillis, J. (with Reznick, Bruce; Zeilberger, Doron) On elementary methods in positivity theory. **84d:42017**
- Glaeske, Hans-Jürgen On a class of integral transformations. (German and Russian summaries) **84m:44006**
- Golub, Gene H. See Kaustsky, J., **84g:65050**
- Gupta, P. M. See Dwivedi, A. P., **84d:45018** and **84m:45015**
- Gupta, R. G. See Dwivedi, A. P.; et al., **84m:45015**
- Habibullah, G. M. An integral operator involving a Legendre function. **84f:44014**
- Hang, H. M. See Yu, S. Y.; et al., **84a:41010**
- Huang, Ch'i (with Shih, Yen Ping) Laguerre series direct method for variational problems. **84i:49093**
- Jain, Rajendra Nath (with Dube, Mahesh) On Laguerre polynomials of two variables from the viewpoint of Lie algebra. (Hindi. English summary) **84m:33023**
- Jain, Renu See Agarwal, B. M., **84j:33003**
- Kalla, S. L. (with Conde, S.) On a Legendre polynomial integral. **84c:65022**
- Kant, Shri (with Pandey, Ram Nakshatra) Generating functions involving generalized Appell-function of two variables. (Turkish summary) **84f:33004**
- Kaustsky, J. (with Golub, Gene H.) On the calculation of Jacobi matrices. **84g:65050**
- Koh, E. L. See Deeba, E. Y., **84b:44009**
- Koornwinder, Tom H. Krawtchouk polynomials, a unification of two different group theoretic interpretations. **84f:33022**
- Kütz, Martin On the positivity of certain Cotes numbers. **84d:41042**
- Lakhani, K. B. On order of approximation of a function by its Laguerre expansion. **84b:42021**
- Lasser, Rupert Bochner theorems for hypergroups and their applications to orthogonal polynomial expansions. **84m:43005**
- Littlejohn, Lance L. The Krall polynomials: a new class of orthogonal polynomials. **84c:42036**
- Logan, B. F. An integral equation connected with the Jacobi polynomials. **84f:45006**
- Lubinsky, Doron S. (with Sharif, A.) On the largest zeroes of orthogonal polynomials for certain weights. **84f:42015**
- Madhekar, H. C. See Thakare, Nimbakrishna K., **84f:33006**
- Manocha, H. L. See Agarwal, Ashok Kumar, **84b:33013**
- Meaney, Christopher See Cazzaniga, Franco, **84a:42036**
- Muth, Eginhard J. The discrete Laguerre polynomials and their use in exponential smoothing. **84c:65022**
- Nevai, Paul G. See Geronimo, Jeffrey S., **84d:42037**
- Ossicini, A. See Ghizzetti, Aldo, **84c:42020**
- Pandey, Ram Nakshatra See Kant, Shri, **84f:33004**
- Popov, G. Ya. ★ Контактные задачи для линейно-деформируемого основания. (Russian) [Contact problems for a linearly deformed base] **84d:73004**
- Pradhan, K. M. Some generating functions for generalized hypergeometric polynomials. **84b:33002**
- Radecki, Jerzy A generalization of the ultraspherical polynomials. **84i:33009**
- Raychowdhury, P. N. See Boyd, J. N., **84b:33010**
- Reznick, Bruce See Gillis, J.; et al., **84i:42017**
- Ricci, Paolo Emilio Harmonic polynomials and systems of orthogonal functions of two variables. (Italian. English summary) **84g:31002**
- Roman, Steven The theory of the umbral calculus. I. **84c:05008a**
The theory of the umbral calculus. II. **84c:05008b**
- See, Michele Orthogonal polynomials, factor sequences and moments. (Italian. English summary) **84c:05004**
- Seleznev, A. I. (with Dodunova, L. K.) On two theorems of A. F. Leont'ev on the completeness of subsystems of Faber and Jacobi polynomials. (Russian) **84j:30061**
- Sharif, A. See Lubinsky, Doron S., **84f:42015**
- Shen, C. N. See Yu, S. Y.; et al., **84a:41010**
- Shestopalov, V. P. See Tuchkin, Yu. A., **84c:45004**
- Shih, Yen Ping See Huang, Ch'i, **84i:49093**
- Shukla, D. P. A note on new generating relations for functions of several variables. **84m:33006**
- Singh, V. B. See Dwivedi, A. P., **84c:45004**
- Sordi, Paolo M. See Dresler, B., **84d:42029**

- Stanton, Dennis Generalized n -gons and Chebychev polynomials. (84g:05038)
- Thakare, Nimbakrishna K. (with Madhekar, H. C.) On functions defined by n th differential formula involving the operator $(\lambda x^+ + x^{++1}D)$. (84f:33006)
- Tuchkin, Yu. A. (with Shestopalov, V. P.) On a model class of boundary value problems of electrodynamics. (Russian) (84c:45004)
- Wilmet, Jean Déterminant de Hankel-Kronecker de la suite des factorielles. (English summary) [The Hankel-Kronecker determinant of the sequence of factorials] (84c:05014)
- Yu, S. Y. (with Hang, H. M.; Shen, C. N.) Basis functions for piecewise Hermite polynomials. (84c:41010)
- Zayed, Ahmed I. On Laguerre series expansions of entire functions. (84c:30029)
- Generalized functions and orthogonal polynomials on the unit circle. (84c:42026)
- Zeilberger, Doron See Gillis, J.; et al., (84i:42017)

33A70 Other special functions

- Agarwal, Ashok Kumar (with Manocha, H. L.) On some new generating functions. 84b:33013
- Ahmed, Shafique (with Muldoon, Martin E.) Reciprocal power sums of differences of zeros of special functions. 84d:33016
- Bahadur, Satyendra On discrete bibasic hypergeometric series. 84j:33013
- Bhargava, S. K. Applications of some theorems of Srivastava and Lavoie. 84d:33017
- A unified presentation of two general sequences of functions. 84c:33016
- A unified presentation of two classes of polynomials defined by R. Panda and Konhauser. (Hindi. English summary) 84f:33019
- Dwivedi, B. N. See Singh Chandel, R. C., 84d:33021
- Efimova, I. T. (with Klokova, I. V.) Representation of a new special function by Chebyshev series. (Russian) 84m:33021
- Elbert, A. Asymptotic expansion and continued fraction for Mathieu's series. 84b:33020
- Gabutti, Bruno Laguerre, Hermite and Meixner polynomials arising from polynomials in several variables. 84d:33018
- Klokova, I. V. See Efimova, I. T., 84m:33021
- Köhig, K. S. On the integral $\int_0^1 e^{-p/t} t^{-1} \log^m t dt$. 84b:33021
- Kumari, Savita See Singhal, J. P., 84c:33020
- Madhekar, H. C. Some results in unified form for classes of generalized Bernoulli, Euler and related polynomials. 84c:33021
- Manocha, H. L. See Agarwal, Ashok Kumar, 84b:33013
- Mathur, Renu See Munot, P. C., 84d:33019
- Muldoon, Martin E. See Ahmed, Shafique, 84d:33016
- Munot, P. C. (with Mathur, Renu) Operational formulae associated with a class of generalized polynomials. 84d:33019
- Rai, P. N. (with Singh, Surya Narain) Generalization of Bell polynomials and related operational formula. (Hindi. English summary) 84c:33017
- Shahabuddin, Md. Generalised polynomial $A_n(x)$: double integral representations and some of its properties. 84c:33025
- Singh, Surya Narain See Rai, P. N., 84c:33017
- Singhal, J. P. (with Kumari, Savita) On an extension of an inverse series relation. 84d:33020
- Singh Chandel, R. C. (with Dwivedi, B. N.) On some associated polynomials. 84d:33021
- Srivastava, A. N. Some generating functions for a new class of polynomials. 84d:33022
- Srivastava, Aruna See Tomar, R. C., 84f:33020
- Takeuchi, Yu Limit of the series $\sum_{n=0}^{\infty} (-1)^n x^n / (p; p)_n^2$ as $p \rightarrow 1^-$. (Spanish) 84c:33022
- Tomar, R. C. (with Srivastava, Aruna) On a set of polynomials $G_n^2(x, s, p)$. I. (Hindi. English summary) 84f:33020
- Wang, Ren Chuan Integrals of products of Airy functions. (Chinese. English summary) 84c:33012

secondary classifications:

- Arias de Reyna Martínez, Juan Definition and study of an infinitely differentiable function with compact support. (Spanish) (84d:26009)
- Barnabei, Marilena (with Brini, Andrea; Nicoletti, Giorgio) Recursive matrices and umbral calculus. (84c:05020)
- Brini, Andrea See Barnabei, Marilena; et al., (84c:05020)
- Chongdar, A. K. On a class of generating relations for certain special functions from the viewpoint of one-parameter continuous transformations group. (84f:33021)
- Howard, F. T. A theorem relating potential and Bell polynomials. (84c:05015)
- Koblitz, Neal q -extension of the p -adic gamma function. II. (84c:12024)
- Nicoletti, Giorgio See Barnabei, Marilena; et al., (84c:05020)
- Ojeda-Castaneda, J. Focus-error operator and related special functions. (84j:78007)

33A75 Special functions and Lie groups [See also 22Exx, 43A80.]

- Agarwal, B. M. See Jain, Renu, 84b:33015
- Chatterjea, S. K. On $(p+3)$ -dimensional complex Lie group and special functions. 84m:33022
- See also Chongdar, A. K., 84c:33026
- Chiney, S. P. Extended Jacobi polynomials and group representations. 84b:33014
- Chongdar, A. K. (with Chatterjea, S. K.) On a class of trilateral generating relations with Tchebychev polynomials from the viewpoint of one-parameter group of continuous transformations. 84c:33026
- On a class of generating relations for certain special functions from the viewpoint of one-parameter continuous transformations group. 84f:33021
- Dube, Mahesh See Jain, Rajendra Nath, 84m:33023
- Hermann, Robert Some algebraic, geometric, and system-theoretic properties of the special functions of mathematical physics. 84d:33023
- Jain, Rajendra Nath (with Dube, Mahesh) On Laguerre polynomials of two variables from the viewpoint of Lie algebra. (Hindi. English summary) 84m:33023

- Jain, Renu (with Agrawal, B. M.) Multiplier representation and generating functions H_r and ψ_r . (Hindi. English summary) 84b:33015
- Koornwinder, Tom H. Krawtchouk polynomials, a unification of two different group theoretic interpretations. 84f:33022
- Suslov, S. K. Matrix elements of Lorentz boosts and the orthogonality of Hahn polynomials on a contour. 84m:33024

secondary classifications:

- Antone, T. A. Expression for $y_{LM}[(r_1 \wedge r_2) \wedge r_3]$. (84b:33011)
- Basu, Dipak Kumar A novel extension of Lee's trilateral generating relation involving Tchebychev and Charlier polynomials. (84g:33015)
- Gustafson, R. A. (with Milne, S. C.) Schur functions, Good's identity, and hypergeometric series well poised in $SU(n)$. (84m:05013)
- Kalnins, E. G. (with Manocha, H. L.; Miller, Willard, Jr.) Harmonic analysis and expansion formulas for two-variable hypergeometric functions. (84a:58091)
- Manocha, H. L. See Kalnins, E. G.; et al., (84a:58091)
- Miller, Willard, Jr. See Kalnins, E. G.; et al., (84a:58091)
- Milne, S. C. See Gustafson, R. A., (84m:05013)
- Smorodinskii, Ya. A. (with Suslov, S. K.) The Clebsch-Gordan coefficients of the group $SU(2)$ and Hahn polynomials. (84c:81022)
- Suslov, S. K. See Smorodinskii, Ya. A., (84c:81022)

33A99 Miscellaneous topics

- Agarwal, Ashok Kumar (with Manocha, H. L.) On some new generating functions. 84d:33024
- Baweja, K. K. (with Saran, S.) Certain theorems on bilateral generating functions. 84f:33023
- Manocha, H. L. See Agarwal, Ashok Kumar, 84d:33024
- Saran, S. See Baweja, K. K., 84f:33023
- Singh, Surya Narain See Srivastava, A. N., 84d:33025
- Srivastava, A. N. (with Singh, Surya Narain) On bilateral generating relations for certain special functions. 84d:33025

secondary classifications:

- Carroll, Robert Wayne ★ Transmutation, scattering theory and special functions. (84b:35114)
- Kalinowski, M. W. (with Seweryński, M.; Szymanowski, L.) Comment on calculations of higher-order tadpoles and triangle vertex integral. (84b:81034)
- Seweryński, M. See Kalinowski, M. W.; et al., (84b:81034)
- Szymanowski, L. See Kalinowski, M. W.; et al., (84b:81034)

34-XX ORDINARY DIFFERENTIAL EQUATIONS

34-01 Elementary exposition, textbooks

- Bogdanov, Yu. S. (with Syroid, Yu. B.) ★ Дифференциальные уравнения. (Russian) [Differential equations] 84m:34001
- Braun, Martin ★ Differential equations and their applications. 84g:34001a
- ★ Differential equations and their applications. 84g:34001b
- Godunov, S. K. ★ Квадратичные функции Ляпунова. (Russian) [Quadratic Lyapunov functions] 84c:34001
- Huntley, Ian David (with Johnson, Roy Michael) ★ Linear and nonlinear differential equations. 84c:34002
- Iooss, Gérard (with Joseph, Daniel D.) ★ Элементарная теория устойчивости и бифуркации. (Russian) [Elementary stability and bifurcation theory] 84j:34001
- Johnson, Roy Michael See Huntley, Ian David, 84c:34002
- Joseph, Daniel D. See Iooss, Gérard, 84j:34001
- Lukes, Dahlard L. ★ Differential equations. 84c:34001
- (Moiseev, N. N.) See Iooss, Gérard; et al., 84j:34001
- Pontryagin, L. S. ★ Обыкновенные дифференциальные уравнения. (Russian) [Ordinary differential equations] 84c:34001
- Reinhard, Hervé ★ Équations différentielles. (French) [Differential equations] 84g:34002
- (Rubanovskii, V. N.) See Iooss, Gérard; et al., 84j:34001
- Struble, Raimond A. ★ Nonlinear differential equations. [Nonlinear differential equations] 84m:34002
- Syroid, Yu. B. See Bogdanov, Yu. S., 84m:34001
- Wenzel, Horst ★ Gewöhnliche Differentialgleichungen. I. (German) [Ordinary differential equations. I] 84f:34001
- West, Beverly Henderson Setting up first-order differential equations from word problems. (See 84j:00019)
- Qualitative solution sketching for first-order differential equations. (See 84j:00019)
- Ye, Yan Qian ★ Chang weifen fangcheng jiangyi. (Chinese) [Lectures on ordinary differential equations] 84m:34003

secondary classifications:

- Arnol'd, V. I. ★ Теория равновесных точек. (Polish) [Theory of differential equations] (84c:58065)
- (Braun, Martin) See Differential equation models, (84j:00019)
- (Coleman, Courtney S.) See Differential equation models, (84j:00019)
- (Drew, Donald A.) See Differential equation models, (84j:00019)
- Jänich, Klaus ★ Analysis für Physiker und Ingenieure. (German) [Analysis for physicists and engineers] (84c:00002)
- (Wojtkowski, Maciej) See Arnol'd, V. I., (84c:58065)
- Differential equation models ★ Differential equation models. (84j:00019)

34-02 Advanced exposition (research surveys, monographs, etc.)

- (Browder, Felix E.) See Fattorini, Hector O., 84g:34003
 Campbell, Stephen L. ★ Singular systems of differential equations. II. 84b:34001
 Deo, Sadashiv G. See Pandit, Sudhakar G., 84g:34005
 Fattorini, Hector O. ★ The Cauchy problem. 84g:34003
 Hill, James M. ★ Solution of differential equations by means of one-parameter groups. 84g:34002
 Levitan, B. M. (with Zhikov, V. V.) ★ Almost periodic functions and differential equations. 84g:34004
 (Longdon, L. W.) See Levitan, B. M.; et al., 84g:34004
 Pandit, Sudhakar G. (with Deo, Sadashiv G.) ★ Differential systems involving impulses. 84g:34005
 Roach, Gary F. ★ Green's functions. 84a:34001
 Sotomayor, Jorge ★ Curvas definidas por equações diferenciais no plano. (Portuguese) [Curves defined for differential equations in the plane] 84m:34004
 Zhang, Jin Yan ★ Changweifen fangcheng jibe lilun yu fenzhi wenti. (Chinese) [Geometric theory of ordinary differential equations and bifurcations] 84k:34003
 Zhikov, V. V. See Levitan, B. M., 84g:34004

secondary classifications:

- Arnold, V. I. ★ Geometrical methods in the theory of ordinary differential equations. (84d:58023)
 Chow, Shui Nee (with Hale, Jack K.) ★ Methods of bifurcation theory. (84c:58019)
 Hader, K. P. Nonlinear differential equations from biology. (84f:92001)
 Hale, Jack K. See Chow, Shui Nee, (84c:58019)
 (Levi, Mark) See Arnold, V. I., (84d:58023)
 Rosinger, Elemer E. ★ Nonlinear equivalence, reduction of PDEs to ODEs and fast convergent numerical methods. (84g:65005)
 Szielen, Wiesław ★ Wstęp do teorii gładkich układów dynamicznych. (Polish) [Introduction to the theory of smooth dynamical systems] (84k:58066)
 (Szűcs, József) See Arnold, V. I., (84d:58023)
 Walter, Eric ★ Identifiability of state space models. (84h:92001)

34-03 Historical (must also be assigned at least one classification number from Section 01)

- Hukuhara, Masuo Fifty years of ordinary differential equations. I. (Japanese) 84k:34004a
 Fifty years of ordinary differential equations. II. (Japanese) 84k:34004b

secondary classifications:

- Acloque, Paul ★ Oscillations et stabilité selon Foucault. (French) [Oscillations and stability according to Foucault] (84m:01022)
 Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Introduction. (84i:14001)
 Chudnovsky, Gregory V. See Chudnovsky, D. V., (84i:14001)
 (Costabel, Pierre) See Aclouque, Paul, (84m:01022)
 Kreith, Kurt PDE generalizations of the Sturm comparison theorem. (See 84m:01001)
 (Lyapunov, A. M.) See Mitropol'skii, Yu. A.; et al., (84c:01076)
 Martinet, Jean A propos d'un travail de Christoffel sur les équations différentielles. (English summary) [On a work of Christoffel concerning differential equations] (84d:01036)
 Martynuk, A. A. See Mitropol'skii, Yu. A.; et al., (84c:01076)
 Mawhin, Jean Remarks on E. B. Christoffel's paper: "Über die kleinen Schwingungen eines periodisch eingerichteten Systems materieller Punkte". (84h:01050)
 Mitropol'skii, Yu. A. (with Zubov, V. I.; Martynuk, A. A.) Aleksandr Mikhailovich Lyapunov (on the one hundred twenty-fifth anniversary of his birth). (Russian) (84c:01076)
 Movchan, V. O. M. P. Kravchuk's work in the theory of differential and integral equations. (Ukrainian. Russian summary) (84m:01034)
 Rumyantsev, V. V. Development of research in the USSR in the theory of stability of motion. (Russian) (84h:01068)
 Wasow, Wolfgang The origins of turning point theory. (See 84m:01001)
 Yushkevich, A. P. Sur les origines de la "méthode de Cauchy-Lipschitz" dans la théorie des équations différentielles ordinaires. (English summary) [On the origins of the "Cauchy-Lipschitz method" in the theory of ordinary differential equations] (84f:01032)
 Zubov, V. I. See Mitropol'skii, Yu. A.; et al., (84c:01076)
 Anniversary:
 Birth of Lyapunov, A. M. See Mitropol'skii, Yu. A.; et al., (84c:01076)
 Biography:
 Lyapunov, A. M. See Mitropol'skii, Yu. A.; et al., (84c:01076)

34-04 Explicit machine computation and programs (not the theory of computation or programming)

34-06 Proceedings, conferences, etc.

- (Boyartintsev, Yu. E.) See Degenerate systems of ordinary differential equations, 84i:34002
 (Collatz, L.) See Differential-difference equations, 84k:34005
 (Conti, Roberto) See Ordinary differential equations and functional equations, 84a:34003
 (Dimovski, Ivan Kh.) See Differential equations and applications, 84c:34002
 (Everitt, W. N.) See Ordinary and partial differential equations, 84b:34002
 (Leonovich-Andronova, E. A.) See Methods of the qualitative theory of differential equations, 84k:34006
 (Meinardus, Günter) See Differential-difference equations, 84k:34005
 (Otrokov, N. F.) See Differential and integral equations, 84h:34001
 (Sestini, Giorgio) See Ordinary differential equations and functional equations, 84a:34003

(Sharkov'skii, O. M.) See Oscillation and stability of solutions of functional-differential equations, 84i:34003

(Sleeman, B. D.) See Ordinary and partial differential equations, 84b:34002

(Stoyanov, Jordan M.) See Differential equations and applications, 84c:34002

(Stryin, V. V.) See Approximate methods for investigating differential equations and their applications, 84c:34001

(Villari, Gabriele) See Ordinary differential equations and functional equations, 84a:34003

(Wetterling, W.) See Differential-difference equations, 84k:34005

Approximate methods for investigating differential equations and their applications

★ Приближенные методы исследования дифференциальных уравнений и их приложений. Вып. 6. (Russian) [Approximate methods for investigating differential equations and their applications. No. 6] 84c:34001

Conference:

Differential Equations and Applications ★ Differential equations and applications. I, II. 84c:34002

Equadiff ★ Equazioni differenziali ordinarie ed equazioni funzionali. [Ordinary differential equations and functional equations] 84a:34003

Ordinary and Partial Differential Equations ★ Ordinary and partial differential equations. 84b:34002

Ordinary Differential Equations and Functional Equations ★ Equazioni differenziali ordinarie ed equazioni funzionali. [Ordinary differential equations and functional equations] 84a:34003

Degenerate systems of ordinary differential equations ★ Вырожденные системы обыкновенных дифференциальных уравнений. (Russian) [Degenerate systems of ordinary differential equations] 84i:34002

Differential and integral equations ★ Дифференциальные и интегральные уравнения. Вып. 5. (Russian) [Differential and integral equations. No. 5] 84h:34001

Differential-difference equations ★ Differential-difference equations. 84k:34005

Differential equations and applications ★ Differential equations and applications. I, II. 84c:34002

Dundee ★ Ordinary and partial differential equations. 84b:34002

Florence ★ Equazioni differenziali ordinarie ed equazioni funzionali. [Ordinary differential equations and functional equations] 84a:34003

Methods of the qualitative theory of differential equations ★ Методы качественной теории дифференциальных уравнений. (Russian) [Methods of the qualitative theory of differential equations] 84k:34006

Oberwolfach ★ Differential-difference equations. 84k:34005

Ordinary and partial differential equations ★ Ordinary and partial differential equations. 84b:34002

Ordinary differential equations and functional equations ★ Equazioni differenziali ordinarie ed equazioni funzionali. [Ordinary differential equations and functional equations] 84a:34003

Oscillation and stability of solutions of functional-differential equations ★ Оценки устойчивости решений дифференциально-функциональных уравнений. [Oscillation and stability of solutions of functional-differential equations] 84i:34003

Ruse ★ Differential equations and applications. I, II. 84c:34002

Workshop:

Differential-difference equations ★ Differential-difference equations. 84k:34005

secondary classifications:

- (Hannsgen, Kenneth B.) See Volterra and functional-differential equations, (84h:45002)
 (Helleman, Robert H. G.) See Chaotic behavior of deterministic systems, (84j:58005)
 (Herdman, Terry L.) See Volterra and functional-differential equations, (84h:45002)
 (Jooss, Gérard) See Chaotic behavior of deterministic systems, (84j:58005)
 (Luk'yanov, A. T.) See Mathematical modeling of nonstationary processes, (84j:93007)
 (Maksudov, F. G.) See Abstracts: Conference of the young scientists of the Azerbaijani republic on mathematics and mechanics, (84j:00008)
 (Nuriev, B. R.) See Abstracts: Conference of the young scientists of the Azerbaijani republic on mathematics and mechanics, (84j:00008)
 (Pustomel'nikov, I. P.) See Differential equations and their applications, (84h:65006)
 (Stech, Harlan W.) See Volterra and functional-differential equations, (84h:45002)
 (Stora, Raymond) See Chaotic behavior of deterministic systems, (84j:58005)
 (Wheeler, Robert L.) See Volterra and functional-differential equations, (84h:45002)
 (Yang, Chung Chun) See Value distribution theory and its applications, (84m:30003)
 Abstracts:

Conference of the young scientists of the Azerbaijani republic on mathematics and mechanics ★ Материалы III еспубликанской конференции молодых ученых по математике и механике. (Russian) [Abstracts of the third conference of the young scientists of the Azerbaijani republic on mathematics and mechanics] (84j:00008)

Baku ★ Материалы III еспубликанской конференции молодых ученых по математике и механике. (Russian) [Abstracts of the third conference of the young scientists of the Azerbaijani republic on mathematics and mechanics] (84j:00008)

Blacksburg, Va. ★ Volterra and functional-differential equations. (84h:45002)

Chaotic behavior of deterministic systems ★ Comportement chaotique des systèmes déterministes. [Chaotic behavior of deterministic systems] (84j:58005)

Comportement chaotique des systèmes déterministes ★ Comportement chaotique des systèmes déterministes. [Chaotic behavior of deterministic systems] (84j:58005)

Conference:

Azerbaijani, young scientists ★ Материалы III еспубликанской конференции молодых ученых по математике и механике. (Russian) [Abstracts of the third conference of the young scientists of the Azerbaijani republic on mathematics and mechanics] (84j:00008)

Mathematics and mechanics ★ Материалы III еспубликанской конференции молодых ученых по математике и механике. (Russian) [Abstracts of the third conference of the young scientists of the Azerbaijani republic on mathematics and mechanics] (84j:00008)

Volterra and Functional-Differential Equations ★ Volterra and functional-differential equations. (84h:45002)

Differential equations and their applications ★Дифференциальные уравнения и их приложения. (Russian) [Differential equations and their applications] (84b:65006)

Les Houches ★Comportement chaotique des systèmes déterministes. [Chaotic behavior of deterministic systems] (84j:58005)

Mathematical modeling of nonstationary processes ★Математическое моделирование нестационарных процессов. (Russian) [Mathematical modeling of nonstationary processes] (84j:93007)

Meeting:

American Mathematical Society ★Value distribution theory and its applications. (84m:30003)

New York ★Value distribution theory and its applications. (84m:30003)

Session:

Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

Summer School:

Theoretical Physics ★Comportement chaotique des systèmes déterministes. [Chaotic behavior of deterministic systems] (84j:58005)

Symposium:

Theory of Dynamical Systems and its Related Topics ★Theory of dynamical systems and its related topics. (Japanese) (84a:58008)

Theory of dynamical systems and its related topics ★Theory of dynamical systems and its related topics. (Japanese) (84a:58008)

Value distribution theory and its applications ★Value distribution theory and its applications. (84m:30003)

Volterra and functional-differential equations ★Volterra and functional-differential equations. (84b:45002)

34Axx General theory

34A05 Solutions in closed form, integration by quadratures, reduction of differential equations

Abdelkader, Mostafa A. Exact solutions for Rayleigh's equation with variable mass. 84b:34003

Ablovitz, Mark J. See Fokas, A. S., 84b:34004

Ampilov, V. V. On the theory of linear ordinary differential equations with right-hand sides (inhomogeneous). (Russian. English summary) 84b:34007

Apushkinskii, E. G. (with Moskaev, V. V.) Investigation of Bloch equations. (Russian. English summary) 84b:34004

Bier, Martin See Bountis, Tassos C.; et al., 84j:34002

Blokhin, A. F. On the integrals of the equation $y' = f(x, y)$. (Russian) 84a:34004

Bountis, Tassos C. (with Bier, Martin; Hijmans, Jaap) On the integrability of some generalized Lotka-Volterra systems. 84j:34002

Brauer, Claude (with Lainé, Cl.; Nicolaenko, Basil) Further solutions of the Falkner-Skan equation for $\beta = -1$ and $\gamma = 0$. 84b:34002

Faiziev, S. Construction of polynomial solutions of a system of linear differential equations. (Russian) 84c:34002

Fet'kova, Jana Some cases in which a differential equation of amplitudes can be solved explicitly. (Slovak. English, German and Russian summaries) 84b:34003

Application of a second-order linear differential transformation to the solution of differential equations of amplitudes with complex support. (Slovak. English, German and Russian summaries) 84c:34005

Fokas, A. S. (with Ablovitz, Mark J.) On a unified approach to transformations and elementary solutions of Painlevé equations. 84b:34004

Gu, Jian De On the solution and applications of a class of linear differential equations of second order with variable coefficients. (Chinese) 84a:34005

Hijmans, Jaap See Bountis, Tassos C.; et al., 84j:34002

Hosek, Josef Jacobische Differentialgleichung mit hyperbolischen Phasen die der primitiven Funktion zur Quadratwurzel aus ihrem Träger gleich sind. (Russian and Czech summaries) [Jacobian differential equation with hyperbolic phases that are equal to the primitive function of the square root of its carrier] 84b:34004

Kapcia, A. On the problem of effective integrability of Riccati differential equation and of a linear differential equation of second order with the aid of peculiar integral. (See 84c:34002)

Kard, P. On the solution of one-dimensional wave equations. (Russian. English and Estonian summaries) 84d:34001

Kostenko, V. G. See Zhernovii, Yu. V., 84g:34006

Lainé, Cl. See Brauer, Claude; et al., 84b:34002

Lokhin, B. I. Quadrature solution of differential equations of variations of elements of motion of a point in a force field depending on two arbitrary functions of elliptic coordinates. (Russian) 84j:34003

Lu, Shao Ying A simplified method of undetermined coefficients—finding a particular solution for an n th-order nonhomogeneous linear differential equation with constant coefficients. (Chinese) 84d:34002

Mkrtumyan, R. R. A case of integrability of a second-order linear equation. (Russian) 84b:34005

Moskaev, V. V. See Apushkinskii, E. G., 84i:34004

Nicolaenko, Basil See Brauer, Claude; et al., 84b:34002

Peters, J. M. H. Elementary but unusual methods of solving ordinary differential equations. 84b:34005

Romanova, O. A. See Sidorov, N. A., (See 84c:34002)

Samodurov, A. A. Integrability of the Abel differential equation in parametric form. (Russian) 84b:34008

Šapkarev, Ilija A. Eine Methode über die Integration der linearen Differentialgleichungen der zweiten Ordnung in geschlossener Form. (Macedonian summary) [A method for integrating second-order linear differential equations in closed form] 84f:34002

Schulman, Lawrence S. Time-symmetric self-interaction. 84b:34006

Sidorov, N. A. (with Romanova, O. A.) Application of some results of branching theory in the solution of differential equations with degeneration. (Russian) (See 84c:34002)

Tatsunay, P. I. Solution of an equation for a type of anharmonic oscillator. (Ukrainian. Russian summary) 84j:34004

Wang, Cun Zheng Formulas for the solutions of differential equations. I. Formulas for the solutions of higher-order linear and nonlinear ordinary differential equations with variable coefficients. (Chinese. English summary) 84c:34003

Zhernovii, Yu. V. (with Kostenko, V. G.) Fifth-order ordinary linear differential equations integrable in closed form. (Ukrainian. Russian summary) 84g:34006

Zubov, S. V. Construction of a family of solutions of a system of ordinary differential equations of Briot and Bouquet type. (Russian) 84b:34006

secondary classifications:

Agarwal, Ashok Kumar (with Bhatia, Rita; Manocha, H. L.) Alternative methods of obtaining differential operator representations. (84b:33011)

Aguirre, Eduardo See Gascón, F. G.; et al., (84c:70021)

Akizhanov, A. A. (with Akizhanova, A. A.) The Korteweg-de Vries equation. (Russian) (84i:35120)

Akizhanova, A. A. See Akizhanov, A. A., (84i:35120)

Beklemisheva, L. A. Reducibility of polynomial systems of equations to block-triangular form. (Russian) (84d:34007)

Bershtanskii, Ya. M. Paths of linear systems with a relay-type nonlinearity. (84b:93031)

Bhatia, Rita See Agarwal, Ashok Kumar; et al., (84b:33011)

Burnside, R. R. A note on exact solutions of two prey-predator equations. (84i:92055)

Chodos, Alan (with Sommerfield, Charles M.) Practical use of the Hamilton-Jacobi equation. (84d:70023)

Gonzalez-Gascon, F. G. (with Ramos, F. B.; Aguirre, Eduardo) On the polynomial first integrals of certain second-order differential equations. (84c:70021)

Jeffrey, Alan See Menon, V. V.; et al., (84b:73014)

Katzin, Gerald H. (with Levine, Jack) Time-dependent vector constants of motion, symmetries, and orbit equations for the dynamical system

$\dot{r} = I_1 \{ [U(r)/U(t)] r - [\mu_0/U(t)] r^{-2} \}$. (84j:70007)

Kereksha, Piotr V. (with Otilio, M. A.) A class of linear differential equations of finite and infinite order with special variable coefficients. (Russian) (84f:34018)

Krytchenko, V. E. On a fundamental system of solutions of a fourth-order linear differential equation. (Russian) (84d:34009)

Levine, Jack See Katzin, Gerald H., (84j:70007)

Manocha, H. L. See Agarwal, Ashok Kumar; et al., (84b:33011)

Menon, V. V. (with Sharma, V. D.; Jeffrey, Alan) On the general behavior of acceleration waves. (84b:73014)

Otilio, M. A. See Kereksha, Piotr V., (84f:34018)

Panayotounakos, D. E. See Theocaris, Pericles S., (84b:73021)

Pustome'nikov, I. P. Investigation of some differential equations in a space of generalized functions. (Ukrainian. Russian summary) (84b:34017a)

Existence of solutions of linear differential equations in a space of generalized functions. (Ukrainian. Russian summary) (84b:34017b)

Ramos, F. B. See Gascón, F. G.; et al., (84c:70021)

Reid, James L. Linearization of homogeneous Riccati equations. (84i:58192)

Saermark, K. Solutions to generalized double sine-Gordon equations. (84b:35153)

Sharma, V. D. See Menon, V. V.; et al., (84b:73014)

Sommerfield, Charles M. See Chodos, Alan, (84d:70023)

Theocaris, Pericles S. (with Panayotounakos, D. E.) Exact solution of the nonlinear differential equation concerning the elastic line of a straight rod due to terminal loading. (French and German summaries) (84b:73021)

34A08 Equations not solved with respect to the highest-order derivative, singular solutions

Abduvaliev, A. O. On a problem of O. A. Oleinik. (Russian. English summary) 84b:34007

Campbell, Stephen L. Index two linear time-varying singular systems of differential equations. 84m:34005

Chistyakov, V. F. An existence theorem for solutions of singular linear systems of ordinary differential equations. (Russian) 84g:34007

secondary classifications:

(Boyarintsev, Yu. E.) See Degenerate systems of ordinary differential equations, (84i:34002)

Campbell, Stephen L. ★Singular systems of differential equations. II. (84b:34001)

Emmanuele, Giovanni Convergence of successive approximations for implicit ordinary differential equations in Banach spaces. (84b:34067)

Gear, C. W. (with Petzold, L. R.) Singular implicit ordinary differential equations and constraints. (See 84i:65008)

Petzold, L. R. See Gear, C. W., (See 84i:65008)

Prosenyuk, L. G. (with Yatsenko, S. A.) Asymptotic behavior of solutions and their derivatives of a complex first-order differential equation. (Russian) (84c:34071)

Skripnik, V. P. Degenerate linear systems. (Russian) (84b:34023)

Yatsenko, S. A. See Prosenyuk, L. G., (84c:34071)

Degenerate systems of ordinary differential equations ★Врожденные системы обыкновенных дифференциальных уравнений. (Russian) [Degenerate systems of ordinary differential equations] (84i:34002)

34A10 Initial value problems: general existence and uniqueness theorems; continuous dependence of solutions on parameters, initial conditions and boundary conditions [See also 45D05.]

Androschuk, A. A. Uniqueness of the solution of a problem of electric geophysical exploration. (Russian) 84f:34003

Elbert, Á. A half-linear second order differential equation. 84g:34008

Eliáš, Jozef On the differential equation $y^{(n)}(x) + f(x)y^{\alpha}(x) = 0$, $0 < \alpha < 1$. (See 84c:34002)

- Khachatryan, I. G.** A study of solutions of an ordinary singular differential equation. (Russian. English and Armenian summaries) **84c:34004**
- Kitagawa, Keiichiro** Sur la formulation du problème de Cauchy pour un système d'équations différentielles ordinaires linéaires. [On the formulation of the Cauchy problem for a system of linear ordinary differential equations] **84h:34008**
- Martynuk, A. A.** The comparison method in a problem on the continuous dependence on the parameter. (Russian) **84g:34009**
- Matrosov, V. M.** On the theory of differential equations and inequalities with discontinuous right-hand sides. (Russian. English and Bulgarian summaries) **84g:34010**
- Milosević, Radivoje** On some applications of the norm of Bielecki. (Serbo-Croatian. English summary) **84c:34003**
- Muratori, Paolo** Results of existence and regularity for the equation $y' = f(x, y)$. (Italian. English summary) **84c:34005**
- Nekvinđa, Miloslav** On uniqueness of solutions of differential equations. (Russian summary) **84h:34009**
- Persson, Jan** Generalized nonlinear ordinary differential equations linear in measures. **84h:34010**
- Rzepecki, Bogdan** Note on the equation $f'(x) = A(x)f(g(x))$. **84h:34011**
- Sachdev, S. K.** Positive solutions of a nonlinear initial value problem on half-line. **84c:34009**
- Samimi, Mansour** Nonuniqueness criteria for ordinary differential equations. **84d:34003**
- Schwabik, Štefan** Uniqueness for generalized differential equations. **84g:34011**
- Tazari, Ahmad Zain-Alabedeen Mohammad** Local existence theorems for ordinary differential equations of fractional order. **84c:34004**
- Wiener, Klaus** Über Anfangswertprobleme bei Differentialgleichungen von nichtganzzahliger Ordnung mit singulären Koeffizienten und rechten Seiten. [On initial value problems in differential equations of noninteger order with singular coefficients and right sides] **84m:34006**

secondary classifications:

- Abdualiev, A. O.** On a problem of O. A. Oleinik. (Russian. English summary) **(84h:34007)**
- Arrate Peña, Manuel** (with García, A. G.) A general uniqueness theorem of dissipative type for ordinary differential equations in Banach spaces. (Spanish) **(84a:34066)**
- Astakhova, I. S.** Reduction of a system of differential equations of motion of a dynamically oblate satellite around a center of mass to a special form. (Russian. English summary) **(84d:70039)**
- Astala, Kari** On Peano's theorem in locally convex spaces. **(84m:34090)**
- Chernyshov, K. I.** See **Krein, S. G.**, **(84m:34086)**
- Chistyakov, V. F.** An existence theorem for solutions of singular linear systems of ordinary differential equations. (Russian) **(84g:34007)**
- Deo, Sadashiv G.** See **Pandit, Sudhakar G.**, **(84g:34005)**
- Du, S. W.** (with Lakshmikantham, V.) Monotone iterative technique for differential equations in a Banach space. **(84c:34096)**
- Dzhumabaev, D. S.** Boundedness of a solution and its derivative on the whole axis of a first-kind differential equation. (Russian. Kazakh summary) **(84h:34046)**
- Elderkin, Richard H.** Seed dispersal in a patchy environment with global age dependence. **(84h:92044)**
- García, A. G.** See **Arrate Peña, Manuel**, **(84a:34066)**
- Gopalsamy, K.** Age-specific coexistence in two-species competition. **(84h:92030)**
- Gorshkov, A. I.** Construction of a solution of a boundary value problem for parabolic equations with deviating arguments and variable coefficients. (Russian. English summary) **(84c:35104)**
- Jones, John, Jr.** Solutions of Lyapunov and Riccati type matrix equations arising in optimal control theory and systems theory. (See **84c:00005**)
- Joshi, S. R.** See **Shendge, G. R.**, **(84c:34022)**
- Krbec, P.** Parasitic and nonparasitic solutions of differential equations and stability. **(84h:34065)**
- Krein, S. G.** (with Chernyshov, K. I.) Analogue of Tikhonov's theorem for the equation $(A + \varepsilon B)\dot{x} = C(t)x$. (Russian) **(84m:34086)**
- Krupka, Z. I.** Approximation of meromorphic functions by rational ones and acceleration of the convergence of power series. (Russian. English summary) **(84c:30057)**
- Kubiacyk, Ireneusz** Kneser type theorems for ordinary differential equations in Banach spaces. **(84a:34071)**
- Lakshmikantham, V.** See **Du, S. W.**, **(84c:34096)** and **Samimi, Mansour**, **(84d:34068)**
- Laubin, P.** Sur l'analyticité des solutions des équations différentielles. (English summary) [The analyticity of solutions of differential equations] **(84f:34008)**
- Martin, Clyde Franklin** Finite escape time for Riccati differential equations. **(84g:49034)**
- Melnikova, I. V.** The Cauchy problem for a second-order equation. (Russian) **(84g:34103)**
- Müller, G. O.** Continuity moduli criteria for ODEs in a Banach space. **(84m:34092)**
- Pandit, Sudhakar G.** (with Deo, Sadashiv G.) ★ Differential systems involving impulses. **(84g:34005)**
- Pucci, Patrizia** Identifying all of the solutions of an orientor field by an approximation method. (Italian) (See **84c:34003**)
- Rodkina, A. E.** Solvability of equations of neutral type in different function spaces. (Russian) **(84d:34072)**
- Rosa, Vladislav** Existence theorems for initial value problems with nonlinear differential system with delay. (Russian and Slovak summaries) **(84h:34071)**
- Saint-Raymond, Jean** Une équation différentielle sans solution. [A differential equation with no solution] **(84c:34092)**
- Samimi, Mansour** (with Lakshmikantham, V.) General uniqueness criteria for ordinary differential equations. **(84d:34068)**
- Shendge, G. R.** (with Joshi, S. R.) Abstract measure differential inequalities and applications. **(84c:34022)**
- Stanković, Bogoljub** Linear differential equation with coefficients in a subfield of Mikusiński operators. **(84h:44013)**
- Viegas, Francisco Caetano de Sigmaringen dos Santos** Integration and differentiation of nonentire order for precontinuous distributions. (Portuguese) **(84h:46045)**

Webb, G. F. Diffusive age-dependent population models and an application to genetics. **(84f:92027)**

Winternitz, P. Nonlinear action of Lie groups and superposition principles for nonlinear differential equations. **(84f:22028)**

Zhang, Jin Yan Control equations for nonlinear differential equations with unbounded operators. I. The Banach space case. (Chinese) **(84c:34101)**

Zyukin, P. N. Dependence of the solutions of a perturbed degenerate equation on the parameter. (Russian) **(84m:34088)**

34A15 Initial value problems: continuation of solutions

El-Owaidy, Hassan (with Zagrou, A. A. S.) A note on continuation and boundedness of solutions of a nonlinear differential equation. **84h:34010**

Meroci, Ymer Some properties of the solutions of the equation $y' = (y - a_1)(y - a_2)$. (Serbo-Croatian. French summary) **84f:34004**

Sasagawa, Tetsushi On the finite escape phenomena for matrix Riccati equations. **84c:34006**

Zagrou, A. A. S. See **El-Owaidy, Hassan**, **84h:34010**

secondary classifications:

- Abdualiev, A. O.** On a problem of O. A. Oleinik. (Russian. English summary) **(84h:34007)**
- Al-Bassam, M. A.** On fractional calculus and its applications to the theory of ordinary differential equations of generalized order. **(84c:26013)**
- Elderkin, Richard H.** Seed dispersal in a patchy environment with global age dependence. **(84h:92044)**
- Rosa, Vladislav** Existence theorems for initial value problems with nonlinear differential system with delay. (Russian and Slovak summaries) **(84h:34071)**

34A20 Differential equations in the complex domain [See also 30D05.]

- Amemiya, Ichiro** (with Ozawa, Mitsuru) Nonexistence of finite order solutions of $w'' + e^{-1}w' + Q(z)w = 0$. **84h:34007**
- Baldassarri, Francesco** On algebraic solutions of Lamé's differential equation. **84a:34006**
- Balser, W.** On the existence of solution vectors of a meromorphic differential equation which are of lower order than the others. **84m:34007**
- Solutions of first level of meromorphic differential equations. **84c:34006**
- Bank, Steven B.** (with Gundersen, Gary G.; Laine, Ilpo) Meromorphic solutions of the Riccati differential equation. **84h:34008**
- On certain properties of solutions of second-order linear differential equations. **84c:34007**
- Deniskovets, A. A.** See **Gorbuzov, V. N.**, **84c:34008**
- Dezhurko, Yu. I.** Existence of solutions with prescribed properties in systems of differential equations in the complex domain. (Russian) **84h:34012**
- Dolov, M. V.** (with Kosarev, V. V.) Darboux integrals and the analytic structure of solutions of differential equations. (Russian) **84c:34007**
- Erëmenko, A. E.** Meromorphic solutions of equations of Briot-Bouquet type. (Russian) **84h:34013**
- Meromorphic solutions of algebraic differential equations. (Russian) **84h:34014a**
- Letter to the editors: "Meromorphic solutions of algebraic differential equations". (Russian) **84h:34014b**
- Ergin, N. P.** ★ Проблема Римана. (Russian) [The Riemann problem] **84h:34015**
- Fedyuk, M. V.** The Sturm-Liouville problem with regular singularities. (Russian) **84d:34004**
- Frenkel, Margareta** Remarks on equations of Fuchsian type in Banach algebras. I. (Romanian. French summary) **84m:34008a**
- Remarks on Fuchs-type differential equations in Banach algebras. II. (Romanian. French summary) **84m:34008b**
- Gorbuzov, V. N.** Qualitative investigation in the large of a system in the case of a pole at infinity. (Russian) **84c:34007**
- (with Deniskovets, A. A.) Some properties of polynomial solutions of a nonlinear differential equation. (Russian. English summary) **84c:34008**
- Grigorenko, V. K.** Construction of solutions of a system of linear differential equations with an irregular singular point. (Russian) **84f:34005**
- Gromak, V. I.** Solutions of the second Painlevé equation. (Russian) **84h:34016**
- Gundersen, Gary G.** See **Bank, Steven B.**; et al., **84h:34008**
- Hassan, H. S.** (with Lloyd, N. G.) On the structure of the set of solutions of certain holomorphic two-point boundary value problems. **84c:34006**
- He, Yu Zan** (with Xiao, Xiu Zhi) The applications of value distribution theory to ordinary differential equations. (Chinese) **84g:34012**
- Iwano, Masahiro** On a general solution of a nonlinear n -system of the form $x^i dy/dx = (1_n(\mu) + x1_n(\sigma))y + x f(x, y)$ with a constant diagonal matrix $1_n(\mu)$ of signature $(m, n - m)$. **84f:34006**
- Kalas, Josef** Asymptotic properties of the solutions of the equation $z = f(t, z)$ with a complex-valued function f . **84c:34007**
- Asymptotic behaviour of equations $z = q(t, z) - p(t)z^2$ and $\bar{z} = x\varphi(t, \bar{z}x^{-1})$. **84g:34013**
- Kolmo, Mitsuhiro** (with Ohkohchi, Shigemi) Generalized hypergeometric equations of non-Fuchsian type. **84f:34007**
- Komatsu, Hikosaburo** Linear ordinary differential equations with Gevrey coefficients. **84h:34017**
- Kosarev, V. V.** See **Dolov, M. V.**, **84c:34007**
- Kovalevskii, M. A.** Construction of Stokes multipliers for an equation with two singular points. (Russian. English summary) **84a:34008**
- Laine, Ilpo** See **Bank, Steven B.**; et al., **84h:34008**
- Laubin, P.** Sur l'analyticité des solutions des équations différentielles. (English summary) [The analyticity of solutions of differential equations] **84f:34008**
- Lloyd, N. G.** See **Hassan, H. S.**, **84c:34006**

- Lombet-Goffar, J. Systèmes différentiels polynomiaux stables de degré quatre. (English summary) [Stable polynomial differential systems of degree four] **84b:34018**
- Lukashovich, N. A. Third-order equations without fixed critical points. (Russian) **84c:34009**
- Martinet, Jean (with Ramis, Jean-Pierre) Problèmes de modules pour des équations différentielles non linéaires du premier ordre. [Moduli problems for first-order nonlinear differential equations] **84c:34011**
- Miwa, Tetsuji Deformation of linear ordinary differential equations. IV. **84c:34012**
Clifford operators and Riemann's monodromy problem. **84c:34013**
Painlevé property of monodromy preserving deformation equations and the analyticity of τ functions. **84c:34014**
- Möri, Yasuko On τ functions of a class of Painlevé type equations. I. **84b:34019**
- Ohkouchi, Shigemi See Kohno, Mitsuhiro, **84f:34007**
- Ozawa, Mitsuru See Amemiya, Ichiro, **84b:34007**
- Podolak, Esther See Westreich, David, **84b:34010**
- Pommerenke, Christian On the mean growth of the solutions of complex linear differential equations in the disk. **84c:34010**
- Ramis, Jean-Pierre See Martinet, Jean, **84c:34011**
- Rubel, Lee A. Some research problems about algebraic differential equations. **84j:34005**
- Sadoski, A. P. Normal forms of systems of differential equations with a nonzero linear part. (Russian) **84c:34008**
- Scruton, R. E. Some thoughts on solution in series. **84c:34005**
- Steinmetz, Norbert On the primeness of the Painlevé transcendents. **84b:34009**
Über die eindeutigen Lösungen einer homogenen algebraischen Differentialgleichung zweiter Ordnung. [On the unique solutions of a homogeneous algebraic second-order differential equation] **84f:34009**
Zur Wertverteilung der Lösungen der vierten Painlevéschen Differentialgleichung. [On the value distribution of the solutions of Painlevé's fourth differential equation] **84c:34005**
Über eine Klasse von Painlevéschen Differentialgleichungen. [On a class of differential equations of Painlevé type] **84c:34015**
- Umgeher, K. Lösungsschranken für Differentialgleichungen mit nicht beschränkten holomorphen Koeffizienten. [Bounds for solutions to differential equations with unbounded holomorphic coefficients] **84f:34010**
- Vulpe, N. I. Minimal complete system of orthogonal invariants of a two-dimensional differential system. (Russian) **84c:34020**
- Westreich, David (with Podolak, Esther) Systems of Briot-Bouquet equations with analytic solutions. **84b:34010**
- Wirtlich, H. Anwendungen der Wertverteilungslehre auf gewöhnliche Differentialgleichungen. [Applications of the theory of value distribution to ordinary differential equations] **84g:34014**
- Xiao, Xiu Zhi See He, Yu Zan, **84g:34012**
- Yarskii, A. S. On the property of separability of an algebraic solution of a system of ordinary differential equations. (Russian, English, French and Slovak summaries) **84c:34006**

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- Baldassarri, Francesco Differential modules and singular points of p -adic differential equations. (84i:12021)
- Benham, Craig J. The cylindrical Poisson-Boltzmann equation. I. Transformations and general solutions. (84f:78014)
- Brown, R. K. Univalence of normalized solutions of $W''(z) + p(z)W(z) = 0$. (84g:30014)
- Čanak, Miloš Carleman type boundary value problem for an n th-order areolar differential equation. (Serbo-Croatian, German summary) (84c:30060)
- Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Introduction. (84i:14001)
(with Chudnovsky, Gregory V.) Bäcklund transformations for linear differential equations and Padé approximations. I. (84a:58046)
- Chudnovsky, Gregory V. See Chudnovsky, D. V., (84a:58046) and (84i:14001)
- Clarkson, P. A. (with McLeod, J. B.) A note on solutions of Painlevé II. (84b:35152)
- Denisov, I. V. Asymptotic solution of an irregularly singular equation in a Banach space. (Russian) (84b:34090)
- Fedoryuk, M. V. The Sturm-Liouville problem with regular singular points. I. (Russian) (84c:34030a)
The Sturm-Liouville problem with regular singular points. II. (Russian) (84c:34030b)
- Françoise, Jean-Pierre Domaines de linéarisation asymptotique pour des champs de vecteurs. [Domains of asymptotic linearization for some vector fields] (84a:58067)
- Gérard, Raymond Meromorphic forms solutions of completely integrable Pfaffian systems with regular singularities. (84a:58012)
- Gromak, V. I. The sine-Gordon equation and the third Painlevé equation. (Russian) (84c:35132)
- Il'yashenko, Yu. S. (with Pyartli, A. S.) Materialization of resonances and divergence of normalizing series for polynomial differential equations. (Russian, English summary) (84c:34055)
- Jimbo, Michio (with Miwa, Tetsuji) Deformation of linear ordinary differential equations. I, II. (84c:14009)
Theory of τ functions in integrable systems. (See 84j:81006)
See also Miwa, Tetsuji, (84j:81081) and Sato, Mikio; et al., (84m:81124)
- Kalas, Josef Asymptotic behaviour of the solutions of the equation $dz/dt = f(t, z)$ with a complex-valued function f . (84c:34071)
On the asymptotic behaviour of the equation $dz/dt = f(t, z)$ with a complex-valued function f . (84c:34053)
- Kitagawa, Keiichiro Sur la formulation du problème de Cauchy pour un système d'équations différentielles ordinaires linéaires. [On the formulation of the Cauchy problem for a system of linear ordinary differential equations] (84b:34008)
- Klein, Felix ★ Vorlesungen über die hypergeometrische Funktion. (German) [Lectures on the hypergeometric function] (84b:01060)

- Li, Jian Shun Meromorphic functions which are solutions of algebraic differential equations. (Chinese, English summary) (84b:30038)
- London, David (with Schwarz, Binyamin) Strong and quasistrong discreteness. (84b:34040)
- Lord, M. E. See Watts, H. A.; et al., (84f:65061)
- McLeod, J. B. See Clarkson, P. A., (84b:35152)
- Miwa, Tetsuji (with Jimbo, Michio) Theory of τ -functions. Monodromy preserving deformation and quantum field theories. (Japanese) (84j:81081)
See also Jimbo, Michio, (84c:14009) and Sato, Mikio; et al., (84m:81124)
- Mokhon'ko, A. Z. Estimates of Nevanlinna characteristics of algebroid functions and their applications to differential equations. (Russian) (84c:30040)
- Moussu, Robert Symétrie et forme normale des centres et foyers dégénérés. (English summary) [Symmetry and normal form in degenerate centers and foci] (84j:58090)
- Ozawa, Mitsuru On a conjecture of Gackstatter and Laine. (84f:30043)
- Pyartli, A. S. See Il'yashenko, Yu. S., (84c:34055)
- Sato, Mikio (with Miwa, Tetsuji; Jimbo, Michio) Holonomic quantum fields. II. The Riemann-Hilbert problem. (84m:81124)
- Schwarz, Binyamin On two univalence criteria of Nehari. (84g:30021)
See also London, David, (84b:34040)
- Scott, M. R. See Watts, H. A.; et al., (84f:65061)
- Ueno, Kimio Monodromy preserving deformation and its application to soliton theory. II. (84i:58136)
- Watts, H. A. (with Scott, M. R.; Lord, M. E.) Solving complex-valued differential systems. (84f:65061)

34A25 Analytical theory: series, transformations, transforms, operational calculus, etc. [See also 44-XX, 47E05.]

- Alymkulov, K. A. The solution of a perturbed differential equation with an irregular singular point in the critical case. (Russian) **84c:34009**
- Babadzhanyants, L. K. (with Mgoian, P. B.) Estimation of holomorphic solutions of ordinary differential equations. (Russian, English and Armenian summaries) **84c:34009**
- Beklemisheva, L. A. Reducibility of polynomial systems of equations to block-triangular form. (Russian) **84c:34007**
- Berkovich, L. M. The transformation of differential equations of Sturm-Liouville type. (Russian) **84f:34011**
- Cao, Xuan Chuan Theory of coupled differential equations. **84j:34006a**
Extension of the theorem on the separation of a system of coupled differential equations. **84j:34006b**
- Futák, Ján (with Hăček, Miloš) Transformation of second-order selfadjoint linear differential equations. (Slovak, English, German and Russian summaries) **84c:34008**
- Göfen, A. M. Rapid expansion in a Taylor series and solution of the Cauchy problem. (Russian) **84f:34012**
- Hăček, Miloš See Futák, Ján, **84c:34008**
- Kimura, Toshihisa On the isomonodromic deformation for linear ordinary differential equations of the second order. II. **84b:34021**
- Knyazev, A. V. Differential operators with nonrational characteristics. (Russian) **84c:34010**
- Lamnabhi, M. See Lamnabhi-Lagarigue, Françoise, **84c:34011**
- Lamnabhi-Lagarigue, Françoise (with Lamnabhi, M.) Algebraic computation of the solution of some nonlinear differential equations. **84c:34011**
- Malamud, M. M. Necessary conditions for the existence of a transformation operator for higher-order equations. (Russian) **84c:34011**
- Martin, Pablo (with Zamudio-Cristi, Jorge) Fractional approximations for linear first-order differential equations with polynomial coefficients—application to $E_1(x)$. **84b:34011**
- Mgoian, P. B. See Babadjanyants, L. K., **84c:34009**
- Mikićić, Dušan (with Popović, Dejan) About the fundamental matrix of the linear nonstationary system. **84c:34012**
- Orlov, Konstantin Effective finding of the solutions of the form $\sum_{i=0}^n a_i/x^i$ for the differential equations of the finite and infinite order. **84c:34012**
- Petrovskii, G. N. Orthogonally similar systems of linear differential equations. (Russian) **84j:34007**
- Popović, Dejan See Mikićić, Dušan, **84c:34012**
- Szymanowska, A. Application of the Meijer transform for solving of linear equations. (See 84c:34002)
- Tian, Jing Huang Quadratic systems under affine transformations. (Chinese, English summary) **84c:34013**
- Yosida, Kōsaku The algebraic derivative and Laplace's differential equation. **84g:34015**
- Zamudio-Cristi, Jorge See Martin, Pablo, **84b:34011**

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- Akizhanov, A. A. (with Akizhanova, A. A.) The Korteweg-de Vries equation. (Russian) (84i:35120)
- Akizhanova, A. A. See Akizhanov, A. A., (84i:35120)
- Aksiev, A. Z. See Bykov, Ya. V., (84g:34070)
- Aliev, E. S. General solution and qualitative behavior of characteristics of a system of two ordinary differential equations with right-hand side in the form of a second-order homogeneous polynomial. (Russian) (84m:34009)
- Bykov, Ya. V. (with Aksiev, A. Z.) Particular periodic solutions of the Riccati equation. (Russian) (84g:34070)
- Chang, Jung Yu See Wang, Mao Ling, (84i:93072)
- Chernetskaya, L. N. Majorant estimates of approximate integration of nonhomogeneous linear systems with variable coefficients. (Russian) (84d:34011)
- Chua, Leon O. (with Tang, Yaw Shing) Nonlinear oscillation via Volterra series. (84c:58057)
- Della Dora, J. (with Dicrescenzo, Cl.; Tournier, E.) An algorithm to obtain formal solutions of a linear homogeneous differential equation at an irregular singular point. (84c:65094)

- Di Crescenzo, C. *See Della Dora, J.; et al.* (84c:65094)
- Dimovski, Ivan Kh. \star Convolutional calculus. (84d:44001)
- Driss, Bulara. Centroaffine invariants of a three-dimensional system with homogeneous quadratic right-hand sides. (Russian) (84j:34031)
- Drogozov, A. M. A method for solving problems of optimal control by means of the maximum principle. (Russian) (84c:34076)
- van den Essen, A. R. P. (with Levitt, A. H. M.) Irregular singularities in several variables. (84c:13031)
- Frauenthal, James C. Difference and differential equation population growth models. (See 84j:00019)
- Gammel, J. L. (with Nuttall, J.) Note on generalized Jacobi polynomials. (84g:33018)
- Huang, Ch'i (with Shih, Yen Ping) Laguerre series solution of a functional-differential equation. (84j:34076)
- Inman, D. J. Dynamics of asymmetric nonconservative systems. (84c:70024)
- Kohn, Mitsuhiro (with Ohkouchi, Shigemi) Generalized hypergeometric equations of non-Fuchsian type. (84f:34007)
- Levitt, A. H. M. *See van den Essen, A. R. P.* (84c:13031)
- Nuttall, J. *See Gammel, J. L.* (84g:33018)
- Ohkouchi, Shigemi *See Kohn, Mitsuhiro.* (84f:34007)
- Pukhov, G. E. \star Дифференциальные преобразования функций и уравнений. (Russian) [Differential transformations of functions and equations] (84c:44001)
- Scraton, R. E. Some thoughts on solution in series. (84c:34005)
- Shih, Yen Ping *See Huang, Ch'i.* (84j:34076)
- Stoeva, K. S. A complement to the second fundamental theorem on critical cases of a system of four equations with two critical cases. (Bulgarian. French and Russian summaries) (84f:34056)
- Tang, Yaw Shing *See Chua, Leon O.* (84c:58057)
- Tochkov, G. On a differential equation of neutral type. (Bulgarian. French and Russian summaries) (84c:34072)
- Tournier, E. *See Della Dora, J.; et al.* (84c:65094)
- Wang, Mao Ling (with Chang, Jung Yu) Solution of linear dynamic system with initial or boundary value conditions by shifted Legendre approximations. (84i:93072)
- Yudina, A. S. Asymptotic behavior of the solution of a singular equation with regular singular point. (Russian) (84f:34077)

34A30 Linear equations and systems

- Adrianova, L. Ya. The spectrum of regular linear systems of differential equations. (Russian) (See 84c:34002)
- Aliev, E. S. General solution and qualitative behavior of characteristics of a system of two ordinary differential equations with right-hand side in the form of a second-order homogeneous polynomial. (Russian) (84c:34009)
- Al'sevich, L. A. Initial data of periodic solutions of linear systems of differential equations. (Russian) (84c:34010)
- Barabanov, E. A. *See Izobov, N. A.* (84f:34013)
- Beraha, S. (with Kahane, Joseph; Weiss, N. J.) Asymptotic behaviour of solutions of linear differential equations with a complex parameter. (84c:34014)
- Berkovich, L. M. (with Nechaevskii, M. L.; Senitskii, Yu. E.) The method of factorization of differential operators and its applications. (Russian) (See 84c:34002)
- Bronstein, I. U. Exponential separability and cocycles. (Russian) (84c:34015)
- Dimitrov, Khristo Dimitrov On the solutions of some linear operator nonpolynomial differential equations. (84c:34022)
- El-Owaidy, Hassan (with Zagrou, A. A. S.) On linear systems. (84b:34012)
- Faigle, Ulrich Linear growth: a unifying approach to linear systems of difference and differential equations. (84c:34011)
- Hooker, John W. (with Langenhof, Carl E.) On regular systems of linear differential equations with constant coefficients. (84d:34008)
- Izobov, N. A. (with Barabanov, E. A.) The form of the highest σ -exponent of a linear system. (Russian) (84f:34013)
- Johnson, Gordon G. Moments and differential equations. (Spanish summary) (84c:34016)
- Kahane, Joseph *See Beraha, S.; et al.* (84c:34014)
- Khapaev, M. M. Linear systems of ordinary differential equations. (Russian) (84f:34014)
- Kojack, Jitka Accompanying spaces to a linear two-dimensional space of continuous functions with a continuous first derivative. (Russian and Czech summaries) (84c:34013)
- Kolyada, Yu. V. (with Sigorskii, V. P.) A new formula for the matrixant. (Russian. English summary) (84c:34009)
- Krytchenko, V. E. On a fundamental system of solutions of a fourth-order linear differential equation. (Russian) (84d:34009)
- Langenhof, Carl E. *See Hooker, John W.* (84d:34008)
- Lin, Zhen Sheng The Floquet theory for quasiperiodic linear systems. (84b:34013)
- Nacinovich, Mauro A remark on differential equations with polynomial coefficients. (Italian summary) (84c:34010)
- Nechaevskii, M. L. *See Berkovich, L. M.; et al.* (See 84c:34002)
- Neuman, Frantisek Global theory of linear differential equations of the n th order. (84b:34014)
- Linear differential equations—global theory. (See 84i:00016)
- A survey of global properties of linear differential equations of the n th order. (84c:34012)
- Pustomel'nikov, I. P. Investigation of some differential equations in a space of generalized functions. (Ukrainian. Russian summary) (84c:34017a)
- Existence of solutions of linear differential equations in a space of generalized functions. (Ukrainian. Russian summary) (84c:34017b)
- Ripeanu, Dumitru Sur la longueur d'un intervalle d'interpolation. I. [The length of an interpolation interval. I] (84j:34008)
- Senitskii, Yu. E. *See Berkovich, L. M.; et al.* (See 84c:34002)
- Sigorskii, V. P. *See Kolyada, Yu. V.* (84c:34009)
- Skripnik, V. P. Degenerate linear systems. (Russian) (84c:34023)
- A degenerating parameter and degenerate linear equations. (Russian) (84c:34013)
- Stasyuk, M. F. The structure of solutions of ordinary differential and quasidifferential equations with piecewise variable coefficients. (Russian. English summary) (84c:34010)
- Toma, Beana Local inversion of polynomial differential operators by linear equivalence. (84c:34024)
- Votava, Milan The set of solutions of a linear differential equation from the standpoint of the theory of linear spaces. (Czech. Russian summary) (84c:34014)
- Vrdoljak, Božo The method of scalar product and the behavior of the solution of a system of linear differential equations. (Serbo-Croatian) (84c:34011)
- Weiss, N. J. *See Beraha, S.; et al.* (84c:34014)
- Zagrou, A. A. S. *See El-Owaidy, Hassan.* (84b:34012)
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- Almad, Shair On Sturmian theory for second order systems. (84c:34042)
- Anpilov, V. V. On the theory of linear ordinary differential equations with right-hand sides (inhomogeneous). (Russian. English summary) (84c:34007)
- Areshyan, G. L. *See Isosif'yan, A. G.* (84c:78031)
- Baklekh, Mazhar Linéarisation d'une équation différentielle multivoque. (English summary) [Linearization of a multivalued differential equation] (84c:34018)
- Bank, Steven B. On certain properties of solutions of second-order linear differential equations. (84c:34007)
- Biryukov, V. E. *See Filippenko, F. N.* (84h:70018)
- Bylov, B. F. (with Tikhonova, E. A.) Estimation of the growth of solutions of a piecewise constant system. (Russian) (84m:34042)
- Chanturiya, T. A. On the oscillation of solutions of higher-order linear differential equations. (Russian. English summary) (84c:34043)
- Epstein, Irving J. *See Kotin, Leon.* (84c:15020)
- Filippenko, F. N. (with Biryukov, V. E.) Representation of the matrixant of a linearized system of differential equations of motion in a force field having a potential. (Russian) (84c:70018)
- Futák, Ján (with Hăček, Miloš) Transformation of second-order selfadjoint linear differential equations. (Slovak. English. German and Russian summaries) (84c:34006)
- Greguš, Michal, Jr. On some asymptotic properties of the solutions of a third order linear differential equation. (84b:34044)
- Hăček, Miloš *See Futák, Ján.* (84c:34006)
- Hilali, Abdelaziz Réductibilité d'un système différentiel linéaire. (English summary) [Reducibility of a linear differential system] (84b:34060)
- Isosif'yan, A. G. (with Areshyan, G. L.) Fundamentals of the theory of alternating current synchronous capacity machines. (Russian. Armenian summary) (84c:78031)
- Kastritsa, O. A. Extremal deviations of solutions under bounded perturbations of a linear system. (Russian) (84g:34095)
- Kečkić, Jovan D. (with Stanković, Miomir S.) On some classes of linear equations. III. (84j:39011)
- König, Hermann A trace theorem and a linearization method for operator polynomials. (84c:47021)
- Korolev, G. M. Invariants of a linear differential equation and its reducibility. (Russian) (84c:34048)
- Kostenko, V. G. *See Zheznovii, Yu. V.* (84g:34006)
- Kotin, Leon (with Epstein, Irving J.) On matrices which commute with their derivatives. (84c:15020)
- Kravchenko, V. P. The effect of boundaries of dynamic characteristics of continuous-discrete elastic systems on the choice of variables of perturbation forces. (Russian) (84g:73009)
- Mazanik, S. A. Some properties of E -systems. (Russian) (84c:34049)
- McBride, Adam C. A note on the index laws of fractional calculus. (84g:26006)
- Mikić, Dušan (with Popović, Dejan) About the fundamental matrix of the linear nonstationary system. (84c:34012)
- Paris, R. B. (with Wood, A. D.) On a fourth order symmetric differential equation. (84d:34016)
- Popović, Dejan *See Mikić, Dušan.* (84c:34012)
- Rakhimberdiev, M. I. Central exponents of linear systems. (Russian) (84d:34045)
- Ringo, N. I. The problem of observation of linear systems of general form. (Russian) (84b:93016)
- Shopova, Dimitricha N. An elementary solution of a problem in real analysis. (Bulgarian. English summary) (84c:26002)
- Stanković, Miomir S. *See Kečkić, Jovan D.* (84j:39011)
- Taylor, James G. "Simple-approximate" battle-outcome-prediction conditions for variable-coefficient Lanchester-type equations of modern warfare. (84i:90181)
- Tikhonova, E. A. *See Bylov, B. F.* (84m:34042)
- Tineo, Antonio \star Teorema de inversión global y aplicaciones a la existencia de soluciones 2π -periódicas de la ecuación $x^{(m)} + F(x, \dots, x^{(m-1)}) = P(t) = P(t+2\pi)$. (Spanish) [Global inversion theorem and applications to the existence of 2π -periodic solutions of the equation $x^{(m)} + F(x, \dots, x^{(m-1)}) = P(t) = P(t+2\pi)$] (84f:34063)
- Umgeher, K. Lösungsschranken für Differentialgleichungen mit nicht beschränkten holomorphen Koeffizienten. [Bounds for solutions to differential equations with unbounded holomorphic coefficients] (84f:34010)
- Usacheva, T. V. Stability of characteristics of diagonal systems of differential equations. (Russian) (84f:34074)
- Wood, A. D. *See Paris, R. B.* (84d:34016)
- Zheznovii, Yu. V. (with Kostenko, V. G.) Fifth-order ordinary linear differential equations integrable in closed form. (Ukrainian. Russian summary) (84g:34006)

34A34 Nonlinear equations and systems, general

- Adomian, G. (with Sibul, L. H.; Rach, R.) Coupled nonlinear stochastic differential equations. (84f:34015)
- Airault, Hélène Réduction des équations (3), (5) et (6) de Painlevé. (English summary) [Reduction of the equations (3), (5) and (6) of Painlevé] (84g:34016)
- Bertolino, Milorad Asymptotes verticales des solutions des équations différentielles. [Vertical asymptotes of solutions of differential equations] (84c:34012)
- Cecchi, Mariella (with Marini, Mauro; Zezza, Pierluigi) An abstract method for nonlinear boundary value problems on noncompact intervals. (Italian) (84f:34016)

- Dolov, M. V. (with Lisin, B. V.) On the question of the structure of the correspondence function in the neighborhood of a saddle. (Russian) **84j:34009**
- Druzhkova, T. A. The number of algebraic partial integrals of a differential equation. (Russian) **84m:34010**
- Edbert, A. The Wrońskián and the half-linear differential equations. **84c:34013**
- Eliaš, Jozef On the solutions of n th order differential equation in $L^2(0, \infty)$. **84b:34015**
- Kovachev, V. Khr. Bilinear transformations of some differential equations with rational right-hand side. (Russian) **84c:34018**
- Lisin, B. V. See Dolov, M. V., **84j:34009**
- Marini, Mauro See Cecchi, Mariella; et al., **84f:34016**
- Mescherskaya, M. B. Qualitative picture of a special system of two equations. (Russian) **84f:34017**
- Popa, M. N. The shortest minimal polynomial basis of affine invariants of a differential system with quadratic nonlinearities. (Russian) **84c:34019**
- Rach, R. See Adomian, G.; et al., **84f:34015**
- Sasagawa, Tetsushi Analytical construction of a negative semidefinite solution of algebraic Riccati equations and its application. **84j:34010**
- Sibal, L. H. See Adomian, G.; et al., **84f:34015**
- Strobel, George L. Superposition rules for nonlinear coupled first-order differential equations. **84c:34020**
- Vulpe, N. I. Construction of a minimal complete system of orthogonal invariants of a two-dimensional system of differential equations. (Russian) **84c:34025**
- Zecca, Pierluigi See Cecchi, Mariella; et al., **84f:34016**

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- Chernikova, O. S. The reduction principle for systems of differential equations with impulse action. (Russian) **(84d:34051)**
- Dzhumabaev, D. S. Boundedness of a solution and its derivative on the whole axis of a first-order differential equation. (Russian. Kazakh summary) **(84c:34046)**
- Eshenkulov, K. E. Asymptotic behavior of solutions of the Cauchy problem for a nonlinear system of integro-differential equations. (Russian) **(84c:45015)**
- Liu, Zun Quan (with Qin, Chao Bin) Mechanical deduction of formulas of differential equations. II. **(84m:65096b)**
- (with Qin, Chao Bin) Mechanical deduction of formulas of differential equations. I. **(84m:65096a)**
- Malec, Miloslav Nonlinear Volterra-type equation in Banach space. (Russian summary) **(84c:45013)**
- Qin, Chao Bin See Liu, Zun Quan, **(84m:65096a)** and **(84m:65096b)**
- Rubel, Lee A. A counterexample to elimination in systems of algebraic differential equations. **(84c:12015)**
- Staněk, Svatoplav On a structure of the intersection of the set of dispersions of two second-order linear differential equations. (Russian and Czech summaries) **(84g:34068)**
- Stewart, I. N. (with Woodcock, A. E. R.) On Zeeman's equations for the nerve impulse. **(84m:92014)**
- Wang, Lian (with Wang, Mu Qiu) A theorem on the steady-state oscillation in periodic dissipative systems of higher order. **(84c:34053)**
- Wang, Mu Qiu See Wang, Lian, **(84c:34053)**
- Woodcock, A. E. R. See Stewart, I. N., **(84m:92014)**

34A35 Differential equations of infinite order

- Borok, V. M. The Cauchy problem for finite-infinite systems of linear differential equations. (Russian) **84c:34017**
- Kereksha, Piotr V. (with Ottilio, M. A.) A class of linear differential equations of finite and infinite order with special variable coefficients. (Russian) **84f:34018**
- Ottilio, M. A. See Kereksha, Piotr V., **84f:34018**
- Steeb, Willi-Hans Embedding of nonlinear finite-dimensional systems in linear infinite-dimensional systems and Bose operators. **84c:34014**

secondary classifications:

- Bykov, Ya. V. (with Tankiev, I. A.) A generalized boundary value problem for a countable system of integro-differential equations. (Russian) **(84d:34074)**
- Dang Din' Tyau Study of the strong instability of the zero solution of infinite systems of differential equations by means of generalized characteristic d -numbers. (Russian) **(84c:34074)**
- Erbe, Lynn H. (with Lee, Sung J.) Operator part of infinite system of differential equations. **(84d:34062)**
- Gaisinskii, I. M. A recursive algorithm for solution of infinite systems of linear differential equations with a triangular matrix. (Russian) **(84j:65055)**
- Israilov, S. V. The de la Vallée-Poussin problem for finite and infinite systems of higher-order ordinary differential equations. (Russian. Kazakh summary) **(84d:34013)**
- Lee, Sung J. See Erbe, Lynn H., **(84d:34062)**
- Sibirskii, K. S. Semidynamical systems. (Russian) (See **84c:34002**)
- Tankiev, I. A. See Bykov, Ya. V., **(84d:34074)**

34A40 Differential inequalities

- Abramowich, J. On Gronwall and Wendroff type inequalities. **84c:34015**
- Agarwal, Ravi P. (with Thandapani, E.) On some new integro-differential inequalities. **84c:34016**
- Bainov, D. D. (with Khristova, S. G.) Integral inequalities of Bihari type for functions of two variables. **84m:34011**
- See also Khristova, S. G., **84a:34017** and Simeonov, P. S., **84c:34028**
- Bykov, Ya. V. (with Matakoev, A. I.; Chinkaraev, T.) Oscillation properties of a class of systems of second-order differential inequalities. I. (Russian) **84b:34026**
- Chinkaraev, T. See Bykov, Ya. V.; et al., **84b:34026**
- Heikkilä, Seppo On the quasimonotonicity of differential systems. **84b:34016**
- Ho, Tien Kung A note on Gronwall-Bellman inequality. **84b:34027**
- Joshi, S. R. See Shendge, G. R., **84c:34022**

- Khristova, S. G. (with Bainov, D. D.) Some integral inequalities for a scalar function with vector argument. (Russian. Romanian summary) **84a:34017**
- See also Bainov, D. D., **84m:34011**

- Kulenović, M. R. S. Hille-Wintner type comparison theorems for differential inequalities. **84c:34021**
- Lakshmikantham, V. The method of upper and lower solutions for differential equations in a Banach space. (See **84a:47002**)
- Matakoev, A. I. See Bykov, Ya. V.; et al., **84b:34026**
- Shendge, G. R. (with Joshi, S. R.) Abstract measure differential inequalities and applications. **84c:34022**
- Simeonov, P. S. (with Bainov, D. D.) On some generalizations of the Gronwall-Bellman integral inequality for scalar functions of many variables. **84b:34028**
- Thandapani, E. See Agarwal, Ravi P., **84c:34016**
- Turinici, Mihai Differential inequalities on abstract metric spaces. **84c:34015**
- Function-differential inequalities via maximality procedures. **84c:34016**

secondary classifications:

- Agarwal, Ravi P. See Thandapani, E., **(84c:26020)**
- Bainov, D. D. See Khristova, S. G., **(84d:26012)** and Khristova, S. G., **(84b:26019)**
- Chen, Wen Zhong (with Feng, Gong Ji; Wang, Xing Hua) Twenty years of Opial inequalities. (Chinese) **(84j:26021)**
- Dib, K. A. A simple generalization of one of Perron's theorems and applications. **(84c:34088)**
- Dolinski, R. (with Zima, K.) On weak differential-functional inequalities. **(84c:34091)**
- Feng, Gong Ji See Chen, Wen Zhong; et al., **(84j:26021)**
- Giř, M. I. Stability in the large of nonstationary systems. **(84d:34047)**
- Hong, Ji Ping A result on the stability of systems of differential equations with variable time lag. (Chinese) **(84c:34081)**
- Joshi, S. R. (with Kasaraliker, S. N.) Differential inequalities for a system of abstract measure delay differential equations. **(84f:34093)**
- Kasaraliker, S. N. See Joshi, S. R., **(84f:34093)**
- Khristova, S. G. (with Bainov, D. D.) Integral inequalities for functions of many variables. **(84d:26012)**
- (with Bainov, D. D.) On some integral inequalities for a scalar function of a vector argument. (Russian and Bulgarian summaries) **(84b:26019)**
- Ladde, G. S. (with Lakshmikantham, V.) ★ Random differential inequalities. **(84c:60061)**
- Lakshmikantham, V. See Ladde, G. S., **(84b:60061)**
- Lin, Chin Ts'ai On some new integro-differential inequalities. **(84j:26020)**
- Martynuk, A. A. The comparison method in a problem on the continuous dependence on the parameter. (Russian) **(84g:34009)**
- Matrosov, V. M. On the theory of differential equations and inequalities with discontinuous right-hand sides. (Russian. English and Bulgarian summaries) **(84c:34010)**
- Matvičuk, K. S. Remarks on the comparison method for a system of differential equations with a rapidly rotating phase. (Russian) **(84a:34049)**
- Milošević, Radijoje On some applications of the norm of Bielecki. (Serbo-Croatian. English summary) **(84c:34003)**
- Morro, Angelo A Gronwall-like inequality and its application to continuum thermodynamics. (Italian summary) **(84j:73012)**
- Muratori, Paolo Results of existence and regularity for the equation $|v'| = f(x, y)$. (Italian. English summary) **(84c:34005)**
- Pachpatte, B. G. Some inequalities between functions and their derivatives. **(84c:26018)**
- Thandapani, E. (with Agarwal, Ravi P.) On some new integro-differential inequalities: theory and applications. **(84b:26020)**
- Theodoroviciu, Cornel Some differential inequalities in the complex plane. I. **(84c:30001)**
- Wang, Xing Hua See Chen, Wen Zhong; et al., **(84j:26021)**
- Wattanwar, M. J. On some integral inequalities of Gronwall-Bellman type. **(84c:26018)**
- Yang, Kuo Sheng A note on an integro-differential inequality. **(84a:26010)**
- Young, Estiquio C. On Bellman-Bihari integral inequalities. **(84d:26015)**
- Zhang, Jin Yan Control equations for nonlinear differential equations with unbounded operators. I. The Banach space case. (Chinese) **(84c:34101)**
- Zima, K. See Dolinski, R., **(84c:34091)**

34A45 Theoretical approximation of solutions

- Berkovich, L. M. The Gylden-Meshcherskii problem and laws of the variation of mass. (Russian) **84c:34014**
- Buttazzo, Giuseppe (with Percivale, Danilo) Approximation of the one-dimensional bounce problem. (Italian. English summary) **84c:34016**
- Chen, Feng Su (with Hsieh, D. Y.) A Galerkin method and nonlinear oscillations and waves. **84f:34019**
- Chernetskaya, L. N. Majorant estimates of approximate integration of nonhomogeneous linear systems with variable coefficients. (Russian) **84d:34011**
- Cheshankov, B. I. (with Tseryanov, M. P.) Resonance solutions of a system of differential equations. (Bulgarian. English and Russian summaries) **84c:34017**
- Dorodnitsyn, A. A. Application of the small parameter method to numerical solution of differential equations. (Russian) (See **84b:65005**)
- Hsieh, D. Y. See Chen, Feng Su, **84f:34019**
- Kiryakov, K. N. Analytic approximation of the solution of the initial value problem for a quasilinear second-order ordinary differential equation. (Russian) (See **84c:34002**)
- Koneru, S. R. See Padukone, G. D., **84c:34018**
- Lenárd, M. (with Székelyhidi, László) Functional-differential equations by spline functions. (See **84c:34002**)
- Makhmudov, A. P. (with Musaeu, A.) Approximation by polynomials of continuous solutions of a boundary value problem. (Russian) **84b:34017**
- Marinescu, Constantin See Marinescu, Elvira, **84b:34029**
- Marinescu, Elvira (with Marinescu, Constantin) Les fonctions spline comme solutions des équations à impulsions. [Spline functions as solutions of equations with pulses] **84b:34029**

- Musaev, A. See Makhmudov, A. P. 84b:34017
- Narendran, G. (with Venkatarangan, S. N.) Padé approximation applied to Lighthill's model differential equation. 84a:34018
- Padukone, G. D. (with Koneru, S. R.) On quasilinearisation technique for mildly nonlinear problems. 84i:34018
- Percival, Danilo See Buttazzo, Giuseppe. 84i:34016
- Štekauer, Ján Calculation of derivatives of solutions of the n th order ordinary differential equation. (Russian and Slovak summaries) 84f:34020
- Székelyhidi, László See Lénárd, M. (See 84c:34002)
- Tasheva, B. E. A polynomial approximation of the solution of a system of ordinary differential equations. (See 84c:34002)
- Tseryanov, M. P. See Cheshankor, B. I. 84i:34017
- Venkataraman, S. N. See Narendran, G. 84a:34018

secondary classifications:

- Adomian, G. Approximate calculation of Green's functions. (84g:34049)
(with Sibul, L. H.; Rach, R.) Coupled nonlinear stochastic differential equations. (84f:34015)
- Arrate Peña, Manuel (with García, A. G.) On existence, uniqueness and approximation of solutions of ordinary differential equations in Banach spaces. (84c:34094)
- Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Rational approximations to solutions of linear differential equations. (84k:10026)
- Chudnovsky, Gregory V. See Chudnovsky, D. V. (84k:10026)
- Fukui, Ayumu (with Maeda, Hajime; Kodama, Shinzo) Asymptotic behavior of nonlinear discrete-time compartmental systems—comparison with continuous-time systems. (84m:92011)
- García, A. G. See Arrate Peña, Manuel. (84c:34094)
- Gofen, A. M. Rapid expansion in a Taylor series and solution of the Cauchy problem. (Russian) (84f:34012)
- Johnston, George L. Langer's method for weakly bound states of the Helmholtz equation with symmetric profiles. (84d:34059)
- Kappel, F. Approximation of neutral functional-differential equations in the state space $\mathbb{R}^n \times L^2$. (84m:34095)
- Kochneva, T. V. On the construction of an approximation to the solution of a linear boundary value problem for an ordinary differential equation. (Russian. English summary) (84c:34020)
- Kodama, Shinzo See Fukui, Ayumu; et al. (84m:92011)
- Krochuk, V. V. Solvability of approximating equations of an approximation method, constructed on the basis of interpolation polynomials. (Russian) (84j:41006)
- Maeda, Hajime See Fukui, Ayumu; et al. (84m:92011)
- Manolov, S. A periodic algorithm for autonomous systems with a matrix spectrum of resonance type in semieven phase spaces. I, II, III. (Bulgarian. French and Russian summaries) (84b:34050)
- Pechentsov, A. S. Estimates of coefficients of asymptotic series for solving the Cauchy problem in the case of analytic coefficients. (Russian. English summary) (84c:34070)
- Rach, R. See Adomian, G.; et al. (84f:34015)
- Sibul, L. H. See Adomian, G.; et al. (84f:34015)
- (Strygin, V. V.) See Approximate methods for investigating differential equations and their applications. (84c:34001)
- Approximate methods for investigating differential equations and their applications
★ Приближенные методы исследования дифференциальных уравнений и их приложения. Вып. 6. (Russian) [Approximate methods for investigating differential equations and their applications. No. 6] (84c:34001)

34A50 Numerical approximation of solutions (For numerical analysis, see 65Lxx.)

- Flashner, Henryk (with Hsu, Chieh Su) A study of nonlinear periodic systems via the point mapping method. 84g:34018
- Hsu, Chieh Su See Flashner, Henryk. 84g:34018
- Karr, Bruno (with Schmitt, Bruno V.) Une méthode numérique dans le domaine de la stabilité et des bifurcations pour un système différentiel périodique avec symétries. (English summary) [A numerical method in the domain of stability and bifurcations for a periodic differential system with symmetries] 84k:34023
- Pascual, Pedro Nonlinear differential equations and Padé approximants. (Spanish. English summary) 84k:34024
- Schmitt, Bruno V. See Karr, Bruno. 84k:34023
- Stolyarchuk, V. K. Efficient construction of polynomials that effect a near-best approximation of solutions of certain differential equations. (Russian) 84a:34019
- Trif, Damian Numerical solution of some boundary value problems by the alternative method. (Romanian. French summary) 84m:34012
- Vinokurov, V. A. A method of numerical solution of linear differential equations. (Russian) 84b:34018
- Zharov, M. I. A method of calculation of a separating solution of a differential equation. (Russian) 84c:34017

secondary classifications:

- Akhmetov, M. U. Periodic solutions of some systems of differential equations. (Ukrainian. Russian summary) (84j:34032)
- Bickart, Theodore A. P -stable and $P[\alpha, \beta]$ -stable integration/interpolation methods in the solution of retarded differential-difference equations. (84j:34090)
- Feagin, Terry (with Nacory, Paul) Matrix formulation of the Picard method for parallel computation. (84e:65066)
- Gofen, A. M. Rapid expansion in a Taylor series and solution of the Cauchy problem. (Russian) (84f:34012)
- Knežević, Julka Construction of periodic solutions of ordinary differential equations. (Russian) (84c:34053)

- Liseikin, V. D. (with Yanenko, N. N.) A uniformly converging algorithm for the numerical solution of a second-order ordinary differential equation with a small parameter multiplying the highest derivative. (Russian) (84g:65103)
- Nacory, Paul See Feagin, Terry. (84e:65066)
- Nelson, Paul, Jr. (with Ray, Asok Kumar; Wing, G. Milton) A theoretical result on the effectiveness of the addition formulae for two-point boundary systems. (84j:34013)
- Pagliari, Carmen Study of a fifth-order method for the numerical integration of the general second-order ordinary differential equation. (Italian) (84f:65054)
- Ray, Asok Kumar See Nelson, Paul, Jr.; et al. (84j:34013)
- Socă, D. Sur l'approximation des solutions des équations différentielles par des fonctions spline à déficience. (Romanian summary) [The approximation of the solutions of differential equations by deficient spline functions] (84c:5079)
- Štekauer, Ján Calculation of derivatives of solutions of the n th order ordinary differential equation. (Russian and Slovak summaries) (84f:34020)
- (Strygin, V. V.) See Approximate methods for investigating differential equations and their applications. (84c:34001)
- Weber, Michael Zur Äquivalenz der Zeitintegrationsverfahren für dynamische Systeme. (English and Russian summaries) [On the equivalence of methods for time integration of dynamic systems] (84g:65095)
- Wing, G. Milton See Nelson, Paul, Jr.; et al. (84j:34013)
- Yanenko, N. N. See Liseikin, V. D. (84g:65103)
- Zadumskiy, Pedro E. On the estimation of small perturbations in ordinary differential equations. (84j:34056)
- Approximate methods for investigating differential equations and their applications
★ Приближенные методы исследования дифференциальных уравнений и их приложения. Вып. 6. (Russian) [Approximate methods for investigating differential equations and their applications. No. 6] (84c:34001)

34A55 Inverse problems

- Allen, Richard C., Jr. (with Pruess, Steven A.) An analysis of an inverse problem in ordinary differential equations. 84c:34015
- Barclon, Victor Explicit solution of the inverse problem for a vibrating string. 84f:34021
- Gasyimov, M. G. Uniqueness of the solution of the inverse problem of scattering theory for a class of even-order ordinary differential equations. (Russian) 84f:34022
- Levitan, B. M. Inverse problem for the Sturm-Liouville operator in the case of finite-range and infinite-range potentials. (Russian) 84j:34011
- Maksimov, V. V. A means of determining the coefficients of a differential equation. (Russian) 84j:34012
- Pruess, Steven A. See Allen, Richard C., Jr. 84c:34015
- secondary classifications:
- Anastasova, K. I. (with Stoeva, K. S.) An inverse problem for a nonlinear equation of neutral type. (Bulgarian. English and Russian summaries) (84c:34100a)
On an inverse problem for a nonlinear equation of neutral type. (Bulgarian. English and Russian summaries) (84c:34100b)
(with Stoeva, K. S.) An inverse problem for a nonlinear equation of neutral type. (Bulgarian. English and Russian summaries) (84c:34064)
- Beals, Richard William (with Coifman, R. R.) Scattering, transformations spectrales et équations d'évolution non linéaires. [Scattering, spectral transformations and nonlinear evolution equations] (84d:35129)
(with Coifman, R. R.) Scattering, transformations spectrales et équations d'évolution non linéaire. II. [Scattering, spectral transformations and nonlinear evolution equations. II] (84d:35130)
- Coifman, R. R. See Beals, Richard William. (84d:35129) and (84d:35130)
- Nizhnik, L. P. (with Pham Lo'i Vù) An inverse scattering problem on the whole axis for a system of second-order ordinary differential equations. (Russian) (84m:34032)
- Pham Lo'i Vù See Nizhnik, L. P. (84m:34032)
- Stoeva, K. S. See Anastasova, K. I. (84c:34100a) and (84c:34064)

34A60 Equations with multivalued right-hand sides [See also 49A50, 49E10.]

- Anapol'skiĭ, L. Yu. Stability of differential inclusions. (Russian) 84m:34013
- Bakleh, Mazhar Linéarisation d'une équation différentielle multivoque. (English summary) [Linearization of a multivalued differential equation] 84c:34018
- Bogatyrev, A. V. Fixed points and properties of solutions of differential inclusions. (Russian) 84k:34025
- Boudourides, M. A. On the asymptotic behavior of solutions of multivalued differential equations. 84i:34019
- De Blasi, Francesco S. (with Pianigiani, G.) A Baire category approach to the existence of solutions of multivalued differential equations in Banach spaces. 84c:34019
- Di Guglielmo, F. J. Differential inclusions with multivalued boundary conditions. 84m:34014
- Hadad, Georges (with Lasry, Jean-Michel) Periodic solutions of functional-differential inclusions and fixed points of α -selectionable correspondences. 84m:34015
- Himmelberg, C. J. (with Van Vleck, F. S.) A note on the solution sets of differential inclusions. 84b:34019
- Jarník, Jiří Generalized Filippov operator and multivalued mappings. (See 84c:34002)
(with Kurzweil, Jaroslav) Integral of multivalued mappings and its connection with differential relations. (Russian) 84m:34016
- Kisielewicz, Michał Continuous dependence of solution sets for generalized differential equations of neutral type. 84f:34023
- Compactness and upper semicontinuity of solution set of generalized differential equation in separable Banach space. 84c:34020
- Kurzweil, Jaroslav Nonautonomous differential relations and their connections with differential equations the right hand side of which is discontinuous with respect to space variables. (See 84c:34002)
- See also Jarník, Jiří. 84m:34016

- Lasry, Jean-Michel. See Haddad, Georges, 84m:34015
 Levakov, A. A. Some properties of multivalued mappings and an existence theorem for solutions of differential inclusions. (Russian) 84m:34017
 Pianigiani, G. See De Biasi, Francesco S., 84c:34019
 Rzetuchowski, T. On the set where all the solutions satisfy a differential inclusion. 84c:34016
 Seah, Sek Wui. Existence of solutions and asymptotic equilibrium of multivalued differential systems. 84c:34017
 Tolstomogov, A. A. On an equation of an integral funnel of a differential inclusion. (Russian) 84c:34018
 Turinici, Mihai. Invariant polygonal domains for multivalued functional-differential equations. 84m:34018
 Van Vleck, F. S. See Himmelberg, C. J., 84b:34019
 Vasil'ev, A. B. The continuous parameter dependence of solutions of differential inclusions. (Russian) 84c:34026

secondary classifications:

- Ahmed-Gamal, Mohamed. Perturbation non convexe d'un problème d'évolution dans un espace hilbertien. [Nonconvex perturbation of an evolution problem in a Hilbert space] (84c:34089)
 Perturbation non convexe d'une équation d'évolution dans un espace de Banach. [Nonconvex perturbation of an evolution equation in a Banach space] (84j:34066)
 Aubin, Jean-Pierre. Dynamical price decentralization. (84g:90024)
 Blagodatskiĭ, V. I. On the theory of sufficient conditions for optimality. (Russian) (84c:49044)
 Blaz, J. Über die verallgemeinerte Nicoletti-Aufgabe für mehrwertige Differentialgleichungen mit voreilem Argument. [On the generalized Nicoletti problem for multivalued differential equations with advanced argument] (84d:34071)
 Brykalo, S. A. Boundary value problems for functional-differential inclusions. (Russian) (84c:34099)
 Coletti, Giuliana. (with Regoli, Giuliana) Continuous selections and multivalued differential equations. (Italian summary) (84c:54035)
 Deo, Sadashiv G. See Pandit, Sudhakar G., (84g:34005)
 Ekeland, Ivar. Oscillations forcées de systèmes hamiltoniens non linéaires. [Forced oscillations of nonlinear Hamiltonian systems] (84i:58098a)
 Forced oscillations of nonlinear Hamiltonian systems. II. (84i:58098b)
 Finogenko, I. A. Solutions of certain functional-differential inclusions in a Banach space. (Russian) (84d:34084)
 Fryszkowski, A. Properties of the set of solutions of orientor equation. (84i:49052)
 Haraux, Alain. Dissipativity in the sense of Levinson for a class of second-order nonlinear evolution equations. (84c:34069)
 Makhlín, A. R. See Ukolov, I. S., (84f:49053)
 Pandit, Sudhakar G. (with Deo, Sadashiv G.) ★ Differential systems involving impulses. (84g:34005)
 Regoli, Giuliana. See Coletti, Giuliana, (84c:54035)
 Stefani, Gianna. (with Zecca, Pietro) Multivalued vector field and multivalued differential equations. (84b:58046)
 Ukolov, I. S. (with Makhlín, A. R.) The method of Lyapunov functions in the theory of analytical construction of nonlinear regulators. (Russian) (84f:49053)
 Vinter, Richard B. Application of convex analysis to some problems in nonlinear control theory. (84c:49036)
 Zecca, Pietro. (with Zecca, Pierluigi) Nonlinear boundary value problems in Banach spaces for multivalued differential equations on a noncompact interval. (See 84c:34003)
 See also Stefani, Gianna, (84b:58046)
 Zecca, Pierluigi. See Zecca, Pietro, (See 84c:34003)

34A99 None of the above, but in this section

- Alishev, A. Solution of nonlinear differential equations of fractional rank. (Russian. English summary) 84g:34019
 Bagchi, Arunabha. (with Strijbos, R. C. W.) Decoupled decomposition of the Riccati equation. 84b:34020
 Berkovich, L. M. Transformations and factorisation of ordinary nonlinear differential equations. (See 84i:00016)
 Decarreau, A. (with Maroni, P.; Robert-Michel, Aline F.) Sur les équations confluentes de l'équation de Heun. [On the confluent equations of the Heun equation] 84b:34030
 Dimitrov, Kh. D. Solutions of some linear operator nonpolynomial differential equations. 84g:34020
 Hermann, Robert. Isomonodromy as a curvature-zero condition. 84f:34024
 Hill, James M. Abel's differential equation. 84c:34019
 Hukuhara, Masuo. Connection formulas for ordinary differential equations of Laplace type. (Japanese) 84g:34021
 Lazov, Petar R. Conditions for the existence of the maximal number of polynomial solutions of a class of nonlinear differential equations. (Russian) 84b:34021a
 A system of nonlinear differential equations. (Russian) 84b:34021b
 Levitan, B. M. The evolution of Bloch's solution by virtue of the higher Korteweg-de Vries equations. (Russian. English summary) 84f:34025
 Malikov, Kh. M. Compatibility of systems of linear ordinary differential equations with variable coefficients. (Russian) (See 84i:00016)
 Maroni, P. See Decarreau, A.; et al., 84b:34030
 Muratori, Paolo. On the equation $y' = f(x, y)$. (Italian. English summary) 84f:34026
 Pron'kin, V. S. Application of Newton's method to a problem with small denominators. (Russian) 84c:34020
 Reid, James L. See Strobel, George L., 84c:34021
 Robert-Michel, Aline F. See Decarreau, A.; et al., 84b:34030
 Shayman, Mark A. Classification theorems for the algebraic Riccati equation: a synthesis. (See 84g:93005d)

- Stasyuk, M. F. Fundamental property of the influence function of a quasidifferential equation. (Russian) 84b:34031
 Strijbos, R. C. W. See Bagchi, Arunabha, 84b:34020
 Strobel, George L. (with Reid, James L.) Nonlinear superposition rule for Abel's equation. 84c:34021
 Tabaldyev, R. R. Reconstruction of an autonomous differential equation. (Russian) 84c:34020
 Tamba, Tagbino. Compatible differential systems. (Russian) 84m:34019
 Wiener, Klaus. Über Differentialgleichungen von nichtganzzahliger Ordnung mit nichtkonstanten Koeffizienten. [On differential equations of noninteger order with nonconstant coefficients] 84m:34020

secondary classifications:

- Ahmed, Shafique. (with Muldoon, Martin E.) Reciprocal power sums of differences of zeros of special functions. (84d:33016)
 Dorizzi, Bernadette. See Grammaticos, Basile; et al., (84f:58046) and (84f:58047)
 Dwork, Bernard M. On Apéry's differential operator. (84c:12022)
 Grammaticos, Basile. (with Dorizzi, Bernadette; Padjen, Radovan) Sur l'intégrabilité du système de Hénon-Heiles. (English summary) [On the integrability of the Hénon-Heiles system] (84f:58047)
 (with Dorizzi, Bernadette; Padjen, Radovan) Painlevé property and integrals of motion for the Hénon-Heiles system. (84f:58046)
 Liedl, Roman. (with Netzer, N.) Was ist Produktintegration? [What is product integration?] (84k:26001)
 Muldoon, Martin E. See Ahmed, Shafique, (84d:33016)
 Netzer, N. See Liedl, Roman, (84k:26001)
 Olver, Peter J. ★ Applications of Lie groups to differential equations. (84i:58197)
 Padjen, Radovan. See Grammaticos, Basile; et al., (84f:58046) and (84f:58047)
 Padovan, Giovanni. (with Patuzzo Grego, Paola) Problems of G-convergence for systems of differential equations with conditions of various types. (Italian. English summary) (84i:49034)
 Patuzzo Grego, Paola. See Padovan, Giovanni, (84i:49034)
 Robba, P. Sur les équations différentielles linéaires p -adiques. II. [On p -adic linear differential equations. II] (84i:12017)
 Rubel, Lee A. An elimination theorem for systems of algebraic differential equations. (84c:12033)
 Shayman, Mark A. A symmetry group for the matrix Riccati equation. (84d:58072)

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secondary classifications:

- Ablowitz, Mark J. (with Segur, Harvey) ★ Solitons and the inverse scattering transform. (84c:35251)
 Segur, Harvey. See Ablowitz, Mark J., (84c:35251)

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- Berezovskii, A. A. See Mitropol'skii, Yu. A.; et al., 84b:34033
 Boguslavskii, A. S. See Mitropol'skii, Yu. A.; et al., 84b:34033
 Ecsedi, István. Bounds for the energy integral. (Hungarian. English summary) 84b:34022
 Elder, Ira T. See Nelson, Paul, Jr.; et al., 84g:34023
 Knowles, Ian. (with Race, David) On the correctness of boundary conditions for certain linear differential operators. 84f:34027
 Kochneva, T. V. On the construction of an approximation to the solution of a linear boundary value problem for an ordinary differential equation. (Russian. English summary) 84c:34020
 Kosheleva, T. M. A boundary value problem for an m th-order ordinary differential equation in the class of generalized functions. (Russian. English and Armenian summaries) 84g:34022
 Krbiľa, Jaroslav. A class of strict and specially nonselfadjoint differential equations $y'' + qy = 0$. (Slovak. English, German and Russian summaries) 84b:34032
 Markowich, Peter A. Analysis of boundary value problems on infinite intervals. 84c:34021
 Mitropol'skii, Yu. A. (with Berezovskii, A. A.; Boguslavskii, A. S.) Qualitative investigation of a mathematical model of a thermocline. (Russian) 84b:34033
 Mukhidinov, N. M. (with Sadykov, M. K.) Boundary value problems for a system of degenerate second-order ordinary differential equations. (Russian) 84c:34022
 Nelson, Paul, Jr. (with Ray, Asok Kumar; Wing, G. Milton) A theoretical result on the effectiveness of the addition formulae for two-point boundary systems. 84j:34013
 (with Sagong, Seok; Elder, Ira T.) Invariant imbedding applied to homogeneous two-point boundary value problems with a singularity of the first kind. 84g:34023
 Race, David. See Knowles, Ian, 84f:34027
 Ray, Asok Kumar. See Nelson, Paul, Jr.; et al., 84j:34013
 Sadykov, M. K. See Mukhidinov, N. M., 84c:34022
 Sagong, Seok. See Nelson, Paul, Jr.; et al., 84g:34023
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 Wing, G. Milton. See Nelson, Paul, Jr.; et al., 84j:34013

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- Böhmer, Klaus. (with Locker, J.) Asymptotic expansions in ill-posed boundary value problems. (84c:65101)
 Boyce, William E. See Xia, Ning Mao, (84m:34080)
 Bruk, V. M. Dissipative extensions of symmetric relations in a space of vector-valued functions. (Russian) (84b:34067)

- Čanak, Miloš. Carleman type boundary value problem for an n th-order areolar differential equation. (Serbo-Croatian. German summary) (84c:30066)
- Fedoryuk, M. V. The Sturm-Liouville problem with regular singularities. (Russian) (84d:34004)
- Gaponenko, Yu. L. Solvability of a class of nonlinear operator equations. (Russian) (84b:47079)
- Greenberg, William (with van der Mee, C. V. M.) Abstract boundary value problems from kinetic theory. (84c:34079)
- Kolpakov, A. G. Effective characteristics of a heat-conducting surface. (Russian) (84b:80006)
- Konyaev, Yu. A. Development of the regularization method for the solution of initial and boundary value problems with a polynomial singularity. (Russian) (84f:34079)
- Kuznetskii, R. S. On integration of a system of differential equations of nonlinear electrodynamics. (Russian) (84g:65102)
- Liñán, Amable. See Vega, José M., (84d:80009)
- Locker, J. See Böhmer, Klaus, (84c:65101)
- Mahony, J. J. (with Shepherd, J. J.) Stiff systems of ordinary differential equations. I. Completely stiff, homogeneous systems. (84c:65072a)
- (with Shepherd, J. J.) Stiff systems of ordinary differential equations. II. Boundary value problems for completely stiff systems. (84c:65072b)
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- van der Mee, C. V. M. See Greenberg, William, (84c:34079)
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- Rashchepkina, N. A. Asymptotic integration of a boundary value problem when the nature of the spectrum changes. (Russian) (84c:34086)
- Rizikulova, T. D. Generalized maximum principle for a difference scheme of a second-order degenerate ordinary differential equation. (Russian. Tajiki summary) (84m:65092)
- Shaw, J. K. See Prather, C. L., (84m:42036)
- Shepherd, J. J. See Mahony, J. J., (84c:65072a); (84c:65072b) and (84c:65072c)
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- Vega, José M. (with Liñán, Amable) Singular Langmuir-Hinshelwood reaction-diffusion problems: strong adsorption under quasi-isothermal conditions. (84d:80009)
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- Grimm, L. J. (with Eloe, P. W.) Multipoint boundary value problems for ordinary differential equations. (See 84c:34002)
- See also Eloe, P. W., 84c:34024
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- Muradyan, M. G. Problems of transport in a periodic medium. (Russian) 84c:34021
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- Ojika, Takeo. Structure analyses for large scale nonlinear multipoint boundary value problems. 84j:34015
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- Barkovskii, Yu. S. Hypo-oscillation and hyperoscillation differential operators. (Russian) (84c:47050)
- Bykov, Ya. V. (with Tankiev, I. A.) A generalized boundary value problem for a countable system of integro-differential equations. (Russian) (84d:34074)
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- Kazakova, N. G. Existence of solutions of a multipoint boundary value problem for functional-differential equations of neutral type. (Russian. English summary) (84c:34100)
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- Tankiev, I. A. See Bykov, Ya. V., (84d:34074)
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- Baxley, John V. Nonlinear second-order boundary value problems: intervals of existence, uniqueness and continuous dependence. 84j:34016
- Nonlinear second order boundary value problems: continuous dependence and periodic boundary conditions. (German summary) 84f:34028
- Bernfeld, Stephen R. (with Lakshmikantham, V.) Monotone method for nonlinear boundary value problems by linearization techniques. (See 84c:00009)
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- England, Roland. Some examples of parameter estimation by multiple shooting. (See 84c:00005)
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- Averaging of certain systems of ordinary differential equations. (Russian) 84d:34014
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- Moderbekova, R. A. A boundary value problem for a second-order nonlinear differential equation. (Russian) **84c:34027**
- Mehri, B. A certain boundary value problem. **84f:34032**
- Murty, K. N. (with Rao, D. R. K. S.) On the existence and uniqueness of solutions of two and three-point boundary value problems. **84b:34026**
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- Nagle, R. Kent Perturbations of differential systems with symmetries and the alternative method. **84b:34039**
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- Nguyen Thanh Bang Multiple Picard's method for the stiff nonlinear two-point boundary value problems. (See **84c:00016**)
- Petryshyn, W. V. (with Yu, Zhi Shou) Solvability of Neumann BV problems for nonlinear second-order ODEs which need not be solvable for the highest-order derivative. **84g:34030**
- Poore, A. B. See Hastings, Stuart P., **84g:34027**
- Rahimov, A. S. A two-point boundary value problem with a parameter for systems of ordinary differential equations. (Russian. English and Georgian summaries) **84c:34029**
- Rao, D. R. K. S. (with Murty, K. N.; Satyanarayana Rao, Ayyalasomayajula) Existence and uniqueness theorems for four-point boundary value problems for fourth order differential equations. **84f:34033**
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- Rodriguez, Jesus Nonlinear differential equations under Stieltjes boundary conditions. **84c:34030**
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- Sherrington, M. E. See Gray, B. F., **84b:34037**
- Sobeil, M. (with Hamad, G.) Some local properties of the solution of special boundary value problem for a vector differential equation of n th order. **84c:34029**
- Stepanets, N. I. Estimation of the error of the solution of boundary value problems for ordinary differential equations with approximate initial data. (Russian) **84j:34017**
- Teodorescu, P. P. (with Toma, Ileana) New considerations concerning the Cauchy type problem in the nonlinear bending of a straight bar. **84g:34031**
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- Toma, Ileana See Teodorescu, P. P., **84g:34031**
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- secondary classifications:
- Abduraliev, A. O. Asymptotic solution of a singularly perturbed boundary value problem. (Russian) **84g:34093**
- Agarwal, Ravi P. Boundary value problems for higher order integro-differential equations. **84i:45009**
- Allgower, E. L. (with Böhrer, Klaus; McCormick, S. F.) Discrete defect corrections: basic ideas. (German and Russian summaries) **84m:65070**
- Antman, Stuart S. (with Wolfe, Peter) Multiple equilibria of elastic strings under central forces: highly singular nonlinear boundary value problems of the Bernoulli. **84c:58018**
- Bagirova, N. Kh. Asymptotic solution of boundary value problems for singularly perturbed systems losing solution uniqueness when degenerate. (Russian. English and Azerbaijani summaries) **84m:34072**
- Bakule, Lubomir Computational algorithms for large-scale systems. (Russian and Czech summaries) **84c:93008**
- Bernfeld, Stephen R. (with Lakshmikantham, V.) Linear monotone method for nonlinear boundary value problems in Banach spaces. **84f:34086**
- Böhrer, Klaus See Allgower, E. L.; et al., **84m:65070**
- Cantrell, Robert Stephen Multiparameter bifurcation problems for second order ordinary differential equations. **84f:58028**
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- Deshpande, M. A. (with Kasture, D. Y.) Two-point boundary value problems inimical to singular perturbation theory. **84b:34086**
- Eidel'man, Yu. S. Two-point boundary value problem for a differential equation with a parameter. (Russian. English summary) **84i:34078**
- Flaherty, Joseph E. (with O'Malley, Robert E., Jr.) Singularly perturbed boundary value problems for nonlinear systems, including a challenging problem for a nonlinear beam. **84c:34058**
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- Hastings, Stuart P. (with Kazarinoff, Nicholas D.) On the bifurcation diagram for a problem in buoyancy induced flow. (See **84f:35004**)
- Hermann, Martin Zur integrativen Behandlung der Bifurkation von einfachen Eigenwerten bei gewöhnlichen Differentialgleichungen. (English summary) [On the integrative treatment of bifurcation of simple eigenvalues in ordinary differential equations] **84b:65076**
- Huslak, N. S. See Tewarson, Reginald P., **84j:65053**
- Israilov, S. V. Investigation of a functional boundary value problem for higher-order differential equations. (Russian) **84d:34075**
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- Kazarinoff, Nicholas D. See Hastings, Stuart P., (See **84f:35004**)
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- Khazan, M. I. Nonlinear and quasilinear evolution equations: existence, uniqueness and comparison of solutions; the rate of convergence of the difference method. (Russian. English summary) **84i:34080**
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- Lakshmikantham, V. See Bernfeld, Stephen R., **84f:34086**
- Lange, Charles G. On spurious solutions of singular perturbation problems. **84c:34076**
- Loud, W. S. Branching phenomena for nonlinear boundary value problems. **84b:58080**
- Lutz, Robert (with Sari, Tewfik) Applications of nonstandard analysis to boundary value problems in singular perturbation theory. **84a:34057**
- Mahony, J. J. (with Shepherd, J. J.) Stiff systems of ordinary differential equations. I. Completely stiff, homogeneous systems. **84c:65072a**
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- Nguyen Thanh Bang Picard's method for solving nonlinear two-point boundary value problem in optimal control theory. (Russian and Polish summaries) **84m:93052**
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- Ojika, Takeo Structure analyses for large scale nonlinear multipoint boundary value problems in ordinary differential equations. **84b:65078**
- O'Malley, Robert E., Jr. See Flaherty, Joseph E., **84c:34058**
- Pachpatte, B. G. Boundary value problems for nonlinear systems of differential equations in Banach spaces. **84f:34091**
- Padukone, G. D. (with Koneru, S. R.) On quasilinearisation technique for mildly nonlinear problems. **84i:34018**
- Popovici, Parashiva An iterative solution of nonlinear finite-difference equations. **84f:39002**
- Roberts, S. M. The analytical and approximate solutions of $\epsilon y'' = y y'$. **84m:34076**
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- Stork, Werner On a theorem by H. Shaw and P. J. McKenna concerning solution sets of some nonlinear boundary value problems. **84d:47089**
- Sukhanov, A. A. A method of solving nonlinear two-point boundary value problems. (Russian) **84d:65054**
- Tewarson, Reginald P. (with Huslak, N. S.) An adaptive implementation of interpolation methods for boundary value ordinary differential equations. **84j:65053**
- Trif, Damian Numerical solution of some boundary value problems by the alternative method. (Romanian. French summary) **84m:34012**
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- 34B20 Weyl theory and its generalizations
- Brändas, Erkki Weyl's theory for second order differential equations and its application to some problems in quantum chemistry. **84d:34015**
- Hinton, D. B. (with Shaw, Ken) Titchmarsh-Weyl theory for Hamiltonian systems. **84c:34031**
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- Graef, John R. Limit circle type results for sublinear equations. **84c:34051**
- Kauffman, Robert M. A Weyl theory for a class of elliptic boundary value problems on a half space. **84c:35066**
- Kovalishina, I. V. (with Potapov, V. P.) Radii of the Weyl circle in the matrix Nevanlinna-Pick problem. (Russian) **84j:30050**
- Potapov, V. P. See Kovalishina, I. V., **84j:30050**

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- Avron, Joseph E. (with Simon, Barry) Almost periodic Schrödinger operators. I. Limit periodic potentials. 84i:34023
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- Dwork, Bernard M.** ★Lectures on p -adic differential equations. (84g:12031)
- Hochstadt, Harry** See Chari, Bhagya, (84i:15005)
- Kilbas, A. A.** See Andreev, A. A., (84c:33002)
- Kohno, Mitsuhiro** (with Ohkouchi, Shigemi) Generalized hypergeometric equations of non-Fuchsian type. (84f:34007)
- Marchenko, V. A.** (with Ostrov'skii, I. V.) Approximation of periodic potentials by finite zone potentials. (Russian) (84b:34032)
- Meixner, Josef** Orthogonal polynomials in the theory of Mathieu functions. II. (84c:33014)
- Muldoon, Martin E.** The variation with respect to order of zeros of Bessel functions. (84b:33010)
- Newton, Roger G.** Inverse scattering by a local impurity in a periodic potential in one dimension. (84c:81114)
- Ohkouchi, Shigemi** See Kohno, Mitsuhiro, (84f:34007)
- Ostrov'skii, I. V.** See Marchenko, V. A., (84b:34032)
- Papastavridis, J. G.** Complementary variational principles and their application to rheo-linear and rheo-nonlinear vibrations. (84j:70027)
- Pavlikova, Elena** Higher monotonicity properties of certain Sturm-Liouville functions. (84i:34051)
- Takahashi, Kazuo** Instability of parametric dynamic systems with nonuniform damping. (84c:70025)
- Wagenführer, Ekkehard** On calculating the eigenvalues of the finite Hill's differential equation. (84c:65089)

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secondary classifications:

- Kozhero, M. V.** Normal bases of solutions of multidimensional linear differential equations. (Russian) (84g:34102)
- Shendge, G. R.** (with Vatsala, A. S.) Comparison results for first and second order boundary value problems at resonance. (84i:34049)
- Vatsala, A. S.** See Shendge, G. R., (84i:34049)

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secondary classifications:

- Arnol'd, V. I.** ★Geometrical methods in the theory of ordinary differential equations. (84d:58023)
- (Chen, Xiang Yan) See Collection: Chen, Xiang Yan, (84f:01121)
- Iooss, Gérard** (with Joseph, Daniel D.) ★Элементарная теория устойчивости и бифуркаций. (Russian) [Elementary stability and bifurcation theory] (84j:34001)
- Joseph, Daniel D.** See Iooss, Gérard, (84j:34001)
- (Levi, Mark) See Arnol'd, V. I., (84d:58023)
- (Moiseev, N. N.) See Iooss, Gérard; et al., (84j:34001)
- (Rubanovskii, V. N.) See Iooss, Gérard; et al., (84j:34001)
- (Szűcs, József) See Arnol'd, V. I., (84d:58023)
- Zhang, Jin Yan** ★Changweifen fangcheng jike lilun yu fenzhi wenti. (Chinese) [Geometric theory of ordinary differential equations and bifurcations] (84c:34003)
- Collection:
- Chen, Xiang Yan ★Collection of articles by Xiang Yan Chen. (Chinese) (84f:01121)

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- Akhurina, R. Yu.** (with Svistunov, P. P.) Algebraic cycles of a three-dimensional system. (Russian) 84d:34021
- Alekseev, B. V.** Methods and algorithms for obtaining focal values. (Russian) 84i:34028
- Artykov, A. R.** (with Rabinkov, G. A.; Rozet, I. G.) Singularities of solutions corresponding to helical trajectories in the neighborhood of infinity. (Russian) 84i:34029

- Bertolino, Milorad Instability of curves of stationary points of differential equations. (Serbo-Croatian. French summary) **84f:34043**
- Bountis, Tassos C. A note on: "Painlevé property of anharmonic systems with an external periodic field" [Phys. Lett. A **95** (1983), no. 6, 269–272] by W.-H. Steeb and A. Kunick. **84j:34023b**
- Bureau, F. J. Systèmes différentiels à points critiques fixes. I. **84j:34022**
- Burkina, L. I. (with Leonov, G. A.) The limit cycles of the second kind in dynamical systems with cylindrical phase space. (Russian) **84b:34035**
- Chen, Guang Qing Limit cycles of equations of type II in a quadratic differential system. I. (Chinese) **84m:34038**
Limit cycles of equations of type II in a quadratic differential system. II. (Chinese) **84b:34041**
- Chen, Lan Sun Regular integrals of a center, Dulac functions and limit cycles for a quadratic system. I. (Chinese) **84d:34022**
- Chen, Xiu Dong (with Huang, Qi Chang) Two existence theorems for limit cycles of the Liénard equation. (Chinese. English summary) **84b:34051**
Existence theorems of limit cycles of Liénard's equation. **84d:34023**
Sufficient conditions for the Liénard equation to have at least n limit cycles, and a procedure for constructing them. (Chinese. English summary) **84g:34051**
- Chicone, Carmen (with Tian, Jing Huang) On general properties of quadratic systems. **84f:34044**
- Dorizzi, Bernadette See Ramani, A.; et al., **84j:34023c**
- Gao, Long Chang On a property of Dulac functions. (Chinese. English summary) **84g:34052**
See also Tian, Jing Huang, **84c:34041**
- Grammaticos, Basile See Ramani, A.; et al., **84j:34023c**
- Hu, Hu Yi See Qian, Min; et al., **84g:34055** and Zhou, Qing Shan; et al., **84g:34056**
- Huang, Qi Chang (with Yang, Si Ren) Conditions for the existence of limit cycles of the Liénard equation with alternate damping. (Chinese. English summary) **84b:34052**
See also Shi, Xi Fu, **84c:34040** and Chen, Xiu Dong, **84b:34051**
- Khusanov, B. The distribution of singular points of a system in an n -dimensional space. (Russian) **84c:34040**
- Kunick, A. See Steeb, Willi-Hans, **84j:34023a**; Bountis, Tassos C., **84j:34023b** and Ramani, A.; et al., **84j:34023c**
- Leonov, G. A. See Burkina, L. I., **84b:34035**
- Li, Li The properties and applications of the integrating factor in the qualitative theory of ordinary differential equations. **84c:34030**
- Makhaneck, M. M. Limit cycles of the Darboux system. (Russian. English summary) **84c:34041**
- Miller, Richard K. (with Skar, S. J.) On existence of limit cycles in systems with discontinuous nonlinear terms. **84b:34036**
- Pasyukova, I. A. Existence of limit cycles of the first kind in an automatic phase frequency control system. (Russian) **84c:34053**
- Perko, L. M. See Ren, Yong Tai, **84f:34045**
- Qian, Min (with Hu, Hu Yi; Zhou, Qing Shan) Bifurcation of invariant curves (solution manifolds) of nonautonomous systems. (Chinese) **84g:34055**
See also Zhou, Qing Shan; et al., **84g:34056**
- Rabinov, G. A. See Artykov, A. R.; et al., **84c:34029**
- Ramani, A. (with Dorizzi, Bernadette; Grammaticos, Basile) Comment on: "Painlevé property of anharmonic systems with an external periodic field" [Phys. Lett. A **95** (1983), no. 6, 269–272] by W.-H. Steeb and A. Kunick. **84j:34023c**
- Rehms, Paul (with Ross, John) Analysis of periodic perturbations of limit cycles. **84c:34042**
- Ren, Yong Tai (with Suo, Guang Jian) The global structure of a quadratic system which possesses three integral straight lines. (Chinese. English summary) **84d:34024**
Notes on the paper: "Rotated vector fields and the global behavior of limit cycles for a class of quadratic systems in the plane" [J. Differential Equations **18** (1975), 63–86; MR **51** #10752] by L. M. Perko. (Chinese. English summary) **84f:34045**
See also Suo, Guang Jian, **84i:34032**
- Ross, John See Rehms, Paul, **84c:34042**
- Rozet, I. G. See Artykov, A. R.; et al., **84c:34029**
- Shaova, S. M. Cycles of a differential equation with polynomials of the third degree. (Russian) **84c:34043**
- Shi, Song Ling An example of a quadratic system with two separate limit cycles not including each other. (Chinese) **84m:34039**
- Shi, Xi Fu (with Huang, Qi Chang) On the limit cycles of the system $\dot{x} = h(y) - F(x)$, $\dot{y} = -g(x)$. (Chinese. English summary) **84c:34040**
See also Zhang, Zhi Fen, **84c:34042**
- Skar, S. J. See Miller, Richard K., **84b:34036**
- Sparing, László Numerical investigation of the perturbed van der Pol equation. (Hungarian. English summary) **84i:34031**
- Steeb, Willi-Hans (with Kunick, A.) Painlevé property of anharmonic systems with an external periodic field. **84j:34023a**
See also Bountis, Tassos C., **84j:34023b** and Ramani, A.; et al., **84j:34023c**
- Suo, Guang Jian Conditions for the Liénard system of an odd polynomial of degree $2n+1$ to have at most one or two limit cycles. (Chinese. English summary) **84g:34053** (with Ren, Yong Tai) The separatrix closed trajectory and the polygonal closed trajectory of the system $\dot{x} = -y + ax + lx^2 + mxy + ny^2$. (Chinese. English summary) **84i:34032**
See also Ren, Yong Tai, **84d:34024**
- Svistunov, P. P. See Akchurina, R. Yu., **84d:34021**
- Terzin, A. M. Dependence of the existence of limit cycles on values of the "small parameter". (Russian) **84g:34054**
Quasisingular orders of smallness of integral curves. (Russian) **84i:34033**
A mixed system of coordinates and cycles of differential equations. (Russian) **84d:34025**
- Tian, Jing Huang (with Gao, Long Chang) Qualitative study of the differential equations $dx/dt = \sin y$, $dy/dt = -\sin x + \mu \sin 2y$ on the torus $(x \bmod 2\pi, y \bmod 2\pi)$. (Chinese. English summary) **84c:34041**
See also Chicone, Carmen, **84f:34044**
- Wu, Kui Guang The existence of limit cycles for a nonlinear system. (Chinese) **84c:34044**
- Yang, Si Ren See Huang, Qi Chang, **84b:34052**
- Yang, Xin An Number of limit cycles of the bounded quadratic system with two finite singular points. **84j:34024**
- Ye, Yan Qian Some problems in the qualitative theory of ordinary differential equations. **84d:34026**
- Zeng, Xian Wu On the uniqueness of limit cycle of Liénard's equation. **84c:34030**
- Zhang, Zhi Fen (with Shi, Xi Fu) Some examples on the number of limit cycles of the Liénard equation. (Chinese. English summary) **84c:34042**
- Zhou, Qing Shan (with Hu, Hu Yi; Qian, Min) Bifurcation of periodic points from singularities of higher order in nonautonomous systems. (Chinese) **84g:34056**
See also Qian, Min; et al., **84g:34055**

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- Akin, Ethan Cycling in simple genetic systems. (**84h:92024**)
- Amel'kin, V. V. (with Lukashevich, N. A.; Sadovskii, A. P.) ★ Непериодические колебания в системах второго порядка. (Russian) [Nonlinear oscillations in second-order systems] (**84c:34037**)
(with al'-Khaider, Kasim Mukhamed) An approach to the solution of a problem of isochronicity of the center. (Russian) (**84c:58159**)
- Bamón, Rodrigo A class of planar quadratic vector fields with a limit cycle surrounded by a saddle loop. (**84m:58109**)
- Bautin, A. N. Bifurcations under the decomposition of a complex equilibrium state with two zero roots into simple states. (Russian) (**84c:58046**)
- Brauer, Fred (with Soudack, A. C.) On constant effort harvesting and stocking in a class of predator-prey systems. (**84d:92037**)
- Braun, Martin Why the percentage of sharks caught in the Mediterranean Sea rose dramatically during World War I. (See **84j:00019**)
- Butler, Gregory (with Freedman, Herbert I.; Waltman, Paul) Global dynamics of a selection model for the growth of a population with genotypic fertility differences. (**84c:92037**)
- Castro, Abel Perturbation of a two-dimensional system with unstable limit cycle. (Spanish. English summary) (**84b:58132**)
- Cherkas, L. A. On the structure of the bifurcations of the analytic autonomous systems on the plane with a parameter rotating the field. (**84c:58162**)
- Chicone, Carmen (with Shafer, Douglas S.) Separatrix and limit cycles of quadratic systems and Dulac's theorem. (**84m:58110**)
- Clerc, René-Louis (with Razafimandimby, Boniface) Domaines d'influence de singularités stables d'un endomorphisme quadratique de \mathbb{R}^2 . (English summary) [Domains of influence of stable singularities of a quadratic endomorphism of \mathbb{R}^2] (**84m:58063**)
- Coleman, Courtney S. Quadratic population models: almost never any cycles. (See **84j:00019**)
Hilbert's 16th problem: how many cycles? (See **84j:00019**)
- Cushing, J. M. (with Saleem, M.) A predator prey model with age structure. (**84f:92033a**) (with Saleem, M.) Erratum: "A predator prey model with age structure". (**84f:92033b**)
- Dolov, M. V. (with Kosarev, V. V.) Bifurcations of limit cycles of equations admitting Darboux integrals. (Russian) (**84m:58092**)
- Ergin, N. P. ★ Проблема Римана. (Russian) [The Riemann problem] (**84h:34015**)
- Fincham, W. F. (with Nikias, C. L.) Further periodic solutions of the van der Pol equations and its application to waveform generation. (**84c:70018**)
- Fleissas, George P. See Karlsson, F.; et al., (**84c:81008**)
- Frauenthal, James C. Some simple models of cannibalism. (**84g:92029**)
- Freedman, Herbert I. See Butler, Gregory; et al., (**84c:92037**)
- Fröman, P. O. See Karlsson, F.; et al., (**84c:81008**)
- Goryachenko, V. D. (with Koltunova, E. S.) Investigation on a phase plane of a nonlinear model of the dynamics of breeding environments. (Russian) (**84j:92034**)
- Hökback, A. See Karlsson, F.; et al., (**84c:81008**)
- Hunt, Fern Regulation of population cycles by genetic feedback: existence of periodic solutions of a mathematical model. (**84c:92029**)
- Karlsson, F. (with Fröman, P. O.; Hökback, A.) Comments on: "On the rotating-harmonic-oscillator equation" [Nuovo Cimento B (11) **64** (1981), no. 2, 358–366; MR **83b:81024**] by G. P. Fleissas. (Italian and Russian summaries) (**84c:81008**)
- Kawato, Mitsuo Transient and steady state phase response curves of limit cycle oscillators. (**84i:92013**)
- al'-Khaider, Kasim Mukhamed See Amel'kin, V. V., (**84c:58159**)
- Khorozov, E. I. Bifurcations of a vector field in the neighborhood of a singular point in the case of two pairs of purely imaginary eigenvalues. II. (Russian) (**84c:58068**)
- Kojack, Jitka Accompanying spaces to a linear two-dimensional space of continuous functions with a continuous first derivative. (Russian and Czech summaries) (**84i:34013**)
- Koltunova, E. S. See Goryachenko, V. D., (**84j:92034**)
- Kosarev, V. V. See Dolov, M. V., (**84m:58092**)
- Liu, Zun Quan (with Qin, Chao Bin) Mechanical deduction of formulas of differential equations. II. (**84m:65096b**)
(with Qin, Chao Bin) Mechanical deduction of formulas of differential equations. I. (**84m:65096a**)
- Lukashevich, N. A. See Amel'kin, V. V.; et al., (**84c:34037**)
- Luk'yanov, V. I. Bifurcations of dynamical systems with "saddle-node" separatrix loops. (Russian) (**84c:58088**)
- Martinet, Jean (with Ramis, Jean-Pierre) Problèmes de modules pour des équations différentielles non linéaires du premier ordre. [Moduli problems for first-order nonlinear differential equations] (**84c:34011**)
- Meshcherskaya, M. B. Qualitative picture of a special system of two equations. (Russian) (**84f:34017**)
- Nikias, C. L. See Fincham, W. F., (**84c:70018**)

- Ohtsuki, Makoto On the number of apparent singularities of a linear differential equation. (84h:14015)
- Qin, Chao Bin See Liu, Zun Quan, (84m:65096a) and (84m:65096b)
- Ramis, Jean-Pierre See Martinet, Jean, (84c:34011)
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- Sadorovskii, A. P. See Amel'kin, V. V.; et al., (84c:34037)
- Saleem, M. See Cushing, J. M., (84f:92033a) and (84f:92033b)
- Shafer, Douglas S. See Chicone, Carmen, (84m:58110)
- Soudack, A. C. See Brauer, Fred, (84d:92037)
- Suo, Guang Jian The algebraic critical cycles and bifurcation of limit cycles for the system $\dot{x} = a + \sum_{i,j=2}^n a_{ij}x^i y^j$, $\dot{y} = b + \sum_{i,j=2}^n b_{ij}x^i y^j$. (Chinese. English summary) (84g:58082)
- Sverdllov, Ronald Critical points with asymmetric schemes. (84b:58063)
- Tian, Jing Huang Qualitative study of van der Pol equations on the torus. (Chinese. English summary) (84c:58182)
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- Wilken, D. R. Some remarks on a competing predators problem. (84c:92061)
- Ye, Yan Qian Qualitative theory of the quadratic systems in the complex space. (Chinese summary) (84h:58125)
- Zeng, Xian Wu See Zhou, Jian Ying; et al., (84f:92020)
- Zhang, Jin Yan See Zhou, Jian Ying; et al., (84f:92020)
- Zhou, Jian Ying (with Zhang, Jin Yan; Zeng, Xian Wu) Qualitative analysis of a nonlinear system of equations describing biochemical reactions. (Chinese. English summary) (84f:92020)
- Žoljdek, Henryk Versality of a family of symmetric vector fields on the plane. (Russian) (84c:58094)
- Zuppa, Carlos Order of cyclicity of the singular point of Liénard's polynomial vector fields. (84h:58126)
- 34C10 Zeros, disconjugacy, oscillation and comparison of solutions
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- Bihari, Imre On the oscillation of Böcher's pairs. II. 84b:34037
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- Bugir, M. K. Conditions for oscillation of solutions of systems of second-order differential equations. (Russian) 84b:34038
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- See also Butler, Gregory, 84h:34054 and 84h:34055
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- Marini, Mauro (with Zezza, Pierluigi) Oscillation and asymptotic behavior of second order nonlinear differential equations. (Italian) (See 84c:34003)
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- Šantará, Sylva Über isochrone durch zwei lineare Differentialgleichungen zweiter Ordnung geregelte Schwingungen von materiellen Punkten. [On isochronal oscillations of material points which are governed by two second-order linear differential equations] 84c:34049
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- See also Anichini, G., (See 84c:34003)
- Schwarz, Binyamin See London, David, 84b:34040
- Švec, Marko Asymptotic equivalence and oscillatory properties of ordinary differential equations. (See 84c:34003)
- Timeo, Antonio ★ Propiedades oscilatorias de las ecuaciones cuasidiferenciales lineales (a) de tercer orden y (b) autoadjuntos de cuarto orden. (Spanish) [Oscillation properties of (a) third-order and (b) selfadjoint fourth-order linear quasidifferential equations] 84g:34063
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- Werbowski, Jarosław (with Wyrwińska, Aleksandra) On functional integrability of solutions of differential equations with deviating argument. 84d:34029
- Wong, James S. W. See Kwong, Man Kam, 84b:34039; 84g:34059; 84g:34060 and 84g:34061
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- Zeza, Pierluigi See Marini, Mauro, (See 84c:34003)
- Zhernolenko, V. N. (with González Mastrapa, H.) Oscillations of second-order linear systems with parametric perturbations. (Spanish. English summary) 84f:34052

secondary classifications:

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- Aripov, M. M. (with Kayumov, T.) Asymptotic behavior of the solution of the nonlinear equation $y''' - g(x)y'' = 0$. (Russian) (84c:34052)
- Bykov, Ya. V. (with Matakhev, A. I.; Chinkaraev, T.) Oscillation properties of a class of systems of second-order differential inequalities. I. (Russian) (84c:34026)
- Chinkaraev, T. See Bykov, Ya. V.; et al., (84c:34026)
- Dahiya, R. S. Oscillation and asymptotic behavior of bounded solutions of functional-differential equations with delay. (84c:34106)
- Detki, J. A remark on the oscillation of ordinary second order nonlinear differential equations. (84d:34031)
- Elbert, A. A half-linear second order differential equation. (84g:34008)
- Foltyńska, Izabela (with Werbowski, Jarosław) On the oscillatory behavior of solutions of systems of differential equations with deviating arguments. (84d:34078)
- Georgiou, D. A. Generalized asymptotic equivalence of functionally perturbed nonlinear ordinary differential equations. (84c:34083)
- Gorbuzov, V. N. Qualitative investigation in the large of a system in the case of a pole at infinity. (Russian) (84c:34007)
- Grace, S. R. (with Lalli, B. S.) A note on G. Ladas' paper: "Oscillatory effect of retarded actions" [J. Math. Anal. Appl. 60 (1977), no. 2, 410-416; MR 56 #6056]. (84j:34080)
- (with Lalli, B. S.) An oscillation criterion for n th order nonlinear differential equations with functional arguments. (84c:34100)
- (with Lalli, B. S.) On oscillation of solutions of n th-order delay differential equations. (84c:34075a)
- (with Lalli, B. S.) Oscillation theorems for n th-order delay differential equations. (84c:34075b)
- Graef, John R. Nonoscillation of higher order functional-differential equations. (84c:34076)
- Grossberg, Stephen Competition, decision, and consensus. (84c:92003)
- Ivanov, Anatolii Fiodorovich Oscillation of solutions of first-order differential-difference equations of neutral type. (Russian) (84c:34101)
- Kayumov, T. See Aripov, M. M., (84c:34052)
- Krbíř, Jaroslav A class of strict and specially nonselfadjoint differential equations $y'' + qy = 0$. (Slovak. English, German and Russian summaries) (84c:34032)
- Kreith, Kurt PDE generalizations of the Sturm comparison theorem. (See 84m:01001)
- Kulenović, M. R. S. Hille-Wintner type comparison theorems for differential inequalities. (84c:34021)
- Ladas, Gerassimos (with Stavroulakis, I. P.) On delay differential inequalities of higher order. (84c:34089)
- (with Sficas, Y. G.; Stavroulakis, I. P.) Necessary and sufficient conditions for oscillations. (84j:34082)
- See also Grace, S. R.; et al., (84j:34080)
- Laforgia, Andrea Sturm theory for certain classes of Sturm-Liouville equations and Turánian and Wronskians for the zeros of derivative of Bessel functions. (84c:33009)
- Lalli, B. S. See Grace, S. R., (84c:34100); (84j:34080); (84c:34075a) and (84j:34075b)
- Marušák, Pavol Some results on the oscillatory and asymptotic behavior of solutions of nonlinear delay differential inequalities. (84j:34083)
- Matakhev, A. I. See Bykov, Ya. V.; et al., (84c:34026)
- Muldoon, Martin E. The variation with respect to order of zeros of Bessel functions. (84c:33010)
- Olah, Rudolf Note on the oscillation of differential equations with deviating argument. (Czech summary) (84b:34103)
- Sficas, Y. G. See Ladas, Gerassimos; et al., (84j:34082)
- Shevelo, V. N. (with Varchuk, N. V.) Oscillatory properties of solutions of certain systems of functional-differential equations with a general character of deviation of the argument. (Russian) (84m:34103)
- Singh, Bhagat Oscillation of a second order nonlinear functional equation via oscillating coefficients. (84j:34085)
- Skobelev, V. G. Oscillation properties of second-order differential equations with deviating argument and rapidly growing leading coefficient. (Russian) (84m:34104)
- Stavroulakis, I. P. See Ladas, Gerassimos, (84c:34089) and (84j:34082)
- Varchuk, N. V. See Shevelo, V. N., (84m:34103)
- Werbowski, Jarosław See Foltyńska, Izabela, (84d:34078)
- Zhang, Bing Gen Oscillation of the solutions of the first-order advanced type differential equations. (Chinese summary) (84j:34087)

34C11 Growth, boundedness of solutions

- Aftabizadeh, A. R. Bounded solutions for some gradient type systems. 84c:34035
- Benson, Donald C. Asymptotic directions for solutions of Liénard systems. 84b:34043
- Budinčević, Miroko Unbounded solutions of a nonlinear differential equation. (Serbo-Croatian summary) 84d:34030
- Bylov, B. F. (with Tikhonova, E. A.) Estimation of the growth of solutions of a piecewise constant system. (Russian) 84m:34042
- Cecchi, Mariella Boundedness criteria for the components of the solutions of a class of systems of n first-order ordinary differential equations. (Italian) (See 84c:34003)
- (with Marini, Mauro; Zezza, Pierluigi) Asymptotic properties of the solutions of nonlinear equations with dichotomies and applications. (Italian summary) 84i:34039
- Detki, J. A remark on the oscillation of ordinary second order nonlinear differential equations. 84d:34031
- Dzhumabaev, D. S. Boundedness of a solution and its derivative on the whole axis of a first-order differential equation. (Russian. Kazakh summary) 84c:34046
- Eliš, Jozef On the solutions of n th order nonlinear differential equation in $L^2(0, \infty)$. 84d:34032
- Graef, John R. Limit circle type results for sublinear equations. 84c:34051
- Greguš, Michal, Jr. On some asymptotic properties of the solutions of a third order linear differential equation. 84b:34044

Hašák, Alexander (with Švec, Marko) Integral equivalence of two systems of differential equations. 84c:34036

- Kalas, Josef On the asymptotic behaviour of the equation $dz/dt = f(t, z)$ with a complex-valued function f . 84f:34053
- Kiguradze, I. T. See Kvinikadze, G. G., 84c:34047
- Kvinikadze, G. G. (with Kiguradze, I. T.) On strongly growing solutions of nonlinear ordinary differential equations. (Russian. English and Georgian summaries) 84c:34047
- Li, Li The boundedness and asymptotic behavior of solutions of differential system of second-order with variable coefficients. 84i:34040
- Marini, Mauro See Cecchi, Mariella; et al., 84i:34039
- Mishina, Toshiro See Tsukamoto, Ichiro; et al., 84i:34042
- Ono, Mahito See Tsukamoto, Ichiro; et al., 84i:34042
- Ráb, Miloš Linear differential equation of the 2nd order whose principal solution has unbounded logarithmic derivative. 84b:34045
- Švec, Marko See Hašák, Alexander, 84c:34036
- Tatarukiewicz, Krzysztof Sur certains systèmes d'équations différo-fonctionnelles et différentielles du second ordre. [Certain systems of second-order différo-functional and differential equations] 84i:34041
- Tikhonova, E. A. See Bylov, B. F., 84m:34042
- Tsukamoto, Ichiro (with Mishina, Toshiro; Ono, Mahito) On solutions of $x'' = e^{ax} x^{1+\alpha}$. 84i:34042
- Voskresenskii, E. V. Asymptotic equivalence of systems of differential equations with a linear autonomous first approximation. (Russian) 84j:34028
- Zecca, Pierluigi See Cecchi, Mariella; et al., 84i:34039

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- Bareket, M. See Leizarowitz, A., (84c:34033)
- Deng, Nai Yang A class of generalized Bessel functions occurring in nonlinear differential equation. (84f:34046)
- El-Owaidy, Hassan (with Zagrou, A. A. S.) A note on continuation and boundedness of solutions of a nonlinear differential equation. (84c:34010)
- Gorbachuk, M. L. See Vinnishin, Ya. F., (84j:34065)
- Graef, John R. (with Kusano, Takasi; Onose, Hiroshi; Spikes, Paul W.) On the asymptotic behavior of oscillatory solutions of functional-differential equations. (84c:34074)
- Kalas, Josef Asymptotic behaviour of equations $\dot{z} = q(t, z) - p(t)z^2$ and $\ddot{x} = x\varphi(t, \dot{x}^{-1})$. (84g:34013)
- Kiguradze, I. T. On asymptotic behavior of solutions of nonlinear nonautonomous ordinary differential equations. (84f:34047)
- Komornik, V. Upper estimates for the eigenfunctions of higher order of a linear differential operator. (84m:34030)
- Kurbatov, V. G. Bounded solutions of differential-difference equations. (Russian) (84j:34081)
- Kusano, Takasi See Graef, John R.; et al., (84c:34074)
- Lakshmikantham, V. (with Leela, S.; Vatsala, A. S.) Method of quasi-upper and lower solutions in abstract cones. (84c:34072)
- Leela, S. See Lakshmikantham, V.; et al., (84c:34072)
- Leizarowitz, A. (with Bareket, M.) Oscillation criteria and growth of nonoscillatory solutions of higher order differential equations. (84c:34033)
- Meisters, Gary H. Jacobian problems in differential equations and algebraic geometry. (84c:58048)
- Neuman, František A survey of global properties of linear differential equations of the n th order. (84c:34012)
- Omey, E. Regular variation and its applications to second order linear differential equations. (84d:34028)
- Onose, Hiroshi See Graef, John R.; et al., (84c:34074)
- Shevelo, V. N. (with Varchuk, N. V.) Oscillatory properties of solutions of certain systems of functional-differential equations with a general character of deviation of the argument. (Russian) (84m:34103)
- Spikes, Paul W. See Graef, John R.; et al., (84c:34074)
- Varchuk, N. V. See Shevelo, V. N., (84m:34103)
- Vatsala, A. S. See Lakshmikantham, V.; et al., (84c:34072)
- Vinnishin, Ya. F. (with Gorbachuk, M. L.) Behavior at infinity of the solutions of operator-differential equations. (Russian) (84j:34065)
- Wattamwar, M. J. On some integral inequalities of Gronwall-Bellman type. (84i:26018)
- Yang, Xin An Number of limit cycles of the bounded quadratic system with two finite singular points. (84j:34024)
- Zagrou, A. A. S. See El-Owaidy, Hassan, (84c:34010)

34C15 Nonlinear oscillations

- Amel'kin, V. V. (with Lukashevich, N. A.; Sadovskii, A. P.) ★Нелинейные колебания в системах второго порядка. (Russian) [Nonlinear oscillations in second-order systems] 84c:34037
- Anand, K. K. On relaxation oscillations governed by a second order differential equation for a large parameter and with a piecewise linear function. 84c:34052
- Blot, Joël Méthodes asymptotiques dans l'étude de systèmes hamiltoniens non autonomes. (English summary) [Asymptotic methods in the study of nonautonomous Hamiltonian systems] 84m:34043
- Echeverría, Pedro On the perturbed Liénard equation. (Spanish summary) 84f:34054
- Elboughy, Thana See Elnaggar, Abd-Elrahim, 84c:34053
- Elnaggar, Abd-Elrahim (with Elboughy, Thana) Harmonic and subharmonic solutions of a weakly nonlinear conservative differential equation with a periodically varying coefficient. (Arabic summary) 84c:34053
- Garde, R. M. (with Shrivastava, M. K.) Resonance classification of the differential equation $\ddot{y} + C(1 - y^2)\dot{y} + (w^2 - G \cos \mu t)y = f \cos \nu t$. 84g:34064
- Gelman, A. One phenomenon in nonlinear oscillations. (See 84k:00009)
- Genchev, Zhivko D. (with Ivanov, Zdravko G.; Todorov, Bogdan N.) Effect of periodic perturbation on radio frequency model of Josephson junction. 84j:34029

- Georgiev, P. G. See Spasov, A. Ya., 84c:34054
- Grassman, J. Subharmonic and chaotic solutions of the forced van der Pol relaxation oscillator. (See 84j:00010)
- Gubin, Yu. P. Point resonance in a Duffing-type oscillator. (Russian) 84c:34048
- He, Qi Min See Zhang, Zhi Fen, 84b:34059
- Ivanov, Zdravko G. See Genchev, Zhivko D.; et al., 84j:34029
- Konyaev, Yu. A. Application of the regularization method to a problem of nonlinear oscillation theory. (Russian) 84c:34055
- Li, Li Peng Existence theorem for J -curves for a class of second-order differential equations. (Chinese. English summary) 84b:34046
- Lukashevich, N. A. See Amel'kin, V. V.; et al., 84a:34037
- Muracchini, Augusto On the existence of periodic oscillations in certain nonlinear systems with two degrees of freedom. (Italian. English summary) 84b:34047
- Peters, J. M. H. Some approximate solutions of the anharmonic motion equation. 84c:34044
- Sadovskii, A. P. See Amel'kin, V. V.; et al., 84a:34037
- Shrivastava, M. K. Resonance classification in a cubic system with self-oscillation. 84g:34065
- See also Garde, R. M., 84g:34064
- Spasov, A. Ya. (with Georgiev, P. G.) A method for analysis of nonlinear oscillations. (Russian summary) 84c:34054
- Todorov, Bogdan N. See Genchev, Zhivko D.; et al., 84j:34029
- Tondi, A. Zum Problem des gegenseitigen Einflusses von selbsterregten und fremderregten Schwingungen. (English and Russian summaries) [The problem of mutual influence between self-excited and forced oscillations] 84c:34047
- Ward, James R., Jr. Asymptotic conditions for forced nonlinear oscillations. (See 84c:00009)
- Zhang, Zhi Fen (with He, Qi Min) A sufficient condition for the existence of no more than n limit cycles for the Liénard equation. (Chinese) 84b:34059
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- Alifov, A. A. Self-oscillation system with an energy source, under periodic and nonperiodic perturbations. (84c:34056)
- Alligood, Kathleen T. (with Mallet-Paret, John; Yorke, James A.) Families of periodic orbits: local continuability does not imply global continuability. (84c:58071b)
- Antonov, I. L. (with Mikhailov, N. I.) The behavior of phase trajectories of a linear oscillator excited by a stationary normal random force. (Russian. English summary) (84i:70033)
- Atherton, D. P. See Balasubramanian, Ram, (See 84d:93002)
- Balasubramanian, Ram (with Atherton, D. P.) Limit cycles in coupled biological systems. (See 84d:93002)
- Bazley, Norman W. (with Weinacht, Richard J.) A class of operator equations in nonlinear mechanics. (84b:34066)
- Bazykin, A. D. (with Khibnik, A. I.) Soft and hard excitation of oscillations in a predator-prey system. (Russian. English summary) (84m:92021)
- Benson, Donald C. Asymptotic directions for solutions of Liénard systems. (84b:34043)
- Bibikov, Yu. N. Quasiperiodic solutions of two-dimensional periodic systems of differential equations of neutral type depending on a small parameter. (Russian) (84j:34038)
- Bliss, R. D. See Painter, P. R., (84a:92034)
- Botashev, Kh. I. Estimates for a small parameter in problems of the theory of nonlinear oscillations. (Russian) (84i:70032)
- Bountis, Tassos C. A note on: "Painlevé property of anharmonic systems with an external periodic field" [Phys. Lett. A 95 (1983), no. 6, 269-272] by W.-H. Steeb and A. Kunick. (84j:34023b)
- Breitenberger, Ernst (with Mueller, Robert D.) The elastic pendulum: a nonlinear paradigm. (84b:70026)
- Buchler, J. Robert See Reger, Oded, (See 84c:76002)
- Buhite, Jack L. Two examples of pathological elastic-plastic behavior. (84c:73028)
- Carmona, F. See Pacault, Adolphe; et al., (See 84b:00035)
- Chen, Xiu Dong Existence theorems of limit cycles of Liénard's equation. (84d:34023)
- Cherkas, L. A. On the structure of the bifurcations of the analytic autonomous systems on the plane with a parameter rotating the field. (84c:58162)
- Chua, Leon O. See Tang, Yaw Shing; et al., (84c:58154)
- Chui, S. T. (with Ma, K. B.) Nature of some chaotic states for Duffing's equation. (84c:58059)
- Cooke, J. R. See Rand, R. H.; et al., (84d:92008)
- Cushing, J. M. (with Saleem, M.) A predator prey model with age structure. (84f:92033a) (with Saleem, M.) Erratum: "A predator prey model with age structure". (84f:92033b)
- Delshams, Amadeo On systems passing through resonances. (See 84f:58001)
- Dorizzi, Bernadette See Ramani, A.; et al., (84j:34023c)
- Drenovac, Vojin The normal vibration modes of some nonlinear systems. (Russian and Serbo-Croatian summaries) (84m:70039)
- Farkas, M. The attractor of perturbed van der Pol's equation. (84i:58073)
- Fufaev, N. A. See Neimark, Yu. I., (84j:58071)
- Grammaticos, Basile See Ramani, A.; et al., (84j:34023c)
- Gubin, Yu. P. (with Lomov, S. A.; Safonov, V. F.) Point resonance in a system of two oscillators. (84j:70036)
- Hamzeh, F. M. Basic methods for stability analysis of nonlinear oscillations and waves. (Arabic summary) (84i:70027)
- an der Heiden, Uwe Delays in physiological systems. (84c:92018)
- Hu, Bambi (with Mao, J. M.) Universal metric properties of an approximate Poincaré map for Duffing's equation with negative stiffness. (84c:58163)
- Huang, Qi Chang See Shi, Xi Fu, (84c:34040)
- Iftode, Vasile A -dissipativity for periodic solutions in ordinary differential equations. (84m:34052)
- Iarov, V. Ya. Forced oscillations of dynamic systems with nonlinearities of internal dry friction type in the case of absence of elastic bonds. (Russian) (84j:70039)
- Iooss, Gérard Bifurcations élémentaires—successions et interactions. [Elementary bifurcations—successions and interactions] (See 84b:00035)
- Ivanov, V. A. (with Kioss, M. N.; Mironov, S. V.) Construction of perturbed solutions of multifrequency systems of differential equations by means of a discrete analogue of the Fourier transform. (Russian) (84j:34055)
- Kaji, Nobuyuki See Shirao, Yoshiaki; et al., (84i:34050)
- K'eu The Dyk See Nguyen Dong An', (84a:70020)
- Khibnik, A. I. See Bazykin, A. D., (84m:92021)
- Khoma, G. P. Some questions of the justification of the asymptotic method of N. M. Krylov-N. N. Bogolyubov. (Russian) (84b:34056)
- Khorozov, E. I. Bifurcations of a vector field in the neighborhood of a singular point in the case of two pairs of purely imaginary eigenvalues. II. (Russian) (84a:58068)
- Kido, Masao See Shirao, Yoshiaki; et al., (84i:34050)
- Kioss, M. N. See Ivanov, V. A.; et al., (84j:34055)
- Kopell, Nancy Frequency plateaus in a chain of weakly coupled oscillators. (See 84f:35004)
- Korolev, N. I. Reduction of nonlinear systems with periodic motions occurring in a single-frequency oscillation mode to analogues of conservative systems, and its application to synthesis of nonlinear systems. (Russian) (84j:70044)
- Kryukov, B. I. (with Seredovich, G. I.) Properties of the appearance of subharmonic and subultraharmonic resonances in systems described by the Duffing equation. (84i:70031)
- Kunick, A. See Steeb, Willi-Hans, (84j:34023a); Bountis, Tassos C., (84j:34023b) and Ramani, A.; et al., (84j:34023c)
- Linkens, D. A. Nonlinear circuit mode analysis. (84c:94024)
- Liu, Zun Quan (with Qin, Chao Bin) Mechanical deduction of formulas of differential equations. II. (84m:65096b) (with Qin, Chao Bin) Mechanical deduction of formulas of differential equations. I. (84m:65096a)
- Lomov, S. A. See Gubin, Yu. P.; et al., (84j:70036)
- Ma, K. B. See Chui, S. T., (84c:58059)
- Makhanev, M. M. Limit cycles of the Darboux system. (Russian. English summary) (84c:34041)
- Mallet-Paret, John See Alligood, Kathleen T.; et al., (84c:58071b)
- Mao, J. M. See Hu, Bambi, (84c:58163)
- Martynuk, A. A. (with Nikitina, N. V.) Reference method in shimmy problem. (84m:70034)
- Marwin, Jean Periodic oscillations of forced pendulum-like equations. (84g:34075)
- Mees, Alistair I. See Tang, Yaw Shing; et al., (84c:58154)
- Merman, G. A. New algorithms for quasiperiodic solutions. (Russian. French summary) (84c:70023)
- Mikhailov, N. I. See Antonov, I. L., (84i:70033)
- Mironov, S. V. See Ivanov, V. A.; et al., (84j:34055)
- Moriguchi, Haruo (with Nakamura, Toshiyuki) Forced oscillations of system with nonlinear restoring force. (84i:70031)
- Morozov, A. D. Pendulum-type equations and resonances. (Russian) (84m:70036)
- Mueller, Robert D. See Breitenberger, Ernst, (84b:70026)
- Myrzakiev, Dz. Conditionally periodic solutions of a system of differential equations. (Russian) (84f:34060)
- Nagahara, Toshikumi See Shirao, Yoshiaki; et al., (84i:34050)
- Nagumo, Jin-ichi See Osada, Hiroyasu; et al., (84c:92024)
- Nakamura, Toshiyuki See Moriguchi, Haruo, (84i:70031)
- Nayfeh, Ali Hasan Parametrically excited multidegree-of-freedom systems with repeated frequencies. (84i:70026)
- The response of two-degree-of-freedom systems with quadratic nonlinearities to a parametric excitation. (84f:70029)
- The response of single degree of freedom systems with quadratic and cubic nonlinearities to a subharmonic excitation. (84j:70037)
- The response of multidegree-of-freedom systems with quadratic nonlinearities to a harmonic parametric resonance. (84j:70038)
- Combination resonances in the nonlinear response of bowed structures to a harmonic excitation. (84i:70032)
- Neimark, Yu. I. (with Fufaev, N. A.) The method of point mappings and its application to the study of dynamical systems. (Russian. English summary) (84j:58071)
- Nguyen Dong An' On the question of the solution of the Fokker-Planck-Kolmogorov equation for nonautonomous systems that are subject to periodic and random actions. (Russian) (84a:34059)
- (with K'eu The Dyk) Solution of the Fokker-Planck-Kolmogorov equation for the van der Pol system subject to periodic and random actions. (Russian) (84a:70020)
- Nikitina, N. V. See Martynuk, A. A., (84m:70034)
- Nitta, Junsaku See Toko, Kiyoshi; et al., (84j:92026)
- Oláh, Rudolf Note on the oscillation of differential equations with deviating argument. (Czech summary) (84b:34103)
- Onose, Hiroshi On the probability density functions and the oscillations. (84b:34106)
- Osada, Hiroyasu (with Yoshizawa, Shuji; Nagumo, Jin-ichi) Theoretical study on Cantor function-like response characteristics of neuron model. (84c:92024)
- Pacault, Adolphe (with Carmona, F.; Piaud, J. J.) La chimie à la croisée des disciplines traditionnelles. Comportements identiques de populations différentes. [Chemistry at the crossroads of traditional disciplines. Identical behavior in different populations] (See 84b:00035)
- Painter, P. R. (with Bliss, R. D.) Reconsideration of the theory of oscillatory repression. (84c:92034)
- Petrov, D. I. Forced periodic oscillations in a control system containing discontinuous nonlinearities. (Bulgarian. English summary) (84j:92052)
- Piaud, J. J. See Pacault, Adolphe; et al., (See 84b:00035)
- Qin, Chao Bin See Liu, Zun Quan, (84m:65096a) and (84m:65096b)
- Ramani, A. (with Dorizzi, Bernadette; Grammaticos, Basile) Comment on: "Painlevé

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- Rand, R. H. (with Storti, D. W.; Upadhyaya, S. K.; Cooke, J. R.) Dynamics of coupled stomatal oscillators. (84d:92008)
- Regev, Oded (with Buchler, J. Robert) Multitime asymptotic methods for slowly evolving oscillating systems. (See 84c:76002)
- Rehms, Paul (with Ross, John) Analysis of periodic perturbations of limit cycles. (84c:34042)
- Ren, Yong Tai See Suo, Guang Jian. (84c:34032)
- Roseau, Maurice La méthode de modulation d'amplitude et son application à l'étude des oscillateurs couplés. (English summary) [The method of amplitude modulation and its application to the study of coupled oscillators] (84b:70028)
- Ross, John See Rehms, Paul. (84c:34042)
- Safonov, V. F. See Gubin, Yu. P.; et al. (84j:70036)
- Saleem, M. See Cushing, J. M. (84f:92033a) and (84f:92033b)
- Sanders, Jan A. Report on the driven Josephson equation. (See 84f:58001)
- Sano, Masaki See Sato, Shin-ichi; et al. (84c:58152)
- Sato, Shin-ichi (with Sano, Masaki; Sawada, Yasuji) Universal scaling property in bifurcation structure of Duffing's and of generalized Duffing's equations. (84c:58152)
- Sawada, Yasuji See Sato, Shin-ichi; et al. (84c:58152)
- Schrödel, H. D. Bemerkungen zum nichtlinearen Hauptschwingungsbegriff. [Remarks on the notion of nonlinear principal oscillations] (84b:70026)
- Selgrade, James F. A Hopf bifurcation in single-loop positive-feedback systems. (84c:58062)
- Seredovich, G. I. See Kryukov, B. I. (84c:70031)
- Shi, Xi Fu (with Huang, Qi Chang) On the limit cycles of the system $\dot{x} = h(y) - F(x)$, $\dot{y} = -g(x)$. (Chinese. English summary) (84c:34040)
- Shirao, Yoshiaki (with Kido, Masao; Nagahara, Toshikuni; Kaji, Nobuyuki) A study of branching phenomena in the nonautonomous piecewise linear dissipative systems with unsymmetrical restoring force in the case of the external force with a sum of several harmonics. (84c:34050)
- Shvets, A. Yu. The effect of time lag on oscillatory-rotary motions of a double pendulum. (Russian) (84c:70034)
- Silberg, P. A. The effect of damping on some nonlinear oscillators. (Italian and Russian summaries) (84c:70033)
- Skierczyński, Bogusław The use of sensitivity analysis methods in studying mechanical systems described by linear and nonlinear Mathieu equations. (Polish. English and Russian summaries) (84c:70035)
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- Dong, Zhen Xi On the existence of periodic solutions of dynamical systems on orientable 2-manifolds. (Chinese. English summary) (84g:58091)
- Dupuis, Benoit Approximation-solvability of nonlinear equations with noninvertible linear part. (84j:47101)
- Egli, W. See Keller, Jakob J., (84b:76086)
- Ekeland, Ivar Oscillations de systèmes hamiltoniens non linéaires. III. (English summary) [Oscillations of nonlinear Hamiltonian systems. III] (84m:58112)
- Elfmov, V. S. On the construction of periodic solutions of Hamiltonian systems. (Russian) (84c:70019)
- El-Nahhas, A. See Sobehi, M., (84i:34064)
- Evteev, V. P. A class of periodic solutions in the averaged elliptic three-body problem. (Russian. Tajiki summary) (84i:70013)
- Faure, Robert Percussions en mécanique non linéaire: sur certaines solutions périodiques de phénomènes non linéaires excités par des percussions. (English summary) [Percussion in nonlinear mechanics: some periodic solutions of nonlinear phenomena excited by percussion] (84i:70030)
- Fincham, W. F. (with Nikias, C. L.) Further periodic solutions of the van der Pol equations and its application to waveform generation. (84c:70018)
- FitzHugh, Richard Nonlinear sinusoidal currents in the Hodgkin-Huxley model. (84j:92021b)
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- Furumochi, Tetsuo Periodic solutions of periodic functional-differential equations. (84a:34087)
- Gambaudo, Jean-Marc Perturbation de "l'application temps τ " d'un champ de vecteurs intégrable de \mathbb{R}^2 . (English summary) [Perturbation of the "time τ map" of an integrable vector field of \mathbb{R}^2] (84i:58190)
- Garay, B. M. On controllably periodic perturbations of autonomous functional-differential equations. (84b:34109)
- Garde, R. M. (with Shrivastava, M. K.) Resonance classification of the differential equation $\ddot{y} + C(1 - y^2)\dot{y} + (w^2 - G \cos \mu t) = f \cos \nu t$. (84g:34064)
- Girardi, M. (with Matzeu, Michele) Some results on solutions of minimal period to superquadratic Hamiltonian systems. (84g:58092)
- Goldberg, Wallace (with Hochstadt, Harry) On a periodic boundary value problem with only a finite number of simple eigenvalues. (84b:34050)
- Gol'dman, P. S. (with Nagaev, R. F.) Degenerate periodic motions in the case of a generating set of quasiperiodic solutions. (84j:58104)
- Gopalsamy, K. Limit cycles in periodically perturbed population systems. (84a:92049)
- Gripenberg, Gustaf Stability of periodic solutions of some integral equations. (84b:34102)
- Grossman, Zvi See Cooke, Kenneth L., (84b:34107)
- Groves, Frank R., Jr. Numerical solution of nonlinear differential equations using computer algebra. (84i:65074)
- Gumowski, I. (with Thibault, Roger) Dynamic systems with a singular parametric resonance. (84b:58133)
- Haddad, Georges (with Lasry, Jean-Michel) Periodic solutions of functional-differential inclusions and fixed points of α -selectionable correspondences. (84m:34015)
- Hader, K. P. On copositive matrices. (84i:15021)
- Hassan, H. S. (with Lloyd, N. G.) On the structure of the set of solutions of certain holomorphic two-point boundary value problems. (84c:34006)
- Hénon, Michel Numerical exploration of Hamiltonian systems. (84c:58074)
- Hochstadt, Harry See Goldberg, Wallace, (84b:34050)
- Hofer, Helmut A new proof for a result of Ekeland and Lasry concerning the number of periodic Hamiltonian trajectories on a prescribed energy surface. (Italian summary) (84g:58044)
- Howland, Robert A., Jr. A quadratic transformation technique for the solution of nonlinear systems. (84b:34061)
- Iooss, Gérard (with Joseph, Daniel D.) The behaviour of solutions lying on an invariant 2-torus arising from the bifurcation of a periodic solution. (84b:58165)
- Ito, Hidekazu On the existence of long periodic orbits near the Liapunov's periodic family in general resonance cases. (84b:58096)
- Johnson, Russell A. An almost periodic linear equation with an unusual property. (Italian. English summary) (84b:34069)
- Joseph, Daniel D. See Iooss, Gérard, (84b:58165)
- Juricic, Henri Loi asymptotique des coefficients de Fourier des solutions périodiques des équations du type $d^2Z/dz^2 + Z^3 = p(z)$. [Asymptotic law of Fourier coefficients of the periodic solutions of equations of type $d^2Z/dz^2 + Z^3 = p(z)$] (84d:34060)
- Kano, Hiroyuki (with Nishimura, Toshimitsu) Periodic solutions of discrete matrix Riccati equations with constant coefficient matrices. (84i:93089)
- Kaplan, Harvey New method for calculating stable and unstable periodic orbits of one-dimensional maps. (84b:58167)
- Karr, Bruno (with Schmitt, Bruno V.) Une méthode numérique dans le domaine de la stabilité et des bifurcations pour un système différentiel périodique avec symétries. (English summary) [A numerical method in the domain of stability and bifurcations for a periodic differential system with symmetries] (84c:34023)
- Kashchenko, S. A. Investigation of a system of nonlinear differential-difference equations modeling the predator-prey problem by the large parameter method. (Russian) (84i:34100)
- Kawakami, Hiroshi (with Kobayashi, Kunihiro) Computation of periodic solutions for polynomial nonlinear equations. (84b:65081)

- Keener, James P. Oscillatory coexistence in the chemostat: a codimension two unfolding. (84c:92016)
- Keller, Jakob J. (with Egli, W.) Evolution scheme to compute periodic solutions of first-order nonlinear equations containing translation operators. (German summary) (84c:76006)
- Khatskevich, V. L. See Zadorozhnyi, V. G.; et al., (84d:65060)
- Kido, Masao See Shirao, Yoshiaki; et al., (84b:58082)
- Kilič, Alois Period doubling bifurcations in a two-box model of the Brusselator. (Russian and Czech summaries) (84c:92017)
- Knežević, Julka Asymptotically bounded solutions of some differential equations. (Serbo-Croatian. Russian summary) (84c:34054)
- Kobayashi, Kunihiro See Kawakami, Hiroshi, (84b:65081)
- Kodama, Shinzo See Maeda, Hajime; et al., (84g:92014)
- Konishi, Tomohisa See Maeda, Hajime; et al., (84g:92014)
- Konyakov, Yu. A. Application of the regularization method to the solution of some problems with a polynomial singularity. (Russian) (84c:34068)
- Asymptotic expansion of periodic solutions of systems of ordinary differential equations with purely imaginary spectrum of the limit operator. (Russian) (84b:34080)
- Kozlov, V. V. Averaging in the neighborhood of stable periodic motions. (Russian) (84d:70032)
- Kummer, Martin On the existence of invariant analytic two-manifolds in a resonant system with two degrees of freedom. (84j:58105)
- Lasry, Jean-Michel See Haddad, Georges, (84c:34015)
- Lin, Zhen Sheng The Floquet theory for quasiperiodic linear systems. (84b:34013)
- Lloyd, N. G. See Hassan, H. S., (84c:34006)
- Lukashovich, N. A. See Amel'kin, V. V.; et al., (84c:34037)
- Luk'yanov, V. I. Bifurcations of dynamical systems with "saddle-node" separatrix loops. (Russian) (84c:58068)
- Maeda, Hajime (with Kodama, Shinzo; Konishi, Tomohisa) Stability theory and existence of periodic solutions of time delayed compartmental systems. (84g:92014)
- Magnat, Pierre Numerical study of periodic orbit properties in a dynamical system with three degrees of freedom. (84c:58128)
- Magomedov, A. R. Stability of periodic solutions of differential equations with maxima. (Russian) (84m:34106)
- Mallet-Paret, John (with Yorke, James A.) Snakes: oriented families of periodic orbits, their sources, sinks, and continuation. (84c:58071a)
- Markeev, A. P. (with Chekhovskaya, T. N.) On the periodic resonant solutions of the Hamiltonian systems generating from the position of equilibrium. (84c:70017)
- Matsuoka, Takashi The number and linking of periodic solutions of periodic systems. (84c:58093)
- Matzeu, Michele See Girardi, M., (84g:58092)
- Mauro, A. See DeFelice, L. J.; et al., (84j:92021c)
- Mawhin, Jean (with Willem, Michel) Periodic solutions of nonlinear differential equations in Hilbert spaces. (84c:34091)
- (with Ward, James R., Jr.) Nonuniform nonresonance conditions at the two first eigenvalues for periodic solutions of forced Liénard and Duffing equations. (84c:34028)
- Mickens, Ronald E. A regular perturbation technique for nonlinearly coupled oscillators in resonance. (84b:34084)
- Molloy, K. G. Construction of periodic solutions of second-order quasilinear differential equations with retarded argument by the iteration method and estimation of their domain of convergence. (Bulgarian. English and Russian summaries) (84b:34103)
- Moritani, Takao See Shirao, Yoshiaki; et al., (84b:58082)
- de Mottoni, P. (with Schiaffino, A.) Bifurcation of periodic solutions of periodic evolution equations in a cone. (84c:34099)
- Muracchini, Augusto On the existence of periodic oscillations in certain nonlinear systems with two degrees of freedom. (Italian. English summary) (84b:34047)
- Nagae, R. F. See Gof'dman, P. S., (84j:58104)
- Nikias, C. L. See Fincham, W. F., (84c:70018)
- Nishimura, Toshimitsu See Kano, Hiroyuki, (84d:93089)
- Nozdracheva, V. P. Bifurcations of a structurally unstable separatrix loop. (Russian) (84c:58090)
- Nussbaum, Roger D. (with Potter, Anthony J. B.) Cyclic differential equations and period three solutions of differential-delay equations. (84b:34105)
- Asymptotic analysis of functional-differential equations and solutions of long period. (84c:34107)
- Ôtsuki, Tominosuke A certain property of geodesics of the family of Riemannian manifolds O_2^4 . IV. (84f:58035a)
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- Papastavridis, J. G. Complementary variational principles and their application to rheo-linear and rheo-nonlinear vibrations. (84j:70027)
- Parhi, N. Periodic solutions of neutral functional-differential equations containing a small parameter. (84j:34084)
- Pera, Maria Patrizia See Amaral, Luis, (84c:58063)
- Perov, A. I. See Zadorozhnyi, V. G.; et al., (84d:65060)
- Potter, Anthony J. B. See Nussbaum, Roger D., (84b:34105)
- Presler, W. H. (with Broucke, R.) Computerized formal solutions of dynamical systems with two degrees of freedom and an application to the Contopoulos potential. I. The exact resonance case. (84b:34082a)
- (with Broucke, R.) Computerized formal solutions of dynamical systems with two degrees of freedom and an application to the Contopoulos potential. II. The near-resonance case. (84b:34082b)
- Ren, Yong Tai See Suo, Guang Jian, (84c:34032)
- Rimmer, Russell J. Generic bifurcations for involutory area preserving maps. (84c:58053)
- Sadovskii, A. P. See Amel'kin, V. V.; et al., (84c:34037)
- Salvadort, Luigi Generalized Hopf bifurcation and related stability problems. (84c:58054)
- Sánchez, David A. Periodic environments, harvesting, and a Riccati equation. (See 84c:00009)
- Saupe, Dietmar Characterization of periodic solutions of special differential delay equations. (84m:34102)
- Schiaffino, A. See Badli, M., (84b:92038) and de Mottoni, P., (84c:34099)
- Schmitt, Bruno V. See Karr, Bruno, (84c:34023)
- Schröpel, H. D. Bemerkungen zum nichtlinearen Hauptschwingungsbegriff. [Remarks on the notion of nonlinear principal oscillations] (84b:70026)
- Selgrade, James F. A Hopf bifurcation in single-loop positive-feedback systems. (84c:58062)
- Sergeev, V. S. Construction of periodic solutions of the Euler-Poisson equations in certain cases. (Russian) (84f:70011)
- Seydel, Rüdiger Numerical computation of periodic orbits that bifurcate from stationary solutions of ordinary differential equations. (84g:65113)
- Shayman, Mark A. On the periodic solutions of the matrix Riccati equation. (84d:49005)
- Shirao, Yoshiaki (with Kido, Masao; Moritani, Takao) A study of branching phenomena in the nonautonomous piecewise linear systems with asymmetrical restoring force. (84b:58082)
- Shrivastava, M. K. Resonance classification in a cubic system with self-oscillation. (84g:34065)
- See also Garde, R. M., (84g:34064)
- Sinay, L. R. Stability boundaries in the elliptic restricted three-body problem. II. Quasiperiodic solutions. (Portuguese summary) (84b:70014)
- Sobeit, M. (with El-Nabhas, A.) A study on the stability of a nonlinear n th order differential equation in both autonomous and nonautonomous cases. (84c:34064)
- Sparing, László Numerical investigation of the perturbed van der Pol equation. (Hungarian. English summary) (84c:34031)
- Străduţaru, Ivan Existence and uniqueness of periodic solutions of linear differential equations in Banach spaces. (84g:34105)
- Suo, Guang Jian (with Ren, Yong Tai) The separatrix closed trajectory and the polygonal closed trajectory of the system $\dot{y} = x, \dot{x} = -y + ax + lx^2 + mxy + my^2$. (Chinese. English summary) (84c:34032)
- Tezin, A. M. A mixed system of coordinates and cycles of differential equations. (Russian) (84c:34025)
- Thibault, Roger See Gumowski, I., (84c:58133)
- Thoulouze-Pratt, Elaine Existence theorem of an invariant torus of solutions to a periodic differential system. (84c:34060)
- Thurston, G. A. Implicit numerical integration for periodic solutions of autonomous nonlinear systems. (84c:73068)
- Tran Van Nhung Stability of periodic solutions of ordinary differential equations with random parameters. (84f:34081)
- Tsukazani, T. See Claessens, J. R.; et al., (84d:65052)
- Uezu, Tatsuya (with Aizawa, Yōji) Topological character of a periodic solution in three-dimensional ordinary differential equation system. (84c:58099)
- Ulyanova, E. L. Superlinear convergence of the variable metric method in a Hilbert space. (Russian) (84m:47021)
- Ushiki, Shigehiro Central difference scheme and chaos. (84c:58064)
- Vanderbauwhede, André Bifurcation near multiparameter families of solutions. (84b:58034)
- Hopf bifurcation for abstract nonlinear equations. (84b:58035)
- Venkatesulu, M. See Das, P. C., (84b:34096)
- Walther, Hans-Otto Bifurcation from periodic solutions in functional-differential equations. (84c:34078)
- Ward, James R., Jr. See Mawhin, Jean, (84c:34028)
- Willem, Michel Solutions périodiques d'équations différentielles dans des espaces de Banach. [Periodic solutions of differential equations in Banach spaces] (84c:34093)
- See also Mawhin, Jean, (84c:34091)
- Yorke, James A. See Mallet-Paret, John, (84c:58071a)
- Zadorozhnyi, V. G. (with Perov, A. I.; Khatskevich, V. L.) Galerkin's method for finding periodic solutions of linear differential equations. (Russian) (84d:65060)
- Zaslavskii, B. G. Size dynamics of controlled populations. (84c:92074)
- Zeiman, A. I. On the approximate construction of asymptotically stable periodic solutions. (Russian) (84c:65066)
- Zennaro, M. See Bellen, A., (84m:34100)
- Zharov, M. I. Universal constants in the theory of relaxation vibrations. (Russian) (84c:34071)

34C27 Almost-periodic solutions

- Bibikov, Yu. N. Quasiperiodic solutions of two-dimensional periodic systems of differential equations of neutral type depending on a small parameter. (Russian) 84j:34038
- Blinov, I. N. The effect of nonexistence of almost periodic solutions of a nonlinear differential equation with quasiperiodic coefficients. (Russian) 84d:34038
- Davis, Stephen H. See Steen, Paul H., 84c:34055
- Hanebaly, Elaidi Solutions presque périodiques d'équations différentielles monotones. (English summary) [Almost periodic solutions of monotonic differential equations] 84g:34079
- He, Chong You Global asymptotic stability and existence and uniqueness of almost periodic solutions. (Chinese) 84c:34052
- Johnson, Russell A. On almost-periodic linear differential systems of Millionshchikov and Vinograd. 84b:34068
- An almost periodic linear equation with an unusual property. (Italian. English summary) 84c:34069
- Kochubei, A. N. Almost periodic solutions of operator-differential equations. (Russian) 84g:34080
- Kurzweil, Jaroslav (with Vencovská, A.) On linear differential equations with almost periodic coefficients and the property that the unit sphere is invariant. (See 84j:00010)
- Risito, Corrado Existence theorems for almost periodic solutions of periodic systems. (See 84c:34003)
- Sartabanov, Zh. The existence and construction of a pseudoperiodic solution of a weakly perturbed nonlinear differential equation. (Russian) 84c:34064

- Seifert, George On uniformly almost periodic sets of functions for almost periodic differential equations. **84c:34053**
 Steen, Paul H. (with Davis, Stephen H.) Quasiperiodic bifurcation in nonlinearly-coupled oscillators near a point of strong resonance. **84c:34055**
 Vencovská, A. See Kurzweil, Jaroslav. (See **84j:00010**)

secondary classifications:

- Aftabizadeh, A. R. Bounded solutions for some gradient type systems. **(84a:34035)**
 Basit, Bolis Spectral characterization of abstract functions. **(84g:43010)**
 Levitan, B. M. (with Zhikov, V. V.) ★Almost periodic functions and differential equations. **(84g:34004)**
 (London, L. W.) See Levitan, B. M.; et al., **(84g:34004)**
 Marchi, Silvana Necessary conditions for equi-asymptotically-almost periodicity. (Italian) **(84i:42016)**
 Pankov, A. A. Solutions bounded and almost periodic with respect to time of a class of nonlinear evolution equations. (Russian) **(84c:34081)**
 Perov, A. I. (with Ta Kuang Khai; Tyurin, V. M.) Almost periodic solutions of linear differential equations. (Russian) **(84f:34084)**
 Simirad, Constantin Oscillations de certains systèmes différentiels impliqués par l'existence des solutions bornées. II. [Oscillations of certain differential systems implied by the existence of bounded solutions. II] **(84b:34053)**
 Silyusarchuk, V. E. The invertibility of almost periodic ϵ -continuous functional operators. (Russian) **(84c:34091)**
 Bounded solutions of impulse systems. (Russian) **(84f:93031)**
 Ta Kuang Khai See Perov, A. I.; et al., **(84f:34084)**
 Tyurin, V. M. See Perov, A. I.; et al., **(84f:34084)**
 Yamaguchi, Masaru Almost periodic solutions of some wave equations with Dirichlet boundary values. **(84m:34087)**
 Zhikov, V. V. See Levitan, B. M., **(84g:34004)**

34C28 Other types of "recurrent" solutions

- Djaja, Časlav Einige Eigenschaften der quasi-rekurrenten und quasi-fastperiodischen Bewegungen. [Some properties of quasirecurrent and quasi-almost-periodic motions] **84m:34055**
 Golubev, V. K. Quasiperiodic motions of systems in the case of a multiple eigenvalue of a matrix of linear approximation. (Russian) **84m:34056**
 Parasyuk, I. O. Conservation of quasiperiodic motions of reversible multifrequency systems. (Russian. English summary) **84c:34055**

secondary classifications:

- Arnéodo, A. (with Coulet, P. H.; Peyraud, J.; Tresser, Charles) Strange attractors in Volterra equations for species in competition. **(84i:92052)**
 Brorson, Stuart D. (with Dewey, Daniel; Lindsay, Paul S.) Self-replicating attractor of a driven semiconductor oscillator. **(84f:58108)**
 Cheung, Y. K. See Lau, S. L.; et al., **(84m:73050)**
 Coulet, P. H. See Arnéodo, A.; et al., **(84i:58108)**
 Davis, Stephen H. See Steen, Paul H., **(84c:34055)**
 Dewey, Daniel See Brorson, Stuart D.; et al., **(84f:58108)**
 Kirchgässner, Klaus (with Scheurle, Jürgen) Bifurcation from the continuous spectrum and singular solutions. **(84c:58053)**
 Lau, S. L. (with Cheung, Y. K.; Wu, S. Y.) Incremental harmonic balance method with multiple time scales for aperiodic vibration of nonlinear systems. **(84m:73050)**
 Lin, Zhen Sheng The Floquet theory for quasiperiodic linear systems. **(84b:34013)**
 Lindsay, Paul S. See Brorson, Stuart D.; et al., **(84f:58108)**
 Peyraud, J. See Arnéodo, A.; et al., **(84i:58108)**
 Sano, Osamu An analytic solution of the Lorenz model. **(84j:58108)**
 Sartbanov, Zh. The existence and construction of a pseudoperiodic solution of a weakly perturbed nonlinear differential equation. (Russian) **(84c:34064)**
 Scheurle, Jürgen See Kirchgässner, Klaus, **(84c:58053)**
 Steen, Paul H. (with Davis, Stephen H.) Quasiperiodic bifurcation in nonlinearly-coupled oscillators near a point of strong resonance. **(84c:34055)**
 Tresser, Charles See Arnéodo, A.; et al., **(84i:58108)**
 Wu, S. Y. See Lau, S. L.; et al., **(84m:73050)**

34C29 Averaging method [See also 47H10.]

- Akulenko, L. D. Applications of the methods of averaging and successive approximations for studying nonlinear oscillations. **84m:34057**
 Alifov, A. A. Self-oscillatory system with an energy source, under periodic and nonperiodic perturbations. **84c:34056**
 Bainov, D. D. (with Milusheva, S. D.) Justification of an averaging method for systems of differential equations with fast and slow variables and impulses. **84c:34065**
 Balbi, J.-H. Systèmes quasi-périodiques. Méthode de la moyenne résonante. [Quasiperiodic systems. The resonant averaging method] (See **84a:34003**)
 Averaging and reduction. (German summary) **84c:34066**
 Chan Kim Ti See Nguyễn Văn Đạo, **84a:34042**
 Elmaggar, A. M. (with Hamd-Allah, G. M.) Analytical studies for even subharmonic synchronization of a weakly nonlinear conservative physical system. **84c:34067**
 Gilbert, A. D. A geometric approach to two-timing. **84j:34039**
 Gilman, T. S. Construction of a sequence of approximations by the averaging method in the study of nonlinear systems. **84c:34068**
 Golets, B. I. (with Golets, V. L.; Petrishin, R. I.) Averaging in oscillatory systems with variable frequencies. (Russian) (See **84c:34002**)
 Golets, V. L. See Golets, B. I.; et al., **(See 84c:34002)**
 Gubin, Yu. P. The regularization method and solvability in the large of truncated equations of the averaging method. (Russian) **84c:34070**
 Hamd-Allah, G. M. See Elmaggar, A. M., **84c:34067**

- Khoma, G. P. Some questions of the justification of the asymptotic method of N. M. Krylov-N. N. Bogolyubov. (Russian) **84b:34056**
 Investigation of systems of van der Pol equations in the resonance case. (Russian) **84c:34039**

- Kolomiets, V. G. (with Tsikalo, T.-N. M.) The averaging method in essentially nonlinear stochastic systems. (Russian) **84c:34041**
 Milusheva, S. D. See Bainov, D. D., **84c:34065**
 Murdock, James A. Some asymptotic estimates for higher order averaging and a comparison with iterated averaging. **84g:34081**
 Nguyễn Văn Đạo (with Chan Kim Ti) Asymptotic method of investigation of quasilinear oscillations of higher-order dynamical systems. (Russian. English summary) **84a:34042**
 Nosirov, F. U. Averaging in some gyroscopic systems with lag. (Russian) **84c:34057**
 Petrishin, R. I. See Golets, B. I.; et al., **(See 84c:34002)**
 Robinson, Clark Second-order averaging of forced and coupled nonlinear oscillators. **84j:34040**
 Sanders, Jan A. Melnikov's method and averaging. **84c:34069**
 On the fundamental theorem of averaging. **84c:34058**
 Tsikalo, T.-N. M. See Kolomiets, V. G., **84c:34041**
 Zabreiko, P. P. General ordinary differential equations and the problem of prolongation of their bounded solutions. **84f:34064**

secondary classifications:

- Anand, K. K. On relaxation oscillations governed by a second order differential equation for a large parameter and with a piecewise linear function. **(84c:34052)**
 Aslanyan, A. A. Averaging of equations of motion in problems of control of systems of differential equations with impulse action. (Russian) **(84a:49053)**
 Bainov, D. D. (with Milusheva, S. D.) Application of the partially-multiplicative averaging for a class of functional-differential equations with impulses. **(84c:34086)**
 (with Milusheva, S. D.) Application of the averaging method for functional-differential equations with impulses. **(84m:34108)**
 See also Milusheva, S. D., **(84b:34102)** and **(84c:34077)**
 Getmantseva, T. I. Averaging in Volterra integral equations with fast and slow time. (Russian) **(84b:45005)**
 Gul'ka, S. S. Justification of the averaging method for systems of integro-differential equations with impulse action. (Russian) **(84c:45006)**
 Gzyl, Henryk On an abstract averaging theorem. (Spanish summary) **(84c:34085)**
 Khristova, S. G. (with Makrelou, I. V.) Justification of the averaging method for solving a boundary value problem for a class of infinite systems of integro-differential equations of Volterra type. (Bulgarian. English and Russian summaries) **(84f:45013)**
 Kirchgraber, U. A numerical scheme for problems in nonlinear oscillations. **(84d:65062)**
 Kolpakov, A. G. Averaging of certain systems of ordinary differential equations. (Russian) **(84d:34014)**
 Makrelou, I. V. See Khristova, S. G., **(84f:45013)**
 Milusheva, S. D. (with Bainov, D. D.) Justification of the averaging method for a class of functional-differential equations with impulses. **(84b:34102)**
 (with Bainov, D. D.) Justification of partially-multiplicative averaging for a class of functional-differential equations with impulses. **(84c:34077)**
 See also Bainov, D. D., **(84c:34086)** and **(84m:34108)**
 Mitropol'skii, Yu. A. Integral manifolds in the theory of differential equations. **(84c:34070)**
 Asymptotic methods in nonlinear mechanics. V. Adiabatic invariants. VI. The effect of periodic forces on nonlinear systems with slowly changing parameters. VII. A method of averaging. (Russian) **(84b:70029)**
 (with Skripnik, A. I.) The problem of constructing asymptotic solutions in nonlinear mechanics. (Russian. English summary) **(84b:70030)**
 Nayfeh, Ali Hasan Parametrically excited multidegree-of-freedom systems with repeated frequencies. **(84i:70026)**
 The response of two-degree-of-freedom systems with quadratic nonlinearities to a parametric excitation. **(84i:70029)**
 Normuratov, Kh. Averaging of integro-differential equations using Lie series. (Russian) **(84m:45023)**
 Nosirov, F. U. The effect of lag on gyroscopic systems with slowly changing parameters. (Russian) **(84j:70040)**
 Skripnik, A. I. See Mitropol'skii, Yu. A., **(84b:70030)**
 Vasilev, A. B. The continuous parameter dependence of solutions of differential inclusions. (Russian) **(84c:34026)**

34C30 Manifolds of solutions

- Aulbach, Bernd Invariant manifolds with asymptotic phase. **84d:34040**
 Baris, Ya. S. (with Lykova, O. B.) On the question of the existence of integral manifolds. (Russian) **84d:34041**
 Kurbanshoev, S. Z. Construction of integral manifolds by the small parameter method. (Russian. Tajiki summary) **84j:34041**
 Construction of integral manifolds of systems of differential equations containing a small parameter. (Russian) **84c:34059**
 Lykova, O. B. See Baris, Ya. S., **84d:34041**
 Mitropol'skii, Yu. A. Integral manifolds in the theory of differential equations. **84c:34070**
 Palamides, P. K. Kneser's type properties at the extreme points. (See **84c:34002**)
 Tleubergenov, M. I. On the question of stability of an integral manifold. (Russian. Kazakh summary) **84f:34065**
 Yatsyuk, V. T. Toroidal integral manifolds of systems of differential equations with quasiperiodic coefficients. (Russian) **84m:34058**

secondary classifications:

- Akhurina, R. Yu. (with Svistunov, P. P.) Algebraic cycles of a three-dimensional system. (Russian) **(84d:34021)**
 Aulbach, Bernd A reduction principle for nonautonomous differential equations. **(84d:34033)**

Barbu, Viorel Invariant manifolds for Hamiltonian systems in Hilbert spaces. (84c:58070)

Camacho, M. Isabel T. A criterion for the classification of homogeneous polynomial vector fields of degree 2 in \mathbb{R}^3 . (84c:58052)

Cherevko, I. M. See Fodchuk, V. I. (84c:34098)

Chua, Leon O. See Odyniec, Michael. (84c:94055)

Fodchuk, V. I. (with Cherevko, I. M.) Integral manifolds for singularly perturbed functional-differential equations. (Russian) (84c:34098)

Fridman, E. M. See Strygin, V. V. (84m:34105)

Gonchenko, S. V. Stable periodic motions in systems that are close to systems with a structurally unstable homoclinic curve. (Russian) (84c:34057)

Ilyashenko, Yu. S. (with Pyartli, A. S.) Materialization of Poincaré resonances and divergence of normalizing series. (Russian. English summary) (84b:58079)

Johnson, Russell A. On almost-periodic linear differential systems of Millionshchikov and Vinograd. (84b:34068)

Kasatkin, G. V. Extremal properties of stable resonance motions. (84c:70020)

Khariamov, M. P. On the investigation of regions of possible motion in mechanical systems. (Russian) (84d:58027)

Lerman, L. M. The structure of a quasiperiodic Riccati equation. (Russian) (84m:34046)

Misak, V. V. Stability of oscillations of nonlinear systems. (Russian) (84j:70034)

Myrzaliev, Dz. Conditionally periodic solutions of a system of differential equations. (Russian) (84c:34060)

Odyniec, Michael (with Chua, Leon O.) Josephson-junction circuit analysis via integral manifolds. (84c:94055)

Pyartli, A. S. See Ilyashenko, Yu. S. (84b:58079)

Sanders, Jan A. Melnikov's method and averaging. (84c:34069)

Strygin, V. V. (with Fridman, E. M.) On the question of the asymptotic representation of an integral manifold for systems of differential equations with retarded argument. (Russian) (84m:34105)

Svistunov, P. P. See Akchurina, R. Yu. (84d:34021)

Tokarev, S. P. Analytic equivalence of systems of differential equations in the neighborhood of an exponentially stable invariant torus. (Russian) (84c:34044)

34C35 Dynamical systems [See also 54H20, 58Fxx, 70--XX.]

Clarke, Frank H. A classical variational principle for periodic Hamiltonian trajectories. (84c:34071)

Fokin, M. V. Limit sets of trajectories of dynamical systems of gradient type. (Russian) (84c:34043)

al-Khaider, Kasim Mukhamed Isochrony of second-order Hamiltonian differential systems with polynomials of the third degree. (Russian) (84c:34054)

Knight, Ronald A. A correction to: "Recurrent and Poisson stable flows" [Proc. Amer. Math. Soc. 83 (1981), no. 1, 49-53; MR 82i:34047]. (84c:34056)

Kuz'min, A. G. Indexes of singular and nonregular points of direction fields on the plane. (Russian. English summary) (84c:34044)

Okuda, Masami A phase-plane analysis of stability in transient states. (84c:34082)

Reinfelds, Andrejs Dynamic equivalence near a conditionally stable invariant manifold. (Russian) (84c:34055)

Samoilenko, A. M. Separatrix manifolds and splittability of a linear extension of a dynamical system on a torus. (Russian) (84d:34042)

Takens, Floris Motion under the influence of a strong constraining force. (See 84b:00011)

Zhautykov, O. A. Dichotomy and asymptotic behaviour of solutions of differential equations. (84j:34042)

secondary classifications:

Airault, Hélène Systèmes hamiltoniens pour les équations 2, 3 et 4 de Painlevé. (English summary) [Hamiltonian systems for the equations 2, 3, 4 of Painlevé] (84j:58059)

Ali, M. K. (with Somorjai, R. L.) Reappearance of ordered motion in nonintegrable Hamiltonian systems. The strong coupling case. (84f:58075)

(Azé, Dominique) See Blot, Joël. (84c:58041)

Banerjee, A. K. See Kane, T. R. (84c:70018)

(Bef'skii, A. A.) See Tamura, Itiro. (84c:57028b)

Blot, Joël ★Systèmes hamiltoniens: leurs solutions périodiques. (French) [Hamiltonian systems: their periodic solutions] (84c:58041)

Bondi, Paola (with Fergola, P.; Gambardella, Lucia; Tenneriello, C.) Partial asymptotic stability via limiting equations. (84f:34071)

Bountis, Tassos C. (with Segur, Harvey) Logarithmic singularities and chaotic behavior in Hamiltonian systems. (84i:58080)

Bryuno, A. D. Noncanonical invariants of Hamiltonian systems. (Russian) (84i:58042)

Capodanno, P. See Xiang, Mei Feng. (84m:70045)

Castro, Abel Perturbation of a two-dimensional system with unstable limit cycle. (Spanish. English summary) (84b:58132)

Coleman, Courtney S. (with Frauenthal, James C.) Satiabie egg-eating predators. (84c:92039)

Doedel, Eusebius J. AUTO: a program for the automatic bifurcation analysis of autonomous systems. (84b:58001)

Dong, Zhen Xi On the existence of periodic solutions of dynamical systems on orientable 2-manifolds. (Chinese. English summary) (84g:58091)

Ehlers, Fritz (with Knörrer, Horst) An algebraic-geometric interpretation of the Bäcklund-transformation for the Korteweg-de Vries equation. (84b:14022)

Elizarov, P. M. (with Ilyashenko, Yu. S.) Remarks on orbital analytic classification of germs of vector fields. (Russian) (84i:58084)

Éshmuradov, K. É. See Shirov, I. I. (84d:58050)

Fedorenko, V. V. (with Sharkovskii, A. N.) Stability of a dynamic system's property of having a homoclinic trajectory. (Russian) (84c:58123)

Fergola, P. See Bondi, Paola; et al. (84f:34071)

Flockerzi, D. See Knobloch, H. W. (84c:58087)

Frauenthal, James C. See Coleman, Courtney S. (84c:92039)

Gaines, Robert E. Existence of solutions to Hamiltonian dynamical systems of economic growth with Marxian savings hypothesis. (See 84c:34003)

Gambardella, Lucia See Bondi, Paola; et al. (84f:34071)

Gambaudo, Jean-Marc (with Tresser, Charles) Some difficulties generated by small sinks in the numerical study of dynamical systems: two examples. (84i:58074)

Girardi, M. (with Matzeu, Michele) Some results on solutions of minimal period to superquadratic Hamiltonian systems. (84g:58092)

Godbillon, Claude ★Dynamical systems on surfaces. (84b:57018)

Gumowski, I. (with Thibault, Roger) Dynamic systems with a singular parametric resonance. (84b:58133)

(Helfenstein, H. G.) See Godbillon, Claude. (84b:57018)

Heller, M. See Szydłowski, M. (84c:83040)

Hénon, Michel Numerical exploration of Hamiltonian systems. (84c:58074)

Hinton, D. B. (with Shaw, J. K.) Parameterization of the $M(\lambda)$ function for a Hamiltonian system of limit circle type. (84c:34022)

Hirsch, Morris W. Differential equations and convergence almost everywhere in strongly monotone semiflows. (84b:34095)

Ilyashenko, Yu. S. The dimension of attractors of k -contracting systems in an infinite-dimensional space. (Russian. English summary) (84m:58060)

See also Elizarov, P. M. (84i:58084)

Kane, T. R. (with Banerjee, A. K.) A conservation theorem for simple nonholonomic systems. (84i:70018)

Khariamov, M. P. On the investigation of regions of possible motion in mechanical systems. (Russian) (84d:58027)

Khentov, A. A. Dynamics of formation of the resonance rotations of natural celestial bodies. (84f:70020)

Knobloch, H. W. (with Flockerzi, D.) Invariante Mannigfaltigkeiten, Stabilität und Verzweigung bei gewöhnlichen Differentialgleichungen. [Invariant manifolds, stability and bifurcation in ordinary differential equations] (84i:58087)

Knörrer, Horst See Ehlers, Fritz. (84b:14022)

Kobussen, J. A. On symmetries and first integrals. (84b:58096)

Konosevich, B. I. Solvability of a multipoint problem. (Russian) (84b:34035)

Leipholtz, H. H. E. Stability of dynamic systems. (84m:70033)

Lipsey, Zsolt On the synthesis of families of locally given dynamical systems. (84c:90120)

Libre, Jaume On the restricted three-body problem when the mass parameter is small. (84d:70008)

Losco, Lucette Un exemple de système non holonome à liaison de Tchetayev: les systèmes lagrangiens de contact. (English summary) [An example of nonholonomic system with a constraint of a the Chetaev type: the contact Lagrangian system] (84b:70024)

(Manning, Anthony) See Palis, Jacob, Jr.; et al. (84c:58004)

Matzeu, Michele See Girardi, M. (84g:58092)

de Melo, Wellington See Palis, Jacob, Jr. (84c:58004)

Mira, Christian Sur quelques problèmes de dynamique complexe. [On some problems of complex dynamics] (84c:58061)

van Moerbeke, Pierre The complete integrability of Hamiltonian systems. (84c:58110)

Palis, Jacob, Jr. (with de Melo, Wellington) ★Geometric theory of dynamical systems. (84c:58004)

Percival, Ian C. (with Richards, Derek) ★Introduction to dynamics. (84c:70001)

Richards, Derek See Percival, Ian C. (84c:70001)

Saperstone, Stephen H. ★Semidynamical systems in infinite-dimensional spaces. (84m:58024)

Segur, Harvey See Bountis, Tassos C. (84i:58080)

Sergysels, R. Réduction d'un système canonique à un système intégrable. [Reduction of a canonical system to an integrable system] (84j:58051)

Sharkovskii, A. N. See Fedorenko, V. V. (84c:58123)

Shaw, J. K. See Hinton, D. B. (84c:34022)

Shestakov, A. A. Theory and applications of the generalized Lyapunov direct method for abstract dynamical systems (a survey of the current state of the geometric direction in Lyapunov's direct method). (Russian) (84g:58065)

Shirov, I. I. (with Éshmuradov, K. É.) Cells of three-dimensional dynamical systems satisfying Smale's hypothesis. (Russian) (84d:58050)

Skyrabin, B. N. Complete investigation of the phase space of a three-dimensional piecewise-linear dynamical system. (Russian) (84m:70029)

Somorjai, R. L. See Ali, M. K. (84f:58075)

Sotomayor, Jorge ★Curvas definidas por equações diferenciais no plano. (Portuguese) [Curves defined for differential equations in the plane] (84m:34004)

Sparrow, Colin ★The Lorenz equations: bifurcations, chaos, and strange attractors. (84b:58072)

Stolyarov, V. V. Separatrices of a dynamical system. (Russian) (84m:58072)

Struble, Raimond A. ★Nonlinear differential equations. [Nonlinear differential equations] (84m:34002)

Szlenk, Wiesław ★Wstęp do teorii gładkich układów dynamicznych. (Polish) [Introduction to the theory of smooth dynamical systems] (84c:58066)

Szydłowski, M. (with Heller, M.) Remark on an application of the Banach metric method to cosmology. (84c:83040)

Tamura, Itiro ★Yōō no toronōji. (Japanese) [Topology of foliations] (84c:57028a)

★Топология слоёв. (Russian) [Topology of foliations] (84c:57028b)

Tenneriello, C. See Bondi, Paola; et al. (84f:34071)

Thibault, Roger See Gumowski, I. (84b:58133)

Tineo, Antonio ★Introducción a los sistemas dinámicos diferenciabiles. (Spanish) [Introduction to differentiable dynamical systems] (84c:58067)

Tresser, Charles See Gambaudo, Jean-Marc. (84i:58074)

Tu, Gui Zhang A simple approach to Hamiltonian structures of soliton equations. I. (Italian and Russian summaries) (84c:58092)

Xiang, Mei Feng (with Capodanno, P.) Sur les équations du mouvement des systèmes non holonomes de masse variable. [On the equations of motion for nonholonomic systems with variable mass] (84m:70045)

34C40 Equations and systems on manifolds [See mainly 58Fxx, 58Gxx.]

- Gonchenko, S. V. Stable periodic motions in systems that are close to systems with a structurally unstable homoclinic curve. (Russian) **84c:34057**
- Thouvenot-Pratt, Elaine Existence theorem of an invariant torus of solutions to a periodic differential system. **84c:34060**
- Yu, Shu Xiang A note on the rotation number of Poincaré. **84j:34043**

secondary classifications:

- (Bef'skii, A. A.) See Tamura, Itiro, (84a:57028b)
- Berestycki, Henri (with Lasry, Jean-Michel; Mancini, Giovanni; Ruf, Bernhard) Sur le nombre d'orbites périodiques des équations d'Hamilton sur une surface d'énergie étoilée. (English summary) [On the number of periodic orbits for Hamilton's equations on a starshaped energy surface] **(84c:58071)**
- Bothe, Hans Günter Generic properties of ordinary differential equations of higher order. **(84c:58055)**
- Cherednik, I. V. Hamiltonian theory of stationary differential equations with an elliptic pencil. (Russian) **(84m:58051)**
- Elders, Fritz (with Knörrer, Horst) An algebro-geometric interpretation of the Backlund-transformation for the Korteweg-de Vries equation. **(84b:14022)**
- Froeschle, C. See Sun, Yi Sui, (84c:58049) and 84c:58049
- Gao, Long Chang See Tian, Jing Huang, (84c:34041)
- Grines, V. Z. (with Zhuzhoma, E. V.) Necessary and sufficient conditions for topological equivalence of orientable attractors on an n -dimensional torus. (Russian) **(84c:58136)**
- Hartzman, C. S. (with Naugler, D. R.) Separatrix conditions yielding either periodic orbits or unusual behavior for flows on M^3 . **(84c:58127)**
- Iooss, Gérard (with Joseph, Daniel D.) The behaviour of solutions lying on an invariant 2-torus arising from the bifurcation of a periodic solution. **(84c:58165)**
- Joseph, Daniel D. See Iooss, Gérard, (84c:58165)
- Knörrer, Horst See Ehlers, Fritz, (84b:14022)
- Lasry, Jean-Michel See Berestycki, Henri; et al., (84c:58071)
- Mancini, Giovanni See Berestycki, Henri; et al., (84c:58071)
- Naugler, D. R. See Hartzman, C. S., (84c:58127)
- Oliva, W. M. Retarded equations on the sphere induced by linear equations. **(84j:58092)**
- Ruf, Bernhard See Berestycki, Henri; et al., (84c:58071)
- Samoilenko, A. M. (with Tkachenko, V. I.) Splittability of a linear extension of a dynamical system on a two- or three-dimensional torus. (Russian. English summary) **(84b:34062)**
- Sun, Yi Sui (with Froeschle, C.) On the Kolmogorov entropy of two-dimensional area-preserving mappings. **(84c:58049)**
- Tamura, Itiro ★Yōsō no toporōji. (Japanese) [Topology of foliations] **(84a:57028a)**
- ★Топология слоёв. (Russian) [Topology of foliations] **(84a:57028b)**
- Tian, Jing Huang (with Gao, Long Chang) Qualitative study of the differential equations $dx/dt = \sin y$, $dy/dt = -\sin x + \mu \sin 2y$ on the torus $(x \bmod 2\pi, y \bmod 2\pi)$. (Chinese. English summary) **(84c:34041)**
- Tkachenko, V. I. See Samoilenko, A. M., (84c:34062)
- Yang, Lu See Zhang, Jing Zhong, (84b:58087)
- Zhang, Jing Zhong (with Yang, Lu) A simplified model of Smale's horseshoe. **(84b:58087)**
- Zhuzhoma, E. V. See Grines, V. Z., (84c:58136)

34C45 Method of integral manifolds

- Schneider, Klaus R. Hopf bifurcation and center manifolds. **84c:34061**
- Sobolev, V. A. On the theory of integral manifolds of systems of singularly perturbed equations. (Russian) **84c:34066**
- Teplinskii, Yu. V. Invariant tori of linear systems of differential equations in the space m . (Russian) **84f:34067**

secondary classifications:

- Aulbach, Bernd See Knobloch, H. W., (84c:58126)
- Knobloch, H. W. (with Aulbach, Bernd) The role of center manifolds in ordinary differential equations. **(84c:58126)**

34C50 Method of accelerated convergence

34C99 None of the above, but in this section

- Hošek, Josef Zu einer Eigenschaft von Phasen der Differentialgleichungen zweiter Ordnung. (Russian and Czech summaries) [On a property of phases of second-order differential equations] **84c:34058**
- Kuz'min, A. G. Qualitative theory of the equation $a(x, y)(y')^2 - 2b(x, y)y' + c(x, y) = 0$. (Russian) (See **84c:34002**)
- Turmagambetova, K. V. Continuous normalization of a class of periodic systems. (Russian) **84m:34059**

secondary classifications:

- Eliáš, Jozef On the solutions of n th order differential equation in $L^2(0, \infty)$. **(84b:34015)**
- Gard, Thomas C. Top predator persistence in differential equation models of food chains: the effects of omnivory and external forcing of lower trophic levels. **(84b:92046)**
- Holmes, Philip J. (with Moon, F. C.) Strange attractors and chaos in nonlinear mechanics. **(84m:70038)**
- Keener, James P. Chaotic behavior in slowly varying systems of nonlinear differential equations. **(84c:58042)**
- Moon, F. C. See Holmes, Philip J., (84m:70038)
- Ōtsuki, Nobukazu Spectral theory of vector bundle homeomorphisms. **(84c:58066)**
- Rössler, Otto E. See Uehleke, Bernhard, (84c:58156)
- Uehleke, Bernhard (with Rössler, Otto E.) Complicated Poincaré half-maps in a linear system. **(84c:58156)**

34Dxx Stability theory [See also 58F10, 93Dxx.]

secondary classifications:

- Arnol'd, V. I. ★Теория равновесных. (Polish) [Theory of differential equations] **(84c:58065)**
- Iooss, Gérard (with Joseph, Daniel D.) ★Элементарная теория устойчивости и бифуркации. (Russian) [Elementary stability and bifurcation theory] **(84j:34001)**
- Joseph, Daniel D. See Iooss, Gérard, (84j:34001)
- Logofet, D. O. See Svirezhev, Yu. M., (84c:92036)
- (Moiseev, N. N.) See Iooss, Gérard; et al., (84j:34001)
- (Rubanovskii, V. N.) See Iooss, Gérard; et al., (84j:34001)
- Svirezhev, Yu. M. (with Logofet, D. O.) ★Устойчивость биологических сообществ. (Russian) [Stability of biological populations] **(84c:92036)**
- (Wojtkowski, Maciej) See Arnol'd, V. I., (84c:58065)

34D05 Asymptotic properties; characteristic exponents

- Andrade, R. F. S. Carleman embedding and Lyapunov exponents. **84d:34043**
- Barabanov, E. A. Attainability of the bound for the number of lower exponents of a linear differential diagonal system. (Russian. English summary) **84c:34062**
- Borisenko, S. D. Asymptotic stability of solutions of systems with impulse action. (Russian) **84f:34068**
- Boudourides, M. A. See De Blasi, Francesco S., **84c:34059**
- Bylov, B. F. A method for the quasitriangularization of a system in connection with the estimation of central and characteristic indices. (Russian) **84b:34057**
- De Blasi, Francesco S. (with Boudourides, M. A.) Characteristic exponents and some applications to differential equations. **84c:34059**
- Dinovski, V. I. On conditional stability in the critical case. (Bulgarian. English and Russian summaries) **84g:34083**
- Conditional stability in the critical case of three zero roots. (Bulgarian. English and Russian summaries) **84g:34084**
- Giř, M. I. Estimates of the norms of solutions and of the boundaries of domains of stability of quasilinear systems. (Russian) **84d:34044**
- Kalas, Josef Asymptotic behaviour of the solutions of the equation $dz/dt = f(t, z)$ with a complex-valued function f . **84c:34071**
- Klincsik, M. On the stability of solutions of differential equations in Banach space by second general exponent. **84c:34045**
- Lasunskii, A. V. The small change of characteristic exponents of a linear second-order system. (Russian) **84c:34072**
- Lord, M. E. Stability and asymptotic equivalence of perturbations of nonlinear systems of differential equations. **84b:34058**
- Millionschikov, V. M. Baire classes of functions and Lyapunov exponents. VI. (Russian) **84j:34044a**
- Baire classes of functions and Lyapunov exponents. VII. (Russian) **84j:34044b**
- Baire classes of functions and Lyapunov exponents. VIII. (Russian) **84j:34044c**
- Baire classes of functions and Lyapunov exponents. IX. (Russian) **84j:34044d**
- Baire classes of functions and Lyapunov exponents. X. (Russian) **84j:34044e**
- Baire classes of functions and Lyapunov exponents. XI. (Russian) **84j:34044f**
- Baire classes of functions and Lyapunov exponents. XII. (Russian) **84j:34044g**
- Orlik, L. K. (with Rutman, M. A.) Exponential indices of solutions of ordinary linear differential equations with periodic coefficients. (Russian) **84a:34046**
- Parner, I. V. Sufficient criterion for stability of the solution of a system of differential equations. (Russian) (See **84c:34002**)
- Rakhimberdiev, M. I. Central exponents of linear systems. (Russian) **84d:34045**
- Rutman, M. A. See Orlik, L. K., **84a:34046**
- Stern, Ronald J. A note on positively invariant cones. **84g:34085**
- Vinograd, Robert E. Simultaneous attainability of central Lyapunov and Bohl exponents for ODE linear systems. **84b:34072**
- Yakovlev, A. A. On the question of the asymptotic stability of a periodic system. (Russian) **84a:34047**

secondary classifications:

- Bán, Ilona Optimization of parameters in linear systems of certain type. **(84c:93046)**
- Cecchi, Mariella (with Marini, Mauro; Zezza, Pierluigi) Asymptotic properties of the solutions of nonlinear equations with dichotomies and applications. (Italian summary) **(84c:34039)**
- Cooke, J. R. See Rand, R. H.; et al., (84d:92008)
- Dang Din' Tyau Generalized characteristic numbers of solutions of differential equations in a Banach space. (Russian) **(84b:34083)**
- El-Owaidy, Hassan (with Zagout, A. A. S.) On stability of perturbed third order linear differential equation. **(84g:34071)**
- Ezeilo, James Okoye Chukuka Some properties of the differential equation $f(u) = d^p u/dt^p$ of arbitrary order $p \geq 1$. **(84b:34074)**
- Farkas, M. Attractors of systems close to autonomous ones. **(84m:58078)**
- Fujisaka, Hirokazu Multiperiodic flows, chaos and Lyapunov exponents. **(84b:58140)**
- Gribov, A. F. (with Krishchenko, A. P.) The conditions for existence of a separatrix cycle in a piecewise-linear system. **(84d:93055)**
- Gumowski, I. Some properties of second order dynamic systems with parametric resonances. **(84b:58077)**
- Haken, Hermann At least one Lyapunov exponent vanishes if the trajectory of an attractor does not contain a fixed point. **(84f:58074)**
- Joss, E. Assessment of the degree of instability in parametric resonances. (See **84c:73010**)
- Kimura, Hironobu On the isomonodromic deformation of a linear ordinary differential equation of the third order. **(84c:58200)**
- Komornik, V. The asymptotic behaviour of the eigenfunctions of higher order of the Schrödinger operator. **(84c:34036)**
- Krishchenko, A. P. See Gribov, A. F., (84d:93055)

- Laloy, M. (with Peiffer, K.) On the instability of equilibrium when the potential has a nonstrict local minimum. (French summary) (84d:70028)
- Marini, Mauro See Cecchi, Mariella; et al. (84i:34039)
- Peiffer, K. See Laloy, M. (84d:70028)
- Rand, R. H. (with Storti, D. W.; Upadhyaya, S. K.; Cooke, J. R.) Dynamics of coupled stomatal oscillators. (84d:92008)
- Shchuko, S. D. Calculation on a computer of the second Lyapunov value for a system of two first-order equations. (Russian) (84m:65097)
- Shirman, V. Ya. See Sklyar, G. M. (84f:34085)
- Sklyar, G. M. (with Shirman, V. Ya.) Asymptotic stability of a linear differential equation in a Banach space. (Russian) (84f:34085)
- Sofronov, E. T. Stability in the large of a system of differential equations. (Russian) (84m:34066)
- Storti, D. W. See Rand, R. H.; et al. (84d:92008)
- Tran Van Nhung An application of Lyapunov's exponent method to the moment stability problem. (84m:60072)
- Upadhyaya, S. K. See Rand, R. H.; et al. (84d:92008)
- Voskresenskii, E. V. Asymptotic properties of solutions of a nonlinear differential system having a linear approximation with a diagonal matrix. (Russian) (84g:34069)
- Yasinskaya, L. I. Stability of linear stochastic functional-differential systems. (Russian) (84c:60091)
- Yoshizawa, Taro Asymptotic behavior for nonautonomous systems. (84g:34092)
- Zagrou, A. A. S. See El-Owaidy, Hassan. (84g:34071)
- Zecca, Pierluigi See Cecchi, Mariella; et al. (84i:34039)

34D10 Perturbations

- El-Owaidy, Hassan On stability of derivo-periodic solutions of nonholonomic systems. (84b:34059)
- Gil', M. I. Determination of the domain of exponential stability of systems of differential equations. (Russian) (84j:34045)
- Gorolomov, N. G. Stability of periodic solutions of a class of quasilinear autonomous systems. (Russian) (See 84c:34002)
- Koditschek, Daniel E. (with Narendra, Kumpati S.) The stability of second-order quadratic differential equations. (84b:34060)
- Martynuk, A. A. Stability of motions in nonlinear mechanics. (Russian) (84c:34063)
- Narendra, Kumpati S. See Koditschek, Daniel E. (84b:34060)
- Preda, Petre See Reghis, M. (84g:34086)
- Reghis, M. (with Preda, Petre) Nonlinear differential equations and nonuniform dichotomy. (84g:34086)
- Sakhaev, Sh. The principle of linearization and stability of the solution of a problem of nonstationary free convection. (Russian) (84m:34060)
- Santoro, Paolo Exponential stability for nonlinearizable systems. (Italian) (See 84a:34003)
- Stoyanova, Romyana Stability of the periodic solutions of a quasilinear autonomous system. A case of multiple roots. (See 84c:34002)
- Troch, I. Über die Stabilität von Empfindlichkeitsgleichungen. (English summary) [On the stability of sensitivity equations] (84m:34061)

secondary classifications:

- Berman, G. P. (with Iomin, A. M.) Quasiclassical perturbation theory for quantum K -systems. (84j:81046)
- Chovnyuk, Yu. V. See Zhurav'el, A. E.; et al. (84b:70008)
- Georgiou, D. A. Generalized asymptotic equivalence of functionally perturbed nonlinear ordinary differential equations. (84b:34083)
- Gohberg, Israel (with Lancaster, Peter; Rodman, Leiba) Perturbations of H -selfadjoint matrices, with applications to differential equations. (84f:47014)
- Gopalsamy, K. Age-specific coexistence in two-species competition. (84h:92030)
- Iomin, A. M. See Berman, G. P. (84j:81046)
- Kopell, Nancy (with Washburn, Robert B., Jr.) Chaotic motions in the two-degree-of-freedom swing equations. (84h:58149)
- Křivý, Ivan Time-delay in some models of a predator-prey system. (Czech. English summary) (84f:92043)
- Lancaster, Peter See Gohberg, Israel; et al. (84f:47014)
- Lord, M. E. Stability and asymptotic equivalence of perturbations of nonlinear systems of differential equations. (84b:34058)
- Raghavendra, V. (with Rama Mohana Rao, M.) Differential systems with impulsive perturbations and an extension of Lyapunov's method. (84m:34065)
- Rama Mohana Rao, M. See Raghavendra, V. (84m:34065)
- Rodman, Leiba See Gohberg, Israel; et al. (84f:47014)
- Siegel, David See Witten, Matthew. (84h:92012)
- Smith, H. L. On the basin of attraction of a perturbed attractor. (84i:58077)
- Tran Van Nhung Stability of periodic solutions of ordinary differential equations with random parameters. (84f:34081)
- Washburn, Robert B., Jr. See Kopell, Nancy. (84h:58149)
- Witten, Matthew (with Siegel, David) A kinetics model of abrin binding in a virus transformed lymphocyte cell culture. (84h:92012)
- Zhigots'ka, N. I. See Zhurav'el, A. E.; et al. (84b:70008)
- Zhukov, V. P. Stability study of one class of nonlinear systems. (84h:58081)
- Zhurav'el, A. E. (with Chovnyuk, Yu. V.; Zhigots'ka, N. I.) Study of the stability of gyroscopic systems of a certain class. (Russian) (84b:70008)
- Zwahlen, Bruno The behaviour of the critical value of an equation under small perturbations. (84h:35009)

34D15 Singular perturbations

- Dontchev, Asen L. See Gichev, Todor R. (84b:34061)
- Gichev, Todor R. (with Dontchev, Asen L.) Convergence of the solution of singularly perturbed linear differential equations. (Russian and Bulgarian summaries) (84b:34061)

- Kashchenko, S. A. Stability of solutions of linear singularly perturbed differential equations with almost periodic coefficients in the case of resonances. (Russian) (84h:34073)

secondary classifications:

- Bainov, D. D. See Khristova, S. G. (84f:45012)
- Grishin, S. A. Some questions of the control and stability of linear systems. (Russian) (84d:93039)
- Khristova, S. G. (with Bainov, D. D.) Asymptotics of the solution of the Cauchy problem for a class of singularly perturbed systems of integro-differential equations. (French summary) (84f:45012)
- Liu, Xing Quan Periodic solutions of a class of singularly perturbed systems. (Chinese. English summary) (84b:34078)
- Yachter, M. On the existence of periodic solutions of the D.E. $\dot{x} + F(x) = \varepsilon f(x, \dot{x}, t; \varepsilon)$. (84d:34037)

34D20 Lyapunov stability

- Aikino, M. K. Absolute stability of controlled systems in critical cases. (Russian) (84d:34046)
- Andreev, Aleksandr Sergeevich Asymptotic stability and instability with respect to part of the variables. (Russian) (84b:34062)
- Borisenko, S. D. Investigation of the stability and attraction of solutions of systems of differential equations with impulse action. (Russian) (84c:34073)
- Burganskaya, L. I. Investigation of the stability of solutions of certain nonlinear multidimensional differential systems. (Russian) (84m:34062)
- Dang Din' Tyau Study of the strong instability of the zero solution of infinite systems of differential equations by means of generalized characteristic d -numbers. (Russian) (84h:34074)
- Egorov, I. G. Stability in the large of the zero solution of an autonomous system of two differential equations. (Russian) (84j:34046)
- El-Nahas, A. See Sobel, M. (84c:34064)
- Gaishun, I. V. (with Knyazhishche, L. B.) Conditions for the stability of solutions of autonomous completely integrable equations. (Russian) (84a:34048)
- Gil', M. I. Stability in the large of nonstationary systems. (84c:34047)
- Gurevich, V. M. On the theory of Lyapunov's second method. (Russian. English, French and Slovak summaries) (84c:34056)
- Gurgula, S. I. (with Perestyuk, M. O.) Lyapunov's second method in systems with impulse action. (Russian. English summary) (84b:34063)
- Gutowski, Roman Investigation of solutions of some ordinary and partial differential equations by the method of integral inequalities constructed for the functions of Liapunov type. (See 84c:34002)
- Harvani, L. A generalization of the Barbashin-Krasovskij theorems to the partial stability in nonautonomous systems. (84d:34048)
- Ignat'ev, A. O. On stability of the equilibrium position of vibrational systems with variable coefficients. (84b:34064)
- Stability in the critical case of a pair of purely imaginary roots for nonautonomous systems. (Russian) (84c:34074)
- Continuous dependence of asymptotic stability on parameters in the critical case of n pairs of purely imaginary roots. (Russian) (84i:34060)
- Jocić, Ljubomir B. Method of sinks for stability analysis of nonlinear systems. (84h:34075)
- Kalas, Josef On a "Liapunov like" function for an equation $\dot{z} = f(t, z)$ with a complex-valued function f . (84g:34087)
- Kalitin, B. S. On the stability of essentially nonlinear systems. (Russian) (84g:34088)
- Kanevskii, A. Ya. The inverse of Marachkov's theorem. (Russian) (84m:34063)
- Karimzhanov, A. See Martynuk, A. A. (84g:34090)
- Kasymov, E. K. Estimate of the solution and exit time of solutions of nonlinear systems of equations. (Russian) (84h:34076)
- Khazin, L. G. See Khazina, G. G. (84j:34047)
- Khazina, G. G. (with Khazin, L. G.) Essentially inhomogeneous systems in stability problems. (Russian) (84j:34047)
- Knyazhishche, L. B. See Gaishun, I. V. (84a:34048)
- Kostin, A. V. (with Vitrichenko, I. E.) Generalization of Lyapunov's theorem on stability in the case of a zero characteristic exponent for nonautonomous systems. (Russian) (84d:34049)
- See also Vitrichenko, I. E. (84f:34069)
- Kovács, Margit On the asymptotic behavior of trajectories of nonstationary differential equations. (Russian. English summary) (84m:34064)
- Kozlov, R. I. See Matrosov, V. M. (84i:34062)
- Krbec, P. Parasitic and nonparasitic solutions of differential equations and stability. (84b:34065)
- Krechetov, G. S. Lyapunov functions for second-order autonomous systems of first and second classes. (Russian) (84c:34057)
- Lyapunov functions for two-dimensional autonomous systems of the third and fourth class. (Russian. English summary) (84d:34050)
- Laserra, Ettore (with Matarazzo, Giovanni) Attractivity of closed sets and applications to the mechanics of holonomic systems. (Italian. English summary) (84g:34089)
- Lavrenyuk, S. P. Stability in the large of a system of n equations. (Ukrainian. Russian summary) (84h:34077)
- Li, Li Peng The stability in the large of the solution of a two-dimensional nonlinear system of differential equations. (Chinese. English summary) (84c:34064)
- Li, Ming Shu On the construction of some counterexamples to stability of the trivial solution for linear nonautonomous systems. (Chinese) (84c:34061)
- Liao, Xiao Xin On the criterion for the absolute stability of the control system. (84c:34075)
- Malyshev, Yu. V. Qualitative investigation of critical cases of stability of motion. (Russian) (See 84c:34002)
- Martynuk, A. A. (with Karimzhanov, A.) Technical stability of a system with fast and slow motions. (84g:34090)
- Stability and instability of systems of processes with respect to two multivalent measures. (84g:34091)

- Matarazzo, Giovanni. See Laserra, Ettore, 84g:34089
- Matrosov, V. M. (with Kozlov, R. I.) The method of vector Lyapunov functions in the qualitative theory of differential equations in Banach spaces. 84i:34062
- Matviichuk, K. S. Remarks on the comparison method for a system of differential equations with a rapidly rotating phase. (Russian) 84a:34049
- Merenkov, Yu. N. See Shestakov, A. A., 84b:34068
- Murakami, Satoru. Asymptotic behavior of solutions of ordinary differential equations. 84c:34076
- Nam, Bón Jun. Stability of solutions of systems of two first-order nonlinear differential equations. (Korean. English summary) 84c:34066
- Olas, A. A criterion of asymptotic stability of the trivial solution of an autonomous set of ordinary differential equations. (German summary) 84c:34065
- Oziraner, A. S. Some theorems on the partial stability and stabilization. 84c:34077
- Perestyuk, M. O. See Gurgula, S. I., 84b:34063
- Petrov, P. P. On exponential stability of motion. (Russian) 84j:34048
- Raghavendra, V. (with Rama Mohana Rao, M.) Differential systems with impulsive perturbations and an extension of Lyapunov's method. 84m:34065
- Rama Mohana Rao, M. See Raghavendra, V., 84m:34065
- Reissig, Rolf. Stability of a linear system by means of the transient solution. 84a:34050
- Rumyantsev, V. V. On stability of motions of conservative systems. 84b:34067
- Samardzija, Nikola. Stability properties of autonomous homogeneous polynomial differential systems. 84i:34063
- Shestakov, A. A. (with Merenkov, Yu. N.) Localization of the limit set in a nonautonomous differential system by means of Lyapunov functions. (Russian) 84b:34068
- Skachkov, B. N. The Lyapunov function with a derivative of a special type for a linear system. (Russian) 84j:34049
- Sobeih, M. (with El-Nahhas, A.) A study on the stability of a nonlinear n th order differential equation in both autonomous and nonautonomous cases. 84i:34064
- Sofronov, E. T. Stability in the large of a system of differential equations. (Russian) 84m:34066
- Sriyazova, S. N. Stability in the case of a pair of imaginary roots. (Russian) 84c:34066a
- Stability in the case of two pairs of imaginary roots. (Russian) 84c:34066b
- Szanto, Ivan. Some results and applications of an instability theorem for nonlinear ordinary differential equations by the direct method of Lyapunov. (Spanish. English summary) 84j:34050
- Tomova, A. V. Lyapunov stability of a trivial solution of an almost linear system in critical cases. (Russian) (See 84c:34002)
- Tsitsiklis, John N. Conditions for finiteness of a constructive algorithm for determining stability. 84b:34069
- Tsygankova, L. A. Practical stability of problems with linear functional conditions and Lyapunov functions. (Russian) 84c:34065
- Vikin, A. V. On the stability of the zero solution of a system of ordinary differential equations. (Russian) 84a:34051
- Vitrichenko, I. E. (with Kostin, A. V.) Stability of the zero solution of a quasilinear nonautonomous system in the critical case. (Russian) 84f:34069
- See also Kostin, O. V., 84d:34049
- Voskresenskii, E. V. Stability of the equilibrium state of a class of quasilinear systems of differential equations. (Russian) 84j:34051
- Vrdoljak, Božo. Monotonic asymptotic stability of a class of solutions along the coordinates. 84m:34067
- Yoshizawa, Taro. Asymptotic behavior for nonautonomous systems. 84g:34092
- Zubov, S. V. Stability of the periodic motion of a dynamical system. (Russian. English, French and Slovak summaries) 84i:34070
- secondary classifications:
- Akinyele, Oluola. Conditional stability of asymptotically self-invariant sets for differential equations in Banach spaces. (84a:34065)
- Albrycht, Jerzy (with Szulc, Tomasz) Lyapunov functions for linear mappings. (84d:39002)
- Antsiferov, E. G. Some optimization problems connected with the construction of stable dynamical systems by Lyapunov's second method. (Russian) (84g:93055)
- Aulbach, Bernd. A reduction principle for nonautonomous differential equations. (84d:34033)
- Balint, Št. (with Stepan, A.) The study of the mathematical model for distillation processes in plate rectification columns. (84m:8004a)
- Barták, Jaroslav. Stability at constantly acting disturbances of abstract differential equations with right-hand sides smooth in the time variable. (84m:34091)
- Bazhenov, V. A. See Gulyaev, V. I.; et al., (84j:73074)
- Boichuk, A. A. Optimal Lyapunov functions for linear periodic systems. (Russian) (See 84c:34002)
- Boudourides, M. A. On the asymptotic behavior of solutions of multivalued differential equations. (84c:34019)
- Brockett, Roger W. On the asymptotic properties of solutions of differential equations with multiple equilibria. (84b:58060)
- Brusin, V. A. Investigation of the asymptotic behavior of solutions of a system of differential equations arising in problems of adaptive control. (Russian) (84m:93073)
- Burton, T. A. (with Mahfoud, W. E.) Stability criteria for Volterra equations. (84b:45004)
- Castro, Abel. Some stability results by the direct method of Lyapunov. (Spanish) (84d:93036)
- Cazenave, Thierry. Stable solutions of the logarithmic Schrödinger equation. (84m:35102)
- Chekhovskaya, T. N. See Markeev, A. P., (84a:70017)
- Chow, Pao Liu. Stability of nonlinear stochastic-evolution equations. (84b:60111)
- Deo, Sadashiv G. See Pandit, Sudhakar G., (84g:34005)
- Elaydi, Saber. On some stability notions in topological dynamics. (84b:54078)
- Elliott, David L. See Kaloustidis, Nicholas, (84b:93059)
- Fedorenko, V. V. (with Sharkovskii, A. N.) Stability of a dynamic system's property of having a homoclinic trajectory. (Russian) (84c:58123)
- Fukuma, Norio. See Mori, Takehiro; et al., (84d:15023)
- Godunov, S. K. ★ Квадратичные функции Ляпунова. (Russian) [Quadratic Lyapunov functions] (84c:34001)
- Gotsulyak, E. A. See Gulyaev, V. I.; et al., (84j:73074)
- Grudo, E. I. On the theory of stability of ordinary differential systems and Pfaffian systems. (Russian) (84m:58009)
- Gulyaev, V. I. (with Bazhenov, V. A.; Gotsulyak, E. A.) ★ Устойчивость нелинейных механических систем. (Russian) [Stability of nonlinear mechanical systems] (84j:73074)
- Gutman, Shaul (with Palmor, Z.) Properties of min-max controllers in uncertain dynamical systems. (84c:49041)
- Haddock, John R. (with Terjeki, J.) Lyapunov-Razumikhin functions and an invariance principle for functional-differential equations. (84f:34104)
- Hamze, F. M. Basic methods for stability analysis of nonlinear oscillations and waves. (Arabic summary) (84i:70027)
- He, Chong You. Global asymptotic stability and existence and uniqueness of almost periodic solutions. (Chinese) (84c:34052)
- Hudec, Lubomir. ★ Synergetika a teorie stability. (Czech) [Synergetics and stability theory] (84c:93111)
- Ikeda, Masao (with Šiljak, Dragoslav D.) Lotka-Volterra equations: decomposition, stability, and structure. I. Equilibrium analysis. (84d:92030a)
- (with Šiljak, Dragoslav D.) Lotka-Volterra equations: decomposition, stability, and structure. II. Nonequilibrium analysis. (84d:92030b)
- Infante, Ettore F. Some results on the Liapunov stability of functional equations. (See 84b:45002)
- Ivanov, A. P. (with Sokol'skii, A. G.) On the stability of a nonautonomous Hamiltonian system under a parametric resonance of essential type. (84a:58033)
- Jones, John, Jr. Solutions of Lyapunov and Riccati type matrix equations arising in optimal control theory and systems theory. (See 84c:00005)
- (with Lew, Charles) Solutions of the Lyapunov matrix equation $BX - XA = C$. (84d:15018)
- Kalas, Josef. Asymptotic properties of the solutions of the equation $\dot{z} = f(t, z)$ with a complex-valued function f . (84c:34007)
- Kaloustidis, Nicholas (with Elliott, David L.) Stability analysis of the orbits of control systems. (84j:93059)
- Karanam, V. R. Eigenvalue bounds for algebraic Riccati and Lyapunov equations. (84d:15022)
- Khazin, L. G. (with Khazina, G. G.) On the possibility of resonance stabilization of a system of oscillators. (84a:70016)
- (with Shnol', E. E.) Stability of fixed points of smooth mappings (critical and near-critical cases). (Russian) (84c:58125)
- Khazina, G. G. See Khazin, L. G., (84a:70016)
- Khitrov, G. M. Application of Lyapunov's second method to the solution of a problem of orientation of a rigid body. (Russian) (84k:70010)
- Křivý, Ivan. Stability of some dynamical systems in biology. (Czech. English summary) (84g:92031)
- Kuwahara, Michiyoshi. See Mori, Takehiro; et al., (84d:15023)
- Lasyi, P. G. On the theory of stability in the first approximation of completely integrable Pfaffian systems. (Russian) (84c:58012)
- Leipholtz, H. H. E. Lyapunov stability of continuous elastic systems and its topological foundations. (84c:73037)
- Leitmann, George. Stabilization of uncertain systems. (Italian) (84f:93041)
- Lew, Charles. See Jones, John, Jr., (84d:15018)
- Li, Zhan Bing (with Yan, Shi Jian; Liu, Ruo Zhuang) On the stability of the multivariate master equation for nonequilibrium systems. (Chinese. English summary) (84c:82054)
- Liu, Ruo Zhuang. See Li, Zhan Bing; et al., (84c:82054)
- Louis, J.-C. Stability in Hilbert spaces by using the Riccati equation. (84m:93069)
- Magomedov, A. R. Stability of periodic solutions of differential equations with maxima. (Russian) (84m:34106)
- Mahfoud, W. E. See Burton, T. A., (84b:45004)
- Makhlin, A. R. See Ukolov, I. S., (84f:49053)
- Markeev, A. P. (with Chekhovskaya, T. N.) On the periodic resonant solutions of the Hamiltonian systems generating from the position of equilibrium. (84a:70017)
- Martynuk, A. A. (with Nikitina, N. V.) Nonlinear comparison systems in problems of stability in a critical case. (Russian) (84k:70031)
- (with Verbitskii, V. G.) Estimation of the domain of attraction for a particular type of nonlinear system. (84k:70030)
- (with Nikitina, N. V.) Reference method in shimmy problem. (84m:70034)
- Mazko, A. G. Theory of distribution of the spectrum of a matrix with respect to algebraic and transcendental curves. (Russian) (84j:15008)
- Medanić, J. Geometric properties and invariant manifolds of the Riccati equation. (84m:58124)
- Mori, Takehiro (with Fukuma, Norio; Kuwahara, Michiyoshi) On the discrete Lyapunov matrix equation. (84d:15023)
- Nadzieja, Tadeusz. Attractors with positively Lyapunov stable trajectories. (84a:58057)
- Nikitina, N. V. See Martynuk, A. A., (84k:70031) and (84m:70034)
- Pai, M. A. ★ Power system stability. (84m:93071)
- Palmor, Z. See Gutman, Shaul, (84c:49041)
- Pandit, Sudhakar G. (with Deo, Sadashiv G.) ★ Differential systems involving impulses. (84g:34005)
- Papastavridis, J. G. Complementary variational principles and their application to rheo-linear and rheo-nonlinear vibrations. (84j:70027)
- Paracelli, Carmela. Some remarks on a class of linear A -stable multistep methods. (Italian. English summary) (84g:65091)
- Peña, Marcos Lizana. On the stability of systems of neutral type. (84j:34088)
- Popescu, Nicolae N. (with Preda, Petre) Necessary and sufficient conditions for exponential dichotomies in Banach spaces. (84c:34088)
- Preda, Petre. See Popescu, Nicolae N., (84c:34088)
- Pykh, Yu. A. On the global stability of some ecological models. (Russian. English summary) (84f:92057)

- Redheffer, Raymond M. (with Zhou, Zhi Ming) Global stability of balanced predator-prey systems. (See 84c:00009)
- Sakhaev, Sh. The principle of linearization and stability of the solution of a problem of nonstationary free convection. (Russian) (84m:34060)
- Samoilenko, A. M. (with Tkachenko, V. I.) Splittability of a linear extension of a dynamical system on a two- or three-dimensional torus. (Russian. English summary) (84h:34062)
- Sánchez G., Gloria ★Un teorema de conjugación global y sus aplicaciones locales. (Spanish) [A global conjugation theorem and its local applications] (84j:58072)
- Šiljak, Dragoslav D. See Ikeda, Masao, (84d:92030a) and (84d:92030b)
- Shestakov, A. A. Theory and applications of the generalized Lyapunov direct method for abstract dynamical systems (a survey of the current state of the geometric direction in Lyapunov's direct method). (Russian) (84g:58065)
- Šmol', E. E. See Khazin, L. G., (84c:58125)
- Šiljak, Dragoslav D. See Ikeda, Masao, (84d:92030a) and (84d:92030b)
- Skachkov, B. N. Transformation of the Lyapunov function of an automatic regulation system. (Russian) (84c:93033)
- Sokol'skiĭ, A. G. See Ivanov, A. P., (84a:58033)
- Stepan, A. The study of the mathematical model for distillation processes in plate rectification columns. II. (84m:80004b)
- See also Balint, Št., (84m:80004a)
- Szocińska, Ewa Stochastic stability of solutions of equations with martingale integrals. (Polish. English and Russian summaries) (84f:60069)
- Szule, Tomasz See Albrycht, Jerzy, (84d:39002)
- Terjeki, J. See Haddock, John R., (84f:34104)
- Tkachenko, V. I. See Samoilenko, A. M., (84h:34062)
- Teubergenov, M. I. On the question of stability of an integral manifold. (Russian. Kazakh summary) (84f:34065)
- Ukolov, I. S. (with Makhlin, A. R.) The method of Lyapunov functions in the theory of analytical construction of nonlinear regulators. (Russian) (84f:49053)
- Verbitskiĭ, V. G. See Martynuk, A. A., (84c:70030)
- Voronov, A. A. Present state and problems of stability theory. (84a:93044)
- Wang, Lian (with Wang, Mu Qiu) A theorem on the steady-state oscillation in periodic dissipative systems of higher order. (84i:34053)
- Wang, Mu Qiu See Wang, Lian, (84i:34053)
- Wexler, Dimu Lyapunov functions for evolution equations in Hilbert spaces via the operational Riccati equation. (See 84c:00009)
- Yan, Shi Jian See Li, Zhan Bing; et al., (84c:82054)
- Zaslavskii, B. G. Size dynamics of controlled populations. (84i:92074)
- Zevin, Alexandr Aronovich Investigation of subharmonic oscillations in systems with soft and rigid elastic conditions. (Russian) (84c:70030)
- Zhao, Wen Yu On the uniform asymptotic stability of two kinds of linear time-varying control system. (Chinese. English summary) (84g:34115)
- Zhautykov, O. A. Dichotomy and asymptotic behaviour of solutions of differential equations. (84j:34042)
- Zhou, Zhi Ming See Redheffer, Raymond M., (See 84c:00009)

34D25 Popov-type stability

secondary classifications:

- Lipatov, A. V. Graph-analytic method for testing the stability of a continuous system with a single monotone nonlinearity in the case of the nonapplicability of A. A. Voronov's criterion. (Russian) (84c:93036)
- Xie, Hui Min Necessary and sufficient conditions for absolute stability of a class of third order control systems. (84d:93038)

34D30 Structural stability and analogous concepts [See also 58Fxx.]

- Churilov, A. N. See Leonov, G. A., 84b:34070
- Leonov, G. A. (with Churilov, A. N.) A frequency criterion for the stability of dynamical systems with angular coordinates. (Russian. English summary) 84b:34070

secondary classifications:

- Burdaev, V. P. Stability of nonautonomous differential equations on a set of cyclically recurrent points. (Russian) (84h:58110)
- Butenina, N. N. (with Metrikin, V. S.) Unattainable boundaries of a point mapping of a circle onto itself. (Russian) (84j:58083)
- Il'yashenko, Yu. S. Topology of phase portraits of analytic differential equations on a complex projective plane. (Russian) (84k:58164)
- Kotus, Janina Vector fields on \mathbb{R}^2 without oscillations are generic. (84k:58127)
- Lerman, L. M. The structure of a quasiperiodic Riccati equation. (Russian) (84m:34046)
- Mal'kov, V. A. See Samoilenko, A. M., (84c:58046)
- Metrikin, V. S. See Butenina, N. N., (84j:58083)
- Popescu, Nicolae N. Exponential dichotomies and Hermitian operators in Banach spaces. (84h:34088)
- Samoilenko, A. M. (with Mal'kov, V. A.) On the question of reducibility of periodic projectors. (Russian) (84k:58046)

34D40 Ultimate boundedness

34D99 None of the above, but in this section

- Avanyan, V. T. Some theorems on stability theory. (Russian. Armenian summary) 84m:34068
- Beretta, E. See Solimano, F., 84f:34073
- Bondi, Paola (with Fergola, P.; Gambardella, Lucia; Tenneriello, C.) Partial asymptotic stability via limiting equations. 84f:34071
- Chernikova, O. S. The reduction principle for systems of differential equations with impulse action. (Russian) 84d:34051

- Farkas, M. Attractors of systems under bounded perturbation. (See 84i:00016)
- Fergola, P. See Bondi, Paola; et al., 84f:34071
- Gambardella, Lucia See Bondi, Paola; et al., 84f:34071
- Garashchenko, F. G. Some problems of practical stability of motion and their application. (Russian) 84h:34078
- Gurgula, S. I. (with Perestyuk, N. A.) Stability of solutions of impulse systems. (Russian) (See 84c:34002)
- Il'chenko, O. V. Critical case of stability of a system of differential equations with coefficients depending on a parameter. (Ukrainian. English and Russian summaries) 84f:34072
- Kurashin, V. N. Study of the stability of systems of linear differential equations with periodic coefficients by means of the principle of the maximum. (Russian) (See 84c:34002)
- Morecho, J. On the stability with respect to part of variables. (See 84c:34002)
- Palmer, Kenneth J. Exponential separation, exponential dichotomy and spectral theory for linear systems of ordinary differential equations. 84c:34067
- Perestyuk, N. A. See Gurgula, S. I., (See 84c:34002)
- Solimano, F. (with Beretta, E.) Graph theoretical criteria for stability and boundedness of predator-prey systems. 84f:34073
- Tenneriello, C. See Bondi, Paola; et al., 84f:34071
- Usacheva, T. V. Stability of characteristics of diagonal systems of differential equations. (Russian) 84f:34074
- Xiao, Shuang Fa The necessary and sufficient conditions for the global asymptotic stability of the zero solution of a second-order nonlinear differential equation. (Chinese. English summary) 84c:34068

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- Aulbach, Bernd Zur Stabilität in kritischen Fällen. [On stability in critical cases] (84c:58040)
- Fukuma, Norio See Mori, Takehiro; et al., (84a:93052)
- Garashchenko, F. G. (with Kirichenko, N. F.; Lyashko, V. I.) ★Практическая устойчивость, минимаксное оценивание и адаптивность динамических систем. (Russian) [Practical stability, minimax estimation and adaptivity of dynamical systems] (84h:93049)
- Habets, P. See Laloy, M., (84f:70029)
- Jumarie, Guy An embedding approach to the stability of some nonlinear discrete systems. (84c:93042)
- Kaye, R. John (with Wu, Felix F.) Dynamic security regions of power systems. (84f:93040)
- Kirichenko, N. F. See Garashchenko, F. G.; et al., (84h:93049)
- Knight, Ronald A. Unstable weak attractors. (84c:58050)
- Kramer, Lorenz Absolute stability and transitions in ecosystems with a multiplicity of stable states and dispersal. (84c:92034)
- Kuwahara, Michiyoshi See Mori, Takehiro; et al., (84a:93052)
- Laloy, M. (with Habets, P.) On the instability of a two-dimensional conservative mechanical system with analytical potential. (84f:70029)
- Lyashko, V. I. See Garashchenko, F. G.; et al., (84h:93049)
- Magnenat, Pierre Numerical study of periodic orbit properties in a dynamical system with three degrees of freedom. (84h:58128)
- Mori, Takehiro (with Fukuma, Norio; Kuwahara, Michiyoshi) A stability criterion for linear time-varying systems. (84a:93052)
- Nguyen Cang Conditions fréquentielles de stabilité absolue pour une classe de systèmes à non-linéarités différentiables et monotones. [Frequency conditions of absolute stability for a class of systems with differentiable and monotone nonlinearities] (84c:93036)
- Okuda, Masami A phase-plane analysis of stability in transient states. (84g:34082)
- Tian, Guo Qiang Matrices satisfying Šiljak's conjecture. (Chinese summary) (84h:15011)
- Vulpe, N. I. Minimal complete system of orthogonal invariants of a two-dimensional differential system. (Russian) (84h:34020)
- Wu, Felix F. See Kaye, R. John, (84f:93040)

34Exx Asymptotic theory

34E05 Asymptotic expansions

- Abduvaliev, A. O. Asymptotic solution of a singularly perturbed boundary value problem. (Russian) 84g:34093
- Alishev, A. Solution of some systems of nonlinear homogeneous differential equations. (Russian) 84h:34071
- Alymkulov, K. A. The Lighthill problem for a perturbed differential equation with an irregular singular point. (Russian) 84j:34052
- Solution of a perturbed differential equation with an irregular singular point in the critical case. (Russian) 84h:34072
- Aripov, M. M. (with Kayumov, T.) Asymptotic behavior of the solution of the nonlinear equation $y''' - g(x)y'' = 0$. (Russian) 84a:34052
- Berestycki, Henri (with Nicolaenko, Basil; Scheurer, Bruno) Sur quelques problèmes asymptotiques avec applications à la combustion. (English summary) [On some asymptotic problems with applications to combustion] 84c:34078
- Bobochko, V. N. (with Lomov, S. A.) Interior boundary layer in a linear problem. (Russian) 84i:34066
- Broucke, R. See Presler, W. H., 84h:34082a and 84h:34082b
- Cassell, J. S. The asymptotic integration of some oscillatory differential equations. 84c:34079
- Cheshankov, B. I. (with Tseryanov, M. P.) Some additions to an asymptotic method. (Russian) (See 84c:34002)
- Diamandescu, Aurel On the asymptotic behaviour of solutions of certain ordinary differential equations. 84k:34058

- Diblik, Josef The asymptotic behavior of solutions of a differential equation that is partially solvable with respect to the derivative. (Russian) **84d:34052**
- Eastham, Michael S. P. Asymptotic theory for a critical class of fourth-order differential equations. **84d:34053**
- Asymptotic theory for a critical class of fourth-order differential equations. **84h:34073**
- Edelson, Allan L. (with Schuur, Jerry D.) Asymptotic and strong asymptotic equivalence to polynomials for solutions of nonlinear differential equations. (See **84j:00010**)
- Evtukhov, V. M. Asymptotic representations of solutions of a class of second-order nonlinear differential equations. (Russian. English and Georgian summaries) **84h:34079**
- Ezeilo, James Okoye Chukuka Some properties of the differential equation $f(u) = d^p u/dt^p$ of arbitrary order $p \geq 1$. **84h:34074**
- Fedenya, M. M. A method of finding coefficients of sensitivity of a multiple spectrum of linear stationary systems. (Russian) **84h:34059**
- Gogokhiya, V. Sh. Asymptotic formulation of the comparison equation method. (Russian. English and Georgian summaries) **84d:34053**
- Gorelova, E. Ya. (with Strygin, V. V.) Justification of an algorithm for asymptotic expansion of the solution of a linear singularly perturbed Cauchy problem. (Russian) **84m:34069**
- Gracheva, G. S. Asymptotic representation of the solution of a differential equation with closed operator. The resonance case. (Russian) **84m:34070**
- Gubin, Yu. P. (with Safonov, V. F.) Nonlinear regularization of resonance problems. (Russian) **84i:34067**
- (with Safonov, V. F.) Normal differential forms and regularization of nonlinear singularly perturbed problems. (Russian) **84e:34069**
- Karimov, S. The asymptotic behavior of solutions of a class of differential equations with a small parameter multiplying the derivatives in the case of focus instability. (Russian) **84c:34080**
- Karpa, M. P. Asymptotic behavior of the solution of the Cauchy problem for a third-order linear differential equation. (Ukrainian. Russian summary) **84f:34075**
- Kayumov, T. See Aripov, M. M., **84a:34052**
- Khoma, G. P. Asymptotic methods for investigating solutions of differential and integro-differential equations. (Russian) **84d:34054**
- Knežević, Julka Asymptotically bounded solutions of some differential equations. (Serbo-Croatian. Russian summary) **84c:34054**
- Konet, I. M. See Shkil', N. I., **84d:34056**
- Konyaev, Yu. A. Application of the regularization method to the solution of some problems with a polynomial singularity. (Russian) **84i:34068**
- Asymptotic expansion of periodic solutions of systems of ordinary differential equations with purely imaginary spectrum of the limit operator. (Russian) **84h:34080**
- Kucherenko, V. V. (with Osipov, Yu. V.) Justification of formal asymptotic solutions for ordinary differential equations with a degenerate symbol. (Russian) **84j:34053**
- Lomov, S. A. See Valiev, M. A., **84a:34055** and Bobochko, V. N., **84i:34066**
- Marić, V. (with Tomić, Miodrag) A note on asymptotics of solutions of a class of nonlinear ordinary differential equations. (See **84c:34003**)
- Meiliev, T. K. Construction of an asymptotic solution of a system of third-order linear differential equations with a small parameter. (Russian) **84h:34081**
- Nicolaenko, Basil See Berestycki, Henri; et al., **84c:34078**
- Nikonov, V. V. Asymptotic properties of solutions of second-order ordinary differential equations. (Russian. English and Georgian summaries) **84i:34069**
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- Pechentsov, A. S. Estimates of coefficients of asymptotic series for solving the Cauchy problem in the case of analytic coefficients. (Russian. English summary) **84c:34070**
- Presler, W. H. (with Broucke, R.) Computerized formal solutions of dynamical systems with two degrees of freedom and an application to the Contopoulos potential. I. The exact resonance case. **84h:34082a**
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- Prosenyuk, L. G. (with Yatsenko, S. A.) Asymptotic behavior of solutions and their derivatives of a complex first-order differential equation. (Russian) **84c:34071**
- Rasulov, M. L. Asymptotic representation of the fundamental matrix of solutions of a system of ordinary differential equations with two parameters. (Russian) **84d:34055**
- Reizips, L. Asymptotic solutions of almost periodic quasihomogeneous equations. (Russian) **84h:34060**
- Ryzhikh, A. D. Regularized asymptotic solutions of singular weakly nonlinear problems with rapidly oscillating coefficients. (Russian) **84e:34072**
- Safonov, V. F. See Gubin, Yu. P., **84e:34069** and **84i:34067**
- Scheurer, Bruno See Berestycki, Henri; et al., **84c:34078**
- Schuur, Jerry D. See Edelson, Allan L., (See **84j:00010**)
- Shkil', N. I. (with Konet, I. M.) Asymptotic properties of formal fundamental matrices of systems of second-order linear differential equations containing a parameter. (Russian) **84d:34056**
- Skrpnik, V. P. Asymptotic behavior of approximate solutions of systems with transformed argument. (Russian) **84f:34076**
- Sokol, B. I. Asymptotic representation of the solution of a nonlinear system in the case of resonance. (Russian) **84g:34094**
- Strygin, V. V. See Gorelova, E. Ya., **84m:34069**
- Tomic, Miodrag See Marić, V., (See **84c:34003**)
- Tseryanov, M. P. See Cheshankov, B. I., (See **84c:34002**)
- Valiev, M. A. (with Lomov, S. A.) Asymptotic integration of singularly perturbed problems in Hilbert space. (Russian) **84a:34055**
- Vil'danova, F. Kh. Asymptotically equivalent linear differential E-systems. (Russian) **84c:34073**
- Yatsenko, S. A. See Prosenyuk, L. G., **84c:34071**
- Yudina, A. S. Regularized asymptotic solutions of equations with a regular singular point. (Russian) **84i:34070**
- Regularized asymptotic expansions of Bessel functions. (Russian) **84c:34074**
- Asymptotic behavior of the solution of a singular equation with regular singular point. (Russian) **84f:34077**
- Zeman, Jiří Zur asymptotischen Integration der Differentialgleichung $y'' + q(t)y = 0$. (Russian and Czech summaries) [On the asymptotic integration of the differential equation $y'' + q(t)y = 0$] **84j:34054**
- Zharov, M. I. Universal constants in the theory of relaxation vibrations. (Russian) **84i:34071**
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- Burgan, J. R. See Besnard, D.; et al., (84h:70021)
- Callias, Constantine J. The heat equation with singular coefficients. I. Operators of the form $-d^2/dx^2 + \kappa/x^2$ in dimension 1. (84m:58136)
- Chanturiya, T. A. Asymptotic properties of the solutions of certain classes of nonautonomous ordinary differential equations. (Russian) (84c:34043)
- Deakin, A. S. Generalized asymptotic matching principle. (84g:34096)
- Dragan, Vasile Asymptotic expansions for singularly perturbed differential matrix Riccati equations with applications to linear-quadratic optimization problems. (84h:49054)
- Edelson, Allan L. (with Kreith, Kurt) Nonlinear relationships between oscillation and asymptotic behavior. (84i:34034)
- Ermentrout, G. B. Asymptotic behavior of stationary homogeneous neuronal nets. (84j:92020)
- Feix, M. R. See Besnard, D.; et al., (84h:70021)
- Fijalkow, E. See Besnard, D.; et al., (84h:70021)
- Gopalsamy, K. Limit cycles in periodically perturbed population systems. (84c:92049)
- Gorelova, E. Ya. (with Strygin, V. V.) On the question of the asymptotic behavior of the fundamental matrix of a singularly perturbed system with periodic coefficients on the half axis. (Russian) (84c:34075)
- Gracheva, G. S. Asymptotic representation of the solution of a linear differential equation with a closed principal part. (Russian) (84g:34108)
- Gubin, Yu. P. The regularization method and solvability in the large of truncated equations of the averaging method. (Russian) (84h:34070)
- Gurtin, Morton E. (with MacCamy, Richard C.) Product solutions and asymptotic behavior for age-dependent, dispersing populations. (84f:92036)
- Hadid, S. B. Estimates for solutions of fourth-order differential equations with complex-valued coefficients. (Arabic summary) (84m:34024)
- Kadomtseva, A. F. Asymptotic behavior of the fundamental matrix of solutions of a linear system of differential equations in the presence of turning points. (Russian) (84c:34080)
- Kalas, Josef Asymptotic properties of the solutions of the equation $z'' = f(t, z)$ with a complex-valued function f . (84c:34007)
- Karasheva, K. Asymptotic behavior with respect to a large parameter for a second-order differential equation with retarded argument with point transfer. (Russian) (84c:34104)
- Kohno, Mitsuhiro (with Ohkouchi, Shigemi) Generalized hypergeometric equations of non-Fuchsian type. (84f:34007)
- Kovalevskii, M. A. Construction of Stokes multipliers for an equation with two singular points. (Russian. English summary) (84c:34008)
- Kreith, Kurt See Edelson, Allan L., (84i:34034)
- Lamberti, L. (with Vernole, Paola) An age structured epidemic model. Asymptotic behaviour. (84f:92044)
- Li, Li The boundedness and asymptotic behavior of solutions of differential system of second-order with variable coefficients. (84i:34040)
- Lomov, S. A. Analytical solutions of singularly perturbed problems. (Russian) (84f:34083)
- See also Bobodzhonov, A. A., (84c:34083)
- MacCamy, Richard C. See Gurtin, Morton E., (84f:92036)
- Marini, Mauro (with Zezza, Pierluigi) Oscillation and asymptotic behavior of second-order nonlinear differential equations. (Italian) (See **84a:34003**)
- Miloserdova, I. V. (with Potapov, A. I.) Parametric instability of systems described by first-order differential-difference equations. (Russian) (84i:34090)
- Mitidieri, Enzo Asymptotic behaviour of some second order evolution equations. (84d:34063)
- Mitropol'skii, Yu. A. (with Skripnik, A. I.) The problem of constructing asymptotic solutions in nonlinear mechanics. (Russian. English summary) (84h:70030)
- Munier, A. See Besnard, D.; et al., (84h:70021)
- Ohkouchi, Shigemi See Kohno, Mitsuhiro, (84f:34007)
- Paris, R. B. (with Wood, A. D.) On the L^2 nature of solutions of n th order symmetric differential equations and McLeod's conjecture. (84f:34039)
- Potapov, A. I. See Miloserdova, I. V., (84i:34090)
- Potapov, M. L. An expansion formula for a spectral problem with boundary conditions containing derivatives of higher order than the equation. (Russian) (84c:34037)
- Sinay, L. R. Stability boundaries in the elliptic restricted three-body problem. II. Quasiperiodic solutions. (Portuguese summary) (84h:70014)
- Skripnik, A. I. See Mitropol'skii, Yu. A., (84h:70030)
- Strygin, V. V. See Gorelova, E. Ya., (84m:34069)
- Vernole, Paola See Lamberti, L., (84f:92044)
- Wood, A. D. See Paris, R. B., (84f:34039)
- Wray, S. D. Absolutely convergent expansions associated with a boundary value problem with the eigenvalue parameter contained in one boundary condition. (84c:34039)
- Zeza, Pierluigi See Marini, Mauro, (See **84a:34003**)

- Zhautykov, O. A. Dichotomy and asymptotic behaviour of solutions of differential equations. (84j:34042)
- Zyukin, P. N. Asymptotic representation of the solution of a singularly perturbed equation in a Banach space. (Russian) (84m:34089)

34E10 Perturbations

- Brown, David E. See Sherman, Thomas L., 84b:34076
- Georgiou, D. A. Generalized asymptotic equivalence of functionally perturbed nonlinear ordinary differential equations. 84b:34083
- Hartman, Philip Asymptotic integration of ordinary differential equations. 84m:34071
- Ivanov, V. A. (with Kiosa, M. N.; Mironov, S. V.) Construction of perturbed solutions of multifrequency systems of differential equations by means of a discrete analogue of the Fourier transform. (Russian) 84j:34055
- Kastritsa, O. A. Extremal deviations of solutions under bounded perturbations of a linear system. (Russian) 84g:34095
- Kiosa, M. N. See Ivanov, V. A.; et al., 84j:34055
- Konet, I. M. Formal integral matrices of systems of second-order linear differential equations with a small parameter multiplying the derivative. (Russian. English summary) 84b:34075
- Mickens, Ronald E. A regular perturbation technique for nonlinearly coupled oscillators in resonance. 84b:34084
- Mironov, S. V. See Ivanov, V. A.; et al., 84j:34055
- Sherman, Thomas L. (with Brown, David E.) Asymptotic behavior of solutions to perturbed linear differential equations. 84b:34076
- Zadunaisky, Pedro E. On the estimation of small perturbations in ordinary differential equations. 84j:34056

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- Alymkulov, K. A. The Lighthill problem for a perturbed differential equation with an irregular singular point. (Russian) (84j:34052)
- Bajaj, A. K. Bifurcating periodic solutions in rotationally symmetric systems. (84e:58045)
- Blot, Joël Méthodes asymptotiques dans l'étude de systèmes hamiltoniens non autonomes. (English summary) [Asymptotic methods in the study of nonautonomous Hamiltonian systems] (84m:34043)
- Bragg, L. R. Perturbations associated with hypergeometric Cauchy problems. (84j:34061)
- Chernyshov, K. I. See Krein, S. G., (84m:34086)
- Deif, Assem S. Nondiagonal systems under small perturbations. (German summary) (84m:15008)
- Garay, B. M. On controllably periodic perturbations of autonomous functional-differential equations. (84b:34109)
- Gubin, Yu. P. Point resonance in a Duffing-type oscillator. (Russian) (84c:34048)
- Howland, Robert A., Jr. A quadratic transformation technique for the solution of nonlinear systems. (84b:34061)
- Isaacson, David Large coupling behavior of the energy eigenvalues of two anharmonic oscillators. (84j:81032)
- Krein, S. G. (with Chernyshov, K. I.) Analogue of Tikhonov's theorem for the equation $(A + \varepsilon B)\dot{x} = C(x)x$. (Russian) (84m:34086)
- Pokrovskii, A. N. Bifurcation of solutions of a singular degenerate system of ordinary differential equations in the neighborhood of a separation surface. (Russian) (See 84c:34002)
- Pozner, A. Ya. Stokes constants for the Schrödinger equation with polynomial potential. (Russian. English summary) (84m:81055)
- Skrjpnik, V. P. A degenerating parameter and degenerate linear equations. (Russian) (84c:34013)
- Turyn, Lawrence Perturbations of periodic boundary conditions. (See 84b:34002)
- Xanthopoulos, B. C. Metric and electromagnetic perturbations of the Reissner-Nordström black hole. (84e:83014)
- Zhou, Huan Wen A perturbation method in nonlinear oscillations. (Chinese. English summary) (84h:70028)
- Zubova, S. P. On the Cauchy problem for a differential equation with a singular perturbation in a Banach space. (Russian) (84c:34091)
- Zyukin, P. N. Dependence of the solutions of a perturbed degenerate equation on the parameter. (Russian) (84m:34088)
- Asymptotic representation of the solution of a singularly perturbed equation in a Banach space. (Russian) (84m:34089)

34E15 Singular perturbations, general theory

- Alybaev, K. S. See Karimov, S., 84c:34082
- Argemí, José Approche qualitative d'un problème de perturbations singulières dans \mathbb{R}^n . [Qualitative approach to a problem of singular perturbations in \mathbb{R}^n] (See 84c:34003)
- Bagirova, N. Kh. Asymptotic solution of boundary value problems for singularly perturbed systems losing solution uniqueness when degenerate. (Russian. English and Azerbaijani summaries) 84m:34072
- Borзов, V. I. Estimation of the value of a small parameter in a linear singularly perturbed system of differential equations. (Russian. English summary) 84b:34085
- Cartier, Pierre Perturbations singulières des équations différentielles ordinaires et analyse non-standard. [Singular perturbations of ordinary differential equations and nonstandard analysis] 84c:34072
- Chernyshov, K. I. See Krein, S. G., 84c:34084
- Cobb, Daniel On the solutions of linear differential equations with singular coefficients. 84c:34056
- Deakin, A. S. Generalized asymptotic matching principle. 84g:34096
- Deshpande, M. A. (with Kasture, D. Y.) Two-point boundary value problems inimical to singular perturbation theory. 84b:34086
- Donaldson, James A. Singular perturbation theory and abstract operator differential equations. (See 84d:47002)

- Drăgan, Vasile (with Halanay, Aristide) Singular perturbations with several parameters. (See 84i:00016)
- Finden, W. F. An asymptotic approximation for singular perturbations. 84b:34077
- Gorelova, E. Ya. (with Strygin, V. V.) On the question of the asymptotic behavior of the fundamental matrix of a singularly perturbed system with periodic coefficients on the half axis. (Russian) 84c:34075
- Halanay, Aristide See Drăgan, Vasile, (See 84i:00016)
- Howes, F. A. Differential inequality techniques and singular perturbations. 84i:34078
- The asymptotic analysis of boundary value problems by the method of order reduction. 84m:34073
- Ishii, Hiroyuki About some singular perturbation problems. 84b:34061
- Karimov, S. (with Alybaev, K. S.) Uniform approximations to solutions of a system of differential equations with a small parameter multiplying the derivatives. (Russian) 84c:34082
- Kassov, D. R. A note on asymptotic methods for jump phenomena. 84j:34057
- Kasture, D. Y. See Deshpande, M. A., 84b:34086
- Kasymov, K. A. Estimate of solutions of a problem with initial jump for nonlinear differential equations in the case of exponential growth. (Russian. Kazakh summary) 84m:34074
- Estimates of solutions of a problem with an initial jump for nonlinear differential equations in the case of power growth. (Russian. Kazakh summary) 84m:34075
- Kelley, Walter G. Boundary value problems for pairs of second order equations containing a small parameter. 84c:34083
- Konet, I. M. Asymptotic expansions of fundamental matrices of linear systems of second-order differential equations containing a parameter. (Russian) 84d:34057
- See also Shkil', N. I., 84g:34098
- Konyser, Yu. A. Development of the regularization method for the solution of initial and boundary value problems with a polynomial singularity. (Russian) 84f:34079
- Krein, S. G. (with Chernyshov, K. I.) Behavior of solutions of general linear systems depending meromorphically on a small parameter. (Russian) 84c:34084
- Lange, Charles G. On spurious solutions of singular perturbation problems. 84c:34076
- Lefevre, Anne-Marie Perturbation singulière pour un problème aux limites non linéaire à solutions multiples. (English summary) [Singular perturbation for a nonlinear boundary value problem with multiple solutions] 84d:34058
- Liu, Xing Quan Periodic solutions of a class of singularly perturbed systems. (Chinese. English summary) 84b:34078
- Lobry, C. (with Mazat, F.) On the solutions of some differential equation in \mathbb{R}^3 with small parameter. (See 84i:92005)
- Lomov, S. A. (with Yudina, A. S.) Structure of the fundamental system of solutions of a singularly perturbed equation with a regular singular point. (Russian) 84c:34085
- Weak convergence of solutions of singularly perturbed problems to limit solutions. (Russian) 84c:34077
- Some questions of ordinary convergence of asymptotic approximations. (Russian) 84c:34078
- Lutz, Robert (with Sari, Tewfik) Applications of nonstandard analysis to boundary value problems in singular perturbation theory. 84c:34057
- Mazat, F. See Lobry, C., (See 84i:92005)
- Meyer, Richard E. Wave reflection and quaresonance. 84j:34058
- (with Painter, J. F.) Irregular points of modulation. 84g:34097
- Painter, J. F. See Meyer, Richard E., 84g:34097
- Raschepkina, N. A. Asymptotic integration of a boundary value problem when the nature of the spectrum changes. (Russian) 84c:34086
- Roberts, S. M. The analytical and approximate solutions of $\varepsilon y'' = y y'$. 84m:34076
- Ryzhikh, A. D. Asymptotic behavior of the solution of a problem containing rapidly oscillating coefficients with nonzero initial argument. (Russian) 84m:34077
- The regularization method for equations with a rapidly oscillating right-hand side. (Russian) 84c:34073
- Asymptotic integral equations in a Banach space. (Russian) 84i:34074
- Sari, Tewfik See Lutz, Robert, 84c:34057
- Shkil', N. I. (with Konet, I. M.) On the question of eigenvalues of a boundary value problem for a system of second-order linear differential equations with a small parameter multiplying the derivative of fractional rank. (Russian) 84g:34098
- Skrjpnik, V. P. On a degenerate parameter. (Russian) 84b:34079
- Strygin, V. V. See Gorelova, E. Ya., 84c:34075
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- Yudina, A. S. See Lomov, S. A., 84c:34085

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- Bykova, E. Ya. Periodic solutions of loaded systems of differential equations. (Russian) (84j:34033)
- Campbell, Stephen L. ★ Singular systems of differential equations. II. (84b:34001)
- Chentsova, N. N. Investigation of a model system of quasistochastic relaxation oscillations. (Russian) (84d:58053)
- Cherevko, I. M. See Fodchuk, V. I., (84b:34098)
- Drăgan, Vasile (with Halanay, Aristide) Stability problems for synchronous machines by singular perturbation methods. (84c:93040)
- Felgenhauer, Andreas Verbindungsregeln (matching rules) für Projektoren in linearen Räumen. (English and Russian summaries) [Matching rules for projectors in linear spaces] (84g:41028)
- Fodchuk, V. I. (with Cherevko, I. M.) On the theory of integral manifolds of singularly perturbed differential-difference equations. (Russian) (84b:34098)
- Frank, Leonid S. (with Wendt, W. D.) Coercive singular perturbations: reduction and convergence. (84b:47030)

- Halanay, Aristotle. See Dragan, Vanile, (84c:93040)
- van Harten, Aart. Applications of singular perturbation techniques to combustion theory. (84i:80010)
- Hemker, P. W. Numerical aspects of singular perturbation problems. (84i:65069)
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- Kress, Rainer. A singular perturbation problem for linear operators with an application to the limiting behaviour of stationary electromagnetic wave fields for small frequencies. (84j:78032)
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- Kurnetsov, V. A. Asymptotic behavior of the solutions of singularly perturbed problems in the investigation of systems of equations of zymotic kinetics. (Russian) (84d:92033a)
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- Liseikin, V. D. Numerical solution of a second-order ordinary differential equation with a small parameter multiplying the highest derivative. (Russian) (84c:65097)
- Mahony, J. J. (with Shepherd, J. J.) Stiff systems of ordinary differential equations. I. Completely stiff, homogeneous systems. (84c:65072a)
- (with Shepherd, J. J.) Stiff systems of ordinary differential equations. II. Boundary value problems for completely stiff systems. (84c:65072b)
- (with Shepherd, J. J.) Stiff systems of ordinary differential equations. III. Partially stiff systems. (84c:65072c)
- Niederreick, Klaus. (with Yserentant, Harry) Die gleichmäßige Stabilität singular gestörter diskreter und kontinuierlicher Randwertprobleme. (English summary) [The uniform stability of singularly perturbed discrete and continuous boundary value problems] (84j:65049)
- Parter, Seymour V. On the swirling flow between rotating coaxial disks: a survey. (84i:76032)
- Sazonov, V. V. Periodic solutions of differential equations containing a large parameter. (Russian) (84j:34036)
- Shepherd, J. J. See Mahony, J. J., (84c:65072a); (84c:65072b) and (84c:65072c)
- Shishkin, G. I. Numerical solution of differential equations with a small parameter multiplying the highest derivatives. (Russian) (84c:65079)
- Shyryev, B. M. The asymptotic method in the theory of periodic solutions for evolution equations of parabolic type. (Russian) (84m:34054)
- Sobolev, V. A. On the theory of integral manifolds of systems of singularly perturbed equations. (Russian) (84i:34066)
- Surla, Katarina. Analysis of a difference method for ordinary differential equations with a small parameter. (Serbo-Croatian) (84g:65106)
- Tobiska, Lutz. Diskretisierungsverfahren zur Lösung singular gestörter Randwertprobleme. (English and Russian summaries) [Discretization methods for the solution of singularly perturbed boundary value problems] (84g:65107)
- Wendt, W. D. See Frank, Leonid S., (84b:47030)
- Wu, Qi Guang. The finite element scheme for ordinary differential equation with small parameter. (84g:65112)
- Yserentant, Harry. See Niederreick, Klaus, (84j:65049)

34E20 Singular perturbations, turning point theory, WKB-methods

- Berk, H. L. (with Nevins, William McCay; Roberts, K. V.) New Stokes' line in WKB theory. 84i:34075
- Bujurke, N. M. See Singh, Mahendra Pal; et al., 84m:34078
- Flaherty, Joseph E. (with O'Malley, Robert E., Jr.) Singularly perturbed boundary value problems for nonlinear systems, including a challenging problem for a nonlinear beam. 84c:34058
- Gupta, J. L. See Singh, Mahendra Pal; et al., 84m:34078
- Herceg, Dragoslav. A uniformly convergent scheme with quasicontant fitting factors. (Serbo-Croatian summary) 84b:34080
- Johnston, George L. Langer's method for weakly bound states of the Helmholtz equation with symmetric profiles. 84d:34059
- Kadomtseva, A. F. Asymptotic behavior of the fundamental matrix of solutions of a linear system of differential equations in the presence of turning points. (Russian) 84f:34080
- Kiryakova, V. S. An explanation of Stokes phenomenon by the method of transmutations. (See 84c:34002)
- Meyer, Richard E. (with Painter, J. F.) On the Schroedinger connection. 84c:34079
- Nevins, William McCay. See Berk, H. L.; et al., 84i:34075
- Ohkouchi, Shigemi. On full uniform simplification of odd order linear differential equations with a parameter. 84i:34076a
- Simplification of Airy type turning point problems. 84i:34076b
- A formal reduction at a turning point. 84i:34076c
- O'Malley, Robert E., Jr. See Flaherty, Joseph E., 84c:34058
- Painter, J. F. See Meyer, Richard E., 84c:34079
- Roberts, K. V. See Berk, H. L.; et al., 84i:34075
- Singh, Mahendra Pal (with Gupta, J. L.; Bujurke, N. M.) On singular perturbation problems in quantum mechanics. 84m:34078
- Voros, André. ★Spectre de l'équation de Schrödinger et méthode BKW. (French) [Spectrum of the Schrödinger equation and the BKW method] 84c:34080

secondary classifications:

- Chin, R. C. Y. (with Krasny, R.) A hybrid asymptotic-finite element method for stiff two-point boundary value problems. (84c:65064)
- Dammert, Orjan. Transmission through a system of potential barriers. I. Transmission coefficient. (84j:81119)
- (Demidov, G. V.) See Doolan, E. P.; et al., (84i:65003)
- Doolan, E. P. (with Miller, John J. H.; Schilders, W. H. A.) ★Равномерные численные методы решения задач с пограничными слоями. (Russian) [Uniform numerical methods for solving problems with a boundary layer] (84i:65003)

- Hemker, P. W. The use of defect correction for the solution of a singularly perturbed O.D.E. (See 84c:65012)
- Hosono, Yuzo. (with Mimura, Masayasu) Singular perturbations for pairs of two-point boundary value problems of Neumann type. (84b:35022)
- Krasny, R. See Chin, R. C. Y., (84c:65064)
- Lorenz, Jens. Nonlinear boundary value problems with turning points and properties of difference schemes. (84a:34025)
- Numerical solution of a singular perturbation problem with turning points. (84m:65090)
- Mansour, H. M. M. (with Müller-Kirsten, H. J. W.) Perturbative technique as an alternative to the WKB method applied to the double-well potential. (84b:81029)
- Meyer, Richard E. Wave reflection and quasisresonance. (84j:34058)
- Miller, John J. H. See Doolan, E. P.; et al., (84i:65003)
- Mimura, Masayasu. See Hosono, Yuzo, (84b:35022)
- Müller-Kirsten, H. J. W. See Mansour, H. M. M., (84b:81029)
- Schilders, W. H. A. See Doolan, E. P.; et al., (84i:65003)
- Trigub, V. N. Self-similar solutions of the equations of a boundary layer on a moving surface. (Russian) (84i:76035)
- Wasow, Wolfgang. The origins of turning point theory. (See 84m:01001)
- (Yanenko, N. N.) See Doolan, E. P.; et al., (84i:65003)
- Zeman, Jiří. Zur asymptotischen Integration der Differentialgleichung $y'' + q(t)y = 0$. (Russian and Czech summaries) [On the asymptotic integration of the differential equation $y'' + q(t)y = 0$] (84j:34054)

34E99 None of the above, but in this section

- Dilibik, Josef. Asymptotic behavior of solutions of a system of differential equations near a singular point. (Russian) 84g:34099
- Juricic, Henri. Loi asymptotique des coefficients de Fourier des solutions périodiques des équations du type $d^2Z/dz^2 + Z^3 = p(z)$. [Asymptotic law of Fourier coefficients of the periodic solutions of equations of type $d^2Z/dz^2 + Z^3 = p(z)$] 84d:34060

secondary classifications:

- Beraha, S. (with Kahane, Joseph; Weiss, N. J.) Asymptotic behaviour of solutions of linear differential equations with a complex parameter. (84a:34014)
- Herceg, Dragoslav. (with Vulanović, Relja) Some finite-difference schemes for a singular perturbation problem on a nonuniform mesh. (Serbo-Croatian summary) (84f:65058)
- Kahane, Joseph. See Beraha, S.; et al., (84a:34014)
- Kalas, Josef. On the asymptotic behaviour of the equation $dz/dt = f(t, z)$ with a complex-valued function f . (84f:34053)
- Levitani, B. M. The evolution of Bloch's solution by virtue of the higher Korteweg-de Vries equations. (Russian. English summary) (84f:34025)
- Vulanović, Relja. See Herceg, Dragoslav, (84f:65058)
- Weiss, N. J. See Beraha, S.; et al., (84a:34014)

34F05 Equations and systems with randomness [See also 60H10, 93Exx.]

- Banai, N. See Brenig, L., 84d:34061
- Baras, F. (with Malek-Mansour, M.; Van den Broeck, C.) Asymptotic properties of coupled nonlinear Langevin equations in the limit of weak noise. II. Transition to a limit cycle. 84b:34081b
- See also Van den Broeck, C.; et al., 84b:34081a
- Bécs, Georges A. Systems of random ordinary differential equation. 84j:34059
- Bochkov, G. N. (with Dubkov, A. A.) Functional statistical analysis of non-Gaussian parametric systems. I. 84g:34100
- Boyce, William E. (with Xia, Ning Mao) The approach to normality of the solutions of random boundary and eigenvalue problems with weakly correlated coefficients. 84j:34060
- See also Xia, Ning Mao, 84m:34080
- Brachman, Stanislaw. (with Szopa, Romuald) Application of the statistical linearization method to a second-order nonlinear stochastic differential equation. (Polish. English and Russian summaries) 84c:34087
- Brenig, L. (with Banai, N.) Nonlinear dynamics of systems coupled with external noise: some exact results. 84d:34061
- Dubkov, A. A. See Bochkov, G. N., 84g:34100
- Kolomiets', V. G. (with Rybachok, A. V.) Motion of a quasilinear harmonic oscillator under the action of vector "white noise". (Russian) 84i:34077
- Korovina, V. E. Existence of limit cycles in certain differential-stochastic equations. (Russian) 84m:34079
- Malek-Mansour, M. See Van den Broeck, C.; et al., 84b:34081a and Baras, F.; et al., 84b:34081b
- Molchanov, S. A. The local structure of the spectrum of a random one-dimensional Schrödinger operator. (Russian. English summary) 84c:34081
- Nguyen Dong An. On the question of the solution of the Fokker-Planck-Kolmogorov equation for nonautonomous systems that are subject to periodic and random actions. (Russian) 84a:34059
- Rybachok, A. V. See Kolomiets', V. G., 84i:34077
- Szopa, Romuald. See Brachman, Stanislaw, 84c:34087
- Tran Van Nhung. Stability of periodic solutions of ordinary differential equations with random parameters. 84f:34081
- Van den Broeck, C. (with Malek-Mansour, M.; Baras, F.) Asymptotic properties of coupled nonlinear Langevin equations in the limit of weak noise. I. Cusp bifurcation. 84b:34081a
- See also Baras, F.; et al., 84b:34081b
- Xia, Ning Mao. (with Boyce, William E.) Two-point boundary value problems containing a finite number of random variables. 84m:34080
- See also Boyce, William E., 84j:34060

Yasinskaya, L. I. Stability of a trivial solution of functional-differential systems with respect to perturbations of their parameters. (Ukrainian. Russian summary) **84m:34081**

secondary classifications:

- Acharya, S. K. See Mishra, M. N., (84e:60114)
- Adomian, G. (with Sibul, L. H.; Rach, R.) Coupled nonlinear stochastic differential equations. (84f:34015)
- (with Rach, R.) Nonlinear stochastic differential delay equations. (84j:60066)
- Antonov, I. L. (with Mikhailov, N. I.) The behavior of phase trajectories of a linear oscillator excited by a stationary normal random force. (Russian. English summary) (84i:70033)
- Arnold, Ludwig (with Crauel, H.; Wihstutz, Volker) Stabilization of linear systems by noise. (84g:93080)
- Borówko, Piotr On the stability of solutions of differential equations with random retarded argument. (Russian and Polish summaries) (84g:34124)
- Chow, Pao Liu Stability of nonlinear stochastic-evolution equations. (84h:60111)
- See also Multiple scattering and waves in random media, (84c:78001)
- Crauel, H. See Arnold, Ludwig; et al., (84g:93080)
- Da Prato, Giuseppe Regularity results of a convolution stochastic integral and applications to parabolic stochastic equations in a Hilbert space. (84g:60096)
- (with Iannelli, Mimmo; Tubaro, Luciano) An existence result for a linear abstract stochastic equation in Hilbert spaces. (84d:60094)
- De Biasi, Francesco S. (with Myjak, Józef) Random differential equations on closed subsets of a Banach space. (84c:34095)
- Demenin, A. N. Investigation of functionals of solutions of linear differential equations with random coefficients. (Russian) (84h:60112)
- Dörfler, M. (with Graham, Robert) Probability density of the Lorenz model. (84i:58077)
- Dubko, V. A. Decreasing the order of a system of stochastic differential equations and some models of a diffusion phenomenon. (Russian) (84h:60099)
- Fufaev, N. A. See Neimark, Yu. I., (84j:58071)
- Gikhman, I. I. (with Skorokhod, A. V.) ★Стохастические дифференциальные уравнения и их приложения. (Russian) [Stochastic differential equations and their applications] (84j:60003)
- Gikhman, I. I. Weak solutions of stochastic differential equations with a strong nonlinearity. (Russian) (84k:60078)
- Gong, Guang Lu (with Qian, Min Ping) The reversibility of the nonminimal Markov processes induced by a second-order differential operator. (Chinese) (84c:60114)
- Graham, Robert See Dörfler, M., (84i:58077)
- Grigor'eva, O. V. Systems of comparison associated to stochastic differential equations. (Russian) (84g:60090)
- Hanggi, Peter See Ryter, Dietrich; et al., (84d:70038)
- Iannelli, Mimmo See Da Prato, Giuseppe; et al., (84d:60094)
- Ibrahim, R. A. (with Soundararajan, A.) Nonlinear parametric liquid sloshing under wide band random excitation. (84k:76039)
- Ichikawa, Akira Stability of semilinear stochastic evolution equations. (84g:60091)
- Ikeda, Nobuyuki (with Watanabe, Shinzo) ★Stochastic differential equations and diffusion processes. (84h:60080)
- Illner, Reinhard (with Wick, Joachim) Statistical solutions of differential equations with nonuniquely solvable Cauchy problems. (84h:35136)
- Isakova, T. I. Existence of a solution of a stochastic differential equation with irregular coefficients. (Russian. English summary) (84i:60074)
- Stochastic differential equations with nonregular coefficients. (Russian) (84c:60087)
- Iwano, Masahiro On a general solution of a nonlinear n -system of the form $x^2 dy/dx = (I_n(\mu) + x I_n(\alpha))y + xf(x, y)$ with a constant diagonal matrix $I_n(\mu)$ of signature $(m, n-m)$. (84f:34006)
- Kalnynya, D. A. The averaging principle for stochastic difference systems. (Russian) (84g:60101)
- K'eu The Dyk See Nguyen Dong An', (84c:70020)
- Khrisanov, S. M. On the mean square theory of the generalized Hill equation. (Russian) (84d:34020)
- (Kohler, Werner E.) See Multiple scattering and waves in random media, (84c:78001)
- Kozobrod, V. N. Random periodically distributed solutions of differential equations. (Russian. Tajiki summary) (84g:60103)
- Lambiris, Menelaos The stochastic harmonic oscillator with linear damping. (84i:70034)
- Matkovsky, Bernard J. (with Schuss, Zeev; Tier, Charles) Diffusion across characteristic boundaries with critical points. (84j:60072)
- Meidan, Reuven See Pels, L. M., (84c:60090)
- Mikhailov, N. I. See Antonov, I. L., (84i:70033)
- Mil'shtein, G. N. Quadratic Lyapunov functionals and second moments for stochastic systems with aftereffect. (Russian. English summary) (84i:60076)
- Mishra, M. N. (with Acharya, S. K.) An estimate of the hitting probability in diffusion processes. (84c:60114)
- Mohammed, S. E. A. The infinitesimal generator of a stochastic functional-differential equation. (84g:34119)
- Moss, Frank (with Welland, G. V.) Equilibrium strength at the deterministic limit of a stochastic model for bistable systems. (84i:60077)
- Myjak, Józef See De Biasi, Francesco S., (84c:34095)
- Narita, Kiyomasa On explosions of solutions of stochastic differential equations. (Japanese) (84c:60084)
- No explosion criteria for stochastic differential equations. (84d:60085)
- Neimark, Yu. I. (with Fufaev, N. A.) The method of point mappings and its application to the study of dynamical systems. (Russian. English summary) (84j:58071)
- Nguyen Dong An' (with K'eu The Dyk) Solution of the Fokker-Planck-Kolmogorov equation for the van der Pol system subject to periodic and random actions. (Russian) (84c:70020)
- (Papanicolaou, George C.) See Multiple scattering and waves in random media, (84c:78001)

- Pels, L. M. (with Meidan, Reuven) On the solution of stochastic differential and integral equations using an L_p calculus and a stochastic Green's formula. (84c:60090)
- Petrov, I. B. The limit behavior of solutions of stochastic differential equations of diffusion type in three-dimensional space. (Russian) (84a:60068)
- Pistone, Giovanni Computation of the probability density of the distribution of the solution of an ordinary differential equation with random parameter and related results. (84d:60091)
- Pokotilo, V. G. Asymptotic properties of minimax estimates under random perturbations. (Russian) (84c:93056)
- Pugliese, A. Stability for linear stochastic differential equations in Hilbert space. (84h:60113)
- Qian, Min Ping See Gong, Guang Lu, (84c:60114)
- Rach, R. See Adomian, G.; et al., (84f:34015) and (84j:60066)
- Ryter, Dietrich (with Talkner, Peter; Hanggi, Peter) Rate of phase slips of a driven van der Pol oscillator at low noise. (84d:70038)
- Schuss, Zeev See Matkovsky, Bernard J.; et al., (84j:60072)
- Sibul, L. H. See Adomian, G.; et al., (84f:34015)
- Skorokhod, A. V. See Gikhman, I. I., (84j:60003)
- Soundararajan, A. See Ibrahim, R. A., (84k:76039)
- Talay, Denis Convergence, pour chaque trajectoire, d'un schéma d'approximation des E.D.S. (English summary) [Convergence for each trajectory of an approximation scheme of S.D.E.] (84g:65174)
- Talkner, Peter See Ryter, Dietrich; et al., (84d:70038)
- Thompson, Mark The state density for second order ordinary differential equations with white Gaussian noise potential. (Italian summary) (84i:60080)
- Tier, Charles See Matkovsky, Bernard J.; et al., (84j:60072)
- Tikhov, M. S. On the sequential estimation of the drift coefficient of a diffusion type process with quadratic and nonquadratic loss functions. (Russian. English summary) (84c:62106)
- Tran Van Nhung Über das asymptotische Verhalten von Lösungen gewöhnlicher asymptotisch periodischer Differentialgleichungen mit zufälligen Parametern. [On the asymptotic behavior of solutions of ordinary asymptotically periodic differential equations with random parameters] (84j:60067)
- Über Lösungen asymptotisch periodischer stochastischer Systeme. [On solutions of asymptotically periodic stochastic systems] (84c:60081)
- An application of Lyapunov's exponent method to the moment stability problem. (84d:60072)
- Tubaro, Luciano Regularity results of the process $X(t) = \int_0^t U(t,s)g(s)dW_s$. (84h:60120)
- On abstract stochastic differential equation in Hilbert spaces with dissipative drift. (84c:60069)
- See also Da Prato, Giuseppe; et al., (84d:60094)
- Watanabe, Shinzo See Ikeda, Nobuyuki, (84h:60080)
- Welland, G. V. See Moss, Frank, (84i:60077)
- Wick, Joachim See Illner, Reinhard, (84h:35136)
- Wihstutz, Volker See Arnold, Ludwig; et al., (84g:93080)
- Wicksburg, Va. ★Multiple scattering and waves in random media. (84c:78001)
- Multiple scattering and waves in random media ★Multiple scattering and waves in random media. (84c:78001)
- Workshop:
- U.S. Army, Multiple Scattering and Waves in Random Media ★Multiple scattering and waves in random media. (84c:78001)

34Gxx Differential equations in abstract spaces [See also 58D25.]

34G10 Linear equations [See also 47Axx, 47Bxx, 47D05.]

- Abudor, A. A. The Green function of a higher-order operator-differential equation with boundary conditions. (Russian. English and Azerbaijani summaries) (84k:34062)
- Alibekov, Kh. A. A splitting method for evolution problems. (Russian) (84m:34082)
- Atanbaev, S. A. A method of regularization of the ill-posed Cauchy problem for an evolution equation. (Russian) (84c:34082)
- Bernardi, Marco Luigi Second order abstract differential equations with singular coefficients. (84b:34082)
- Bobodzhanov, A. A. (with Lomov, S. A.) Application of the spectral theory of operators for asymptotic integration of singularly perturbed problems. (Russian) (84c:34083)
- Botsenyuk, A. N. (with Pankov, A. A.) Some coupled systems of abstract differential equations of the thermoelasticity equation type. (Russian. English summary) (84c:34060)
- Bragg, L. R. Exceptional Cauchy problems and regular singular points. (84c:34084)
- Perturbations associated with hypergeometric Cauchy problems. (84j:34061)
- Bruk, V. M. Dissipative extensions of symmetric relations in a space of vector-valued functions. (Russian) (84h:34087)
- Burns, John A. (with Herdman, Terry L.; Stech, Harlan W.) Differential-boundary operators and associated neutral functional-differential equations. (84j:34062)
- Chernyshov, K. I. See Krein, S. G., (84m:34086)
- Coppoletta, Giuseppe Abstract singular evolution equations of "hyperbolic" type. (84m:34083)
- Dang Din' Tyau Generalized characteristic numbers of solutions of differential equations in a Banach space. (Russian) (84b:34083)
- Da Prato, Giuseppe Maximal regularity results for abstract differential equations in Banach spaces. (84c:34089)
- (with Sinestrari, Eugenio) Hölder regularity for nonautonomous abstract parabolic equations. (84j:34063)
- Dib, K. A. A simple generalization of one of Perron's theorems and applications. (84c:34088)
- Di Blasio, Gabriella L^p -regularity for solutions of nonautonomous parabolic equations in Hilbert spaces. (Italian summary) (84g:34101)
- Eidel'man, Yu. S. Two-point boundary value problem for a differential equation with a parameter. (Russian. English summary) (84i:34078)
- Éminov, M. S. See Maksudov, F. G., (84c:34087)

- Erbe, Lynn H. (with Lee, Sung J.) Operator part of infinite system of differential equations. **84d:34062**
- Garadzhiev, A. (with Orazov, M. B.) Conditions for damping of solutions and the radiation principle for a differential equation with operator coefficients on the half axis. (Russian) **84d:34063**
- Goldstein, Jerome A. Autocorrelation, equipartition of energy, and random evolutions. **84c:34089**
- Gorbachuk, M. L. See Vinnishin, Ya. F., **84j:34065**
- Greenberg, William (with van der Mee, C. V. M.) Abstract boundary value problems from kinetic theory. **84i:34079**
- Grosser, S. I. Linear systems of abstract differential equations and applications. (See **84c:34002**)
- Gzyl, Henryk On an abstract averaging theorem. (Spanish summary) **84c:34085**
- Haraux, Alain Behaviour at infinity for dissipative systems with forcing term in Hilbert space. **84m:34084**
- Herdman, Terry L. See Burns, John A.; et al., **84j:34062**
- Hermann, Leopold (with Vejvoda, Otto) Periodic and quasiperiodic solutions of abstract differential equations. **84b:34084**
- Iannelli, Mimmo Strong solutions to some evolution problems in Hilbert spaces. **84c:34086**
- Kerimov, K. R. A boundary value problem of Bitsadze-Samarskii type for a second-order elliptic equation with operator coefficients. (Russian. English and Azerbaijani summaries) **84f:34082**
- Klimesk, M. On the stability of solutions of differential equations in Banach spaces. **84b:34085**
- Kopaneva, V. I. A boundary value problem for a second-order differential equation in a Hilbert space. (Russian) **84m:34085**
- Kozherov, M. V. Normal bases of solutions of multidimensional linear differential equations. (Russian) **84g:34102**
- Krein, S. G. (with Chernyshov, K. I.) Analogue of Tikhonov's theorem for the equation $(A + \varepsilon B)\dot{x} = C(t)x$. (Russian) **84m:34086**
- Lee, Sung J. See Erbe, Lynn H., **84j:34062**
- Levchuk, V. V. Smooth maximally dissipative boundary value problems for a parabolic equation in a Hilbert space. (Russian) **84c:34064**
- Lewis, Jeff E. (with Parenti, Cesare) Abstract singular parabolic equations. **84b:34088** (with Parenti, Cesare) L^p -estimates for a singular hyperbolic equation. (See **84m:42002**)
- Li, Xun Jing An evolution equation in a Banach space. (Chinese. English summary) **84b:34086**
- Lomov, S. A. Analytical solutions of singularly perturbed problems. (Russian) **84f:34083** See also Bobodzhonov, A. A., **84c:34083**
- Makhsudov, F. G. (with Eminov, M. S.) Behavior at infinity of solutions of second-order ordinary operator-differential equations. (Russian. English and Azerbaijani summaries) **84c:34087**
- Mario, Mario Regularity of second-order linear differential equations in Hilbert spaces. (Italian) (See **84c:34003**)
- van der Mee, C. V. M. See Greenberg, William, **84i:34079**
- Megan, Mihail See Preda, Petre, **84b:34090**
- Mečnikova, I. V. The Cauchy problem for a second-order equation. (Russian) **84g:34103**
- Mitidieri, Enzo Asymptotic behaviour of some second order evolution equations. **84d:34063**
- Neidhardt, Hagen On abstract linear evolution equations. I. **84j:34064**
- N'Guérékata, Gaston Mandata Remarques sur les solutions presque-périodiques de l'équation $[(d/dt) - A]x = 0$. [Remarks on the almost-periodic solutions of the equation $[(d/dt) - A]x = 0$] **84b:34087**
- Orazov, M. B. See Garadzhiev, A., **84c:34063**
- Pankov, A. A. See Botsenyuk, A. N., **84c:34060**
- Parenti, Cesare See Lewis, Jeff E., **84b:34088** and (See **84m:42002**)
- Perov, A. I. (with Ta Kuang Khai; Tyurin, V. M.) Almost periodic solutions of linear differential equations. (Russian) **84f:34084**
- Pham Phu Hien Comportement asymptotique de solutions d'équations d'évolution, lorsque le second membre a une mesure asymptotique. (English summary) [Asymptotic behavior of solutions for evolution equations, when the second member has an asymptotic measure] **84c:34090**
- Piskarev, S. I. Compact convergence in the approximation of differential equations in a Banach space. (Russian. English summary) **84g:34104**
- Popescu, Nicolae N. (with Preda, Petre) Necessary and sufficient conditions for exponential dichotomies in Banach spaces. **84c:34088** Exponential dichotomies and Hermitian operators in Banach spaces. **84b:34088** Équations différentielles avec des coefficients hermitiens dans les espaces de Banach. [Differential equations with Hermite coefficients in Banach spaces] **84c:34061**
- Preda, Petre Équations différentielles linéaires, admissibilité et dichotomie exponentielle non uniforme. [Linear differential equations, admissibility and nonuniform exponential dichotomy] **84c:34062** (with Megan, Mihail) Nonuniform dichotomy of evolutionary processes in Banach spaces. **84b:34090** See also Popescu, Nicolae N., **84c:34088**
- Shirman, V. Ya. See Sklyar, G. M., **84f:34085**
- Sinestrari, Eugenio Hölder and little-Hölder regularity results for evolution equations of parabolic type. **84c:34063** See also Da Prato, Giuseppe, **84j:34063**
- Sklyar, G. M. (with Shirman, V. Ya.) Asymptotic stability of a linear differential equation in a Banach space. (Russian) **84f:34085**
- Slyusarchuk, V. E. The invertibility of almost periodic c -continuous functional operators. (Russian) **84b:34091**
- Stech, Harlan W. See Burns, John A.; et al., **84j:34062**
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- Aliev, R. G. An estimate of the characteristic exponent of an equation with retarded argument in Hilbert space by the freezing method. (Russian) **(84a:34084)**
- Borok, V. M. The Cauchy problem for finite-infinite systems of linear differential equations. (Russian) **(84g:34017)**
- (Browder, Felix E.) See Fattorini, Hector O., **(84g:34003)**
- Brown, Richard C. (with Tvrdý, Milan) Generalized boundary value problems with abstract side conditions and their adjoints. II. **(84f:47057)**
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- Colombeau, Jean-François (with Matos, Mário C.) Convolution equations in infinite dimensions: brief survey, new results and proofs. **(84m:46049)**
- Dobrushin, V. A. A general boundary value problem for an abstract operator-differential equation. (Russian. English summary) **(84m:35117)**
- Donaldson, James A. Singular perturbation theory and abstract operator differential equations. (See **84d:47002**)
- Dubois, R.-M. Problème de Cauchy en norme uniforme pour certains systèmes paraboliques dans des ouverts peu réguliers. [The Cauchy problem in the uniform norm for certain parabolic systems in not very regular open sets] **(84b:35077)**
- Emmanuele, Giovanni Convergence of successive approximations for implicit ordinary differential equations in Banach spaces. **(84c:34067)**
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- Gorbachuk, M. L. (with Kutovoi, V. A.) Resolvent comparability of some boundary value problems. (Russian) **(84b:47024)**
- Gorbachuk, V. I. (with Ribak, M. O.) Boundary value problems for the operator Sturm-Liouville equation with a spectral parameter in the equation and in the boundary condition. (Russian) **(84b:34047)**
- Gordeziani, D. G. An additive model for parabolic equations with mixed derivatives. (Russian) **(84i:35077)**
- Hill, James M. ★Solution of differential equations by means of one-parameter groups. **(84c:34002)**
- Hoppe, Ronald H. W. Discrete approximations of cosine operator functions. I. **(84g:65071)**
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- Ito, Yoshifumi On the abstract Cauchy problems in the sense of Fourier hyperfunctions. **(84j:46071a)** Fourier hyperfunction semigroups. **(84j:46071b)**
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- Zecca, Pierluigi See Zecca, Pietro, (See **84c:34003**)
- Zhang, Jin Yan Control equations for nonlinear differential equations with unbounded operators. I. The Banach space case. (Chinese) **84c:34101**

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- Aizicovici, Sergiu On the asymptotic behaviour of solutions of Volterra equations in Hilbert space. **(84c:45012)**
- Aliiev, Rashid Musa (with Bagirov, R. Yu.) Bounded solutions of integro-differential equations of neutral type. (Russian. English and Azerbaijani summaries) **(84g:34131)**
- Babin, A. V. (with Vishik, M. I.) Attractors of quasilinear parabolic equations. (Russian) **(84c:35078)**
- Bagirov, R. Yu. See Aliiev, Rashid Musa, **(84g:34131)**
- Banks, H. T. (with Kunisch, Karl) An approximation theory for nonlinear partial differential equations with applications to identification and control. **(84f:93019)**
- Boudourides, M. A. See De Blasi, Francesco S., **(84i:34059)**
- Busenberg, Stavros N. (with Travis, Curtis C.) A nonlinear semigroup whose generator is not dissipative. **(84c:47048)**
- Cristea, Mihai A note on global inversion theorems and applications to differential equations. **(84d:58006)**
- Czerwik, S. Random solutions of a system of functional-differential equations in a Banach space. **(84g:34132)**
- De Blasi, Francesco S. (with Boudourides, M. A.) Characteristic exponents and some applications to differential equations. **(84i:34059)**
- Dominguez Benavides, Tomás Generic existence of a nonempty compact set of fixed points. **(84i:47072)**
- Gaines, Robert E. (with Santanilla M., Jairo) A coincidence theorem in convex sets with applications to periodic solutions of ordinary differential equations. **(84c:47061)**
- Hill, James M. ★Solution of differential equations by means of one-parameter groups. **(84c:34002)**
- Invernizzi, Sergio On the solvability of some operator equations with angle-conditions. **(84c:47075)**
- Karakova, N. G. Local solvability of a Cauchy problem for a functional-differential equation of neutral type in a Banach space. (Russian. English summary) **(84c:34080)**
- Kisielewicz, Michał Generic properties of functional-differential equations of neutral type in separable Banach spaces. **(84c:34112)**
- Klincsik, M. On the stability of solutions of differential equations in Banach space by second general exponent. **(84c:34045)**
- Kobayasi, Kazuo See Miyadera, Isao, **(84c:47064)**
- Koz'mina, E. S. The Cauchy problem for a class of quasilinear equations of hyperbolic type. (Russian) **(84b:35074)**
- Krasnoborov, N. A. Behavior of solutions of a quasilinear operator-differential equation of parabolic type. (Russian) **(84b:35063)**
- Kunisch, Karl See Banks, H. T., **(84f:93019)**
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- Likhtarnikov, A. L. (with Yakubovich, V. A.) Abstract criteria for absolute stability of nonlinear systems with respect to the linear output and their applications. I. (Russian) **(84g:93065)**
- Lomov, S. A. See Valiev, M. A., **(84c:34055)**
- Loud, W. S. (with Vanderbauwhede, André) Functional dependence and boundary value problems with families of solutions. **(84f:58030)**
- Miyadera, Isao (with Kobayasi, Kazuo) On the asymptotic behaviour of almost-orbits of nonlinear contraction semigroups in Banach spaces. **(84c:47064)**
- Ötani, Mitsuharu Existence and asymptotic stability of strong solutions of nonlinear evolution equations with a difference term of subdifferentials. **(84d:35015)**
- Parker, G. Edgar Semigroup structure underlying evolutions. **(84c:47065)**
- Potier-Ferry, Michel The linearization principle for the stability of solutions of quasilinear parabolic equations. I. **(84j:35091)**
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- Rzepecki, Bogdan A note on some fixed point theorems. (Serbo-Croatian summary) **(84c:47055)**
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- Smiley, Michael W. An existence theorem for abstract nonlinear hyperbolic boundary value problems at resonance. **(84c:35109)**
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- De Blasi, Francesco S. (with Pianigiani, G.) A Baire category approach to the existence of solutions of multivalued differential equations in Banach spaces. **(84c:34019)**
- Kisielewicz, Michał Compactness and upper semicontinuity of solution set of generalized differential equation in separable Banach space. **(84c:34020)**
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- Blukhin, L. N. ★Оптимальные системы стабилизации. (Russian) [Optimal stabilization systems] **(84c:93030)**
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- Mansimov, K. B. (with Yagubov, M. A.) A method for obtaining multipoint conditions for optimality of singular controls in a problem of terminal control. (Russian) **(84c:93048)**
- Marsili-Libelli, Stefano See Gori-Giorgi, Claudio, (See **84c:92063**)
- Matthaus, Wolf-Gert Eine C^{-1} -Kollokationsmethode für Probleme der optimalen Steuerung mit nichtlinearen Randbedingungen. [A C^{-1} -collocation method for problems of optimal control with nonlinear boundary conditions] **(84h:65086)**
- Mitropol'skii, Yu. A. Integral manifolds in the theory of differential equations. **(84c:34070)**
- Moiseev, N. N. ★Математические задачи системного анализа. (Russian) [Mathematical problems of systems analysis] **(84c:93002)**
- Mordukhovich, B. Sh. On the duality principle in the theory of controllability and observability of functional-differential systems of neutral type. (Russian. English summary) **(84c:93011)**

- Mukherjee, R. N. See Chaudhuri, A. K., (84i:93069)
- Murphy, Lea F. See Gurtin, Morton E., (84g:92030)
- Nguyen Thanh Bang Picard's method for solving nonlinear two-point boundary value problem in optimal control theory. (Russian and Polish summaries) (84m:93052)
- Nistri, Paolo Periodic control problems for a class of nonlinear periodic differential systems. (84c:49002)
- Nussbaum, Roger D. Some remarks on a conjecture in parameter adaptive control. (84i:93051)
- Oziraner, A. S. Some theorems on the partial stability and stabilization. (84c:34077)
- Pandit, Sudhakar G. (with Deo, Sadashiv G.) ★ Differential systems involving impulses. (84g:34005)
- Petrov, D. I. Forced periodic oscillations in a control system containing discontinuous nonlinearities. (Bulgarian. English summary) (84i:93052)
- Pokrovskii, A. V. Class of discontinuous systems. (84i:49048)
- Pucci, Patricia Identifying all of the solutions of an orientor field by an approximation method. (Italian) (See 84a:34003)
- Rastović, Danilo Modal controllability and weighted shifts. (84i:93034)
- Shul'gin, A. M. Optimal stabilization of the invariant state of a dynamic system. (Russian) (84m:70048)
- Sobkovich, R. I. Periodic control problem for systems of second-order differential equations. (Russian) (84b:34054)
- Stoner, R. J. Liapunov reachability and optimization in control. (84m:49011)
- Ulanov, B. V. See Emel'yanov, S. V.; et al., (84d:93025)
- Vinogradova, T. K. (with Kulagin, V. V.) Synthesis of optimal control as a principle of optimality in problems with incomplete information. (Russian) (84i:49075)
- Yagubov, M. A. See Mansimov, K. B., (84c:93048)
- Zevin, Aleksandr Aronovich Accumulation of periodic perturbations in second-order nonlinear systems. (Russian) (84m:93054)
- Zubov, V. I. ★ Динамика управляемых систем. (Russian) [Dynamics of controlled systems] (84i:93005)

34Kxx Functional-differential and differential-difference equations, with or without deviating (or retarded) arguments

secondary classifications:

- (Collatz, L.) See Differential-difference equations, (84k:34005)
- (Hannsgen, Kenneth B.) See Volterra and functional-differential equations, (84i:45002)
- (Herdman, Terry L.) See Volterra and functional-differential equations, (84i:45002)
- (Meinardus, Günter) See Differential-difference equations, (84k:34005)
- (Stech, Harlan W.) See Volterra and functional-differential equations, (84i:45002)
- (Wetterling, W.) See Differential-difference equations, (84k:34005)
- (Wheeler, Robert L.) See Volterra and functional-differential equations, (84i:45002)
- Blacksburg, Va. ★ Volterra and functional-differential equations. (84i:45002)
- Conference:
 Volterra and Functional-Differential Equations ★ Volterra and functional-differential equations. (84i:45002)
- Differential-difference equations ★ Differential-difference equations. (84k:34005)
- Oberwolfach ★ Differential-difference equations. (84k:34005)
- Volterra and functional-differential equations ★ Volterra and functional-differential equations. (84i:45002)
- Workshop:
 Differential-difference equations ★ Differential-difference equations. (84k:34005)

34K05 General theory

- Adomian, G. (with Rach, R.) A nonlinear differential delay equation. 84d:34069
- Aliiev, R. G. Linear differential equations with deviating argument in a Hilbert space. (Russian) (See 84c:34002)
- Amillo Gil, Jose M. (with Burns, John A.; Cliff, Eugene M.) Nonlinear neutral functional-differential equations in product spaces. (See 84b:34002)
- Anastasova, K. I. (with Stoeva, K. S.) An inverse problem for a nonlinear equation of neutral type. (Bulgarian. English and Russian summaries) 84h:34100a
 On an inverse problem for a nonlinear equation of neutral type. (Bulgarian. English and Russian summaries) 84h:34100b
 (with Stoeva, K. S.) An inverse problem for a nonlinear equation of neutral type. (Bulgarian. English and Russian summaries) 84i:34084
- Angelov, V. G. (with Bainov, D. D.) Bounded solutions of functional-differential equations of the neutral type with infinite delays. 84c:34102
 (with Bainov, D. D.) Absolutely continuous solutions of some functional extremal equations of neutral type. 84g:34116
- Azbelev, N. V. (with Maksimov, V. P.) Equations with retarded argument. (Russian) 84d:34070
- Bainov, D. D. See Angelov, V. G., 84c:34102 and 84g:34116
- Banas, József (with Wędrychowicz, Stanisław) Functional equations occurring in the theory of delayed differential equations. 84c:34095
- Blaž, J. Über die verallgemeinerte Nicoletti-Aufgabe für mehrwertige Differentialgleichungen mit voreilem Argument. [On the generalized Nicoletti problem for multivalued differential equations with advanced arguments] 84d:34071
- Brewer, Dennis W. A parameter dependence problem in functional-differential equations. 84j:34074
- Burns, John A. (with Herdman, Terry L.; Stech, Harlan W.) Linear functional-differential equations as semigroups on product spaces. 84c:34096
 See also Amillo Gil, Jose M.; et al., (See 84b:34002)
- Busenberg, Stavros N. (with Travis, Curtis C.) Approximation of functional-differential equations by differential systems. (See 84i:45002)
- Busłowicz, Mikołaj Inversion of characteristic matrix of the time-delay systems of neutral type. 84k:34070
- Cliff, Eugene M. See Amillo Gil, Jose M.; et al., (See 84b:34002)
- Dairbaeva, G. Reduction of a system of differential equations with distributed lag to a system of two equations in Banach spaces with concentrated lag. (Russian) 84c:34097
- Diekmann, Odo A duality principle for delay equations. (See 84i:00016)
- Drakshlin, M. E. A remark on differential equations of neutral type. (Russian) 84j:34075
- Feshchenko, T. S. See Romanenko, E. Yu., 84i:34085
- Grudo, E. I. (with Nguyen Van Ty) Solutions of ordinary differential equations with deviating argument in the neighborhood of a regular singular point. (Russian. English summary) 84c:34078
- Hale, David R. A linear delay partial differential equation. I. 84b:34094
 (Hamedani, G. G.) See Rzepecki, Bogdan, 84m:34097
- Herdman, Terry L. See Burns, John A.; et al., 84c:34096
- Heredia Zapata, Manuel Systems of differential equations with retarded argument. Global solutions and dependency on initial conditions. (Spanish) 84a:34079
- Huang, Ch'i (with Shih, Yen Ping) Laguerre series solution of a functional-differential equation. 84j:34076
- Joshi, S. R. (with Kasaralikal, S. N.) Differential inequalities for a system of abstract measure delay differential equations. 84f:34093
- Kappel, F. (with Schappacher, W.) Approximation of functional-differential equations by finite-dimensional systems. (See 84a:34003)
 Approximation of neutral functional-differential equations in the state space $\mathbb{R}^n \times L^2$. 84m:34095
- Karakostas, George (with Sficas, Y. G.; Stalkos, V. A.) On the basic theory of initial value problems for delay differential equations. (Italian summary) 84j:34077
- Kasaralikal, S. N. See Joshi, S. R., 84f:34093
- Karakova, N. G. Local solvability of a Cauchy problem for a functional-differential equation of neutral type in a Banach space. (Russian. English summary) 84a:34080
- Khalilov, M. S. See Maksudov, F. G.; et al., 84g:34118
- Kholmator, A. Existence of a solution of a system of differential equations of delay type in the form of power series. (Russian) 84c:34081
- Ladde, G. S. (with Pachpatte, B. G.) Existence theorems for a class of functional-differential systems. 84g:34117
- Maksimov, V. P. See Azbelev, N. V., 84d:34070
- Maksudov, F. G. (with Khalilov, M. S.; Shamlov, A. Kh.) A boundary value problem for nonlinear differential equations with deviating argument of nonlinear type. (Russian. English and Azerbaijani summaries) 84g:34118
- Mohammed, S. E. A. The infinitesimal generator of a stochastic functional-differential equation. 84g:34119
- Neuman, František Simultaneous solutions of a system of Abel equations and differential equations with several deviations. 84a:34082
- Nguyen Van Ty See Grudo, E. I., 84c:34078
- Olemskoi, Yu. V. Representation of solutions of linear differential equations with constant coefficients and commensurate deviations of arguments in a space of sequences. (Russian. English summary) 84c:34083
- Pachpatte, B. G. See Ladde, G. S., 84g:34117
- Palanisamy, K. R. See Prasada Rao, Ganti, 84j:34078
- Pelyukh, G. P. General solution of a class of linear functional-differential equations. (Russian) (See 84c:34002)
- Prasada Rao, Ganti (with Palanisamy, K. R.) Walsh stretch matrices and functional-differential equations. 84j:34078
- Rach, R. See Adomian, G., 84d:34069
- Rodkina, A. E. Equations with advanced argument. (Russian) 84m:34096
 Solvability of equations of neutral type in different function spaces. (Russian) 84d:34072
- Romanenko, E. Yu. (with Feshchenko, T. S.) General solution of a degenerate initial value problem for quasilinear functional-differential equations with singularities multiplying the derivatives. (Russian) 84i:34085
- Rosa, Vladislav Existence theorems for initial value problems with nonlinear differential system with delay. (Russian and Slovak summaries) 84i:34071
- Rzepecki, Bogdan Remark in connection with an article of G. G. Hamedani: "Global existence of solutions of certain functional-differential equations" [Časopis Pěst. Mat. 106 (1981), no. 1, 48-51; MR 82f:34082]. 84m:34097
- Samoilenko, V. G. An inverse periodic problem for nonlinear equations of the Langmuir chain. (Russian) 84d:34073
- Sawano, Kensuke Some considerations on the fundamental theorems for functional-differential equations with infinite delay. 84c:34098
- Schappacher, W. See Kappel, F., (See 84a:34003)
- Sficas, Y. G. See Karakostas, George; et al., 84j:34077
- Shamilov, A. Kh. See Maksudov, F. G.; et al., 84g:34118
- Shih, Yen Ping See Huang, Ch'i, 84j:34076
- Smitalová, Kristina Existence of complete solutions of linear differential equations with delays. (Russian and Slovak summaries) 84f:34094
- Sree Hari Rao, V. A representation formula for solutions of a certain linear system of generalized differential equations. 84g:34120
- Stalkos, V. A. (with Tsamatos, P. Ch.) On the dependence of solutions upon initial values and small perturbations for Carathéodory differential systems with retarded arguments. 84m:34098
 See also Karakostas, George; et al., 84j:34077
- Stech, Harlan W. See Burns, John A.; et al., 84c:34096
- Stoeva, K. S. See Anastasova, K. I., 84h:34100a and 84i:34084
- Terekhin, M. T. Solutions of differential equations with deviating argument. (Russian) 84j:34121
- Tochkov, G. On a differential equation of neutral type. (Bulgarian. French and Russian summaries) 84k:34072
 A nonlinear system of differential equations of neutral type. (Russian) (See 84c:34002)
- Travis, Curtis C. See Busenberg, Stavros N., (See 84i:45002)
- Tsamatos, P. Ch. See Stalkos, V. A., 84m:34098
- Wędrychowicz, Stanisław See Banas, József, 84c:34095

Wiener, Joseph Generalized-function and analytic solutions of functional-differential equations. (See 84c:00005)

Distributional and analytic solutions of functional-differential equations. (See 84c:00009)

Distributional and entire solutions of linear functional-differential equations. 84b:34095

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Adomian, G. (with Rach, R.) Nonlinear stochastic differential delay equations. (84j:60066)

Angelov, V. G. (with Bainov, D. D.) Existence and uniqueness of the bounded solution of functional-differential equations of neutral type in Banach space. (Russian) (84c:34089)

Bainov, D. D. See Angelov, V. G., (84c:34089)

Burns, John A. (with Herdman, Terry L.; Stech, Harlan W.) Differential-boundary operators and associated neutral functional-differential equations. (84j:34062)

Delfour, M. C. (with Manitius, A.) The structural operator F and its role in the theory of retarded systems. II. (84h:34111)

Havárneanu, Teodor On a certain integro-differential system with delay. (Russian and Polish summaries) (84c:45011)

Herdman, Terry L. See Burns, John A.; et al., (84j:34062)

Kisielewicz, Michał Continuous dependence of solution sets for generalized differential equations of neutral type. (84f:34023)

Kolesov, Yu. S. See Švitra, Donatas; et al., (See 84f:92002)

Laugaly, R. See Švitra, Donatas; et al., (See 84f:92002)

Manitius, A. See Delfour, M. C., (84h:34111)

Narmatov, Zh. Existence and uniqueness of the solution of integro-differential equations with lag depending on the solution and its derivative. (Russian) (84c:45022)

Rach, R. See Adomian, G., (84j:60066)

Sacker, Robert J. (with Sell, George R.) Exponential dichotomies in evolutionary equations: a preliminary report. (See 84c:45002)

Sell, George R. See Sacker, Robert J., (See 84c:45002)

Stech, Harlan W. See Burns, John A.; et al., (84j:34062)

Švitra, Donatas (with Laugaly, R.; Kolesov, Yu. S.) Mathematical modeling of the production of white blood cells. (See 84f:92002)

Ved', Yu. A. The limit Cauchy problem for integro-differential systems with deviating argument. (Russian) (84c:45025)

Zharkynbaev, S. Hierarchical differential games with time lag. (Russian) (See 84c:34002)

34K10 Boundary value problems

Akhmedov, N. K. See Maksudov, F. G.; et al., 84f:34095

Anastsova, K. I. (with Stoeva, K. S.) Inverse problem for a nonlinear equation of neutral type. (Russian) (See 84c:34002)

Bainov, D. D. See Kazakova, N. G., 84c:34104 and Konstantinov, M. M., 84d:34076

Brykalov, S. A. Boundary value problems for functional-differential inclusions. (Russian) 84c:34099

Existence of a solution that satisfies a functional-differential equation almost everywhere. (Russian) 84c:34073

Bykov, Ya. V. (with Tankiev, I. A.) A generalized boundary value problem for a countable system of integro-differential equations. (Russian) 84d:34074

Das, P. C. (with Venkatesulu, M.) An existence analysis for a functional-differential equation with periodic boundary conditions via the alternative method. 84b:34096

Eloe, P. W. (with Grimm, L. J.) Conjugate type boundary value problems for functional-differential equations. 84c:34103

Graef, John R. (with Kusano, Takasi; Onose, Hiroshi; Spikes, Paul W.) On the asymptotic behavior of oscillatory solutions of functional-differential equations. 84c:34074

Grimm, L. J. See Eloe, P. W., 84c:34103

Israilov, S. V. Investigation of a functional boundary value problem for higher-order differential equations. (Russian) 84d:34075

Kazakova, N. G. Existence of solutions of a multipoint boundary value problem for functional-differential equations of neutral type. (Russian. English summary) 84c:34100

(with Bainov, D. D.) On the solvability of a linear boundary value problem for a class of neutral type functional-differential equations. 84c:34104

Konstantinov, M. M. (with Bainov, D. D.) Stability and approximate solution of regularly perturbed boundary value problems for differential delayed equations. 84d:34076

Kusano, Takasi See Graef, John R.; et al., 84c:34074

Maksudov, F. G. (with Akhmedov, N. K.; Shamilov, A. Kh.) Conditions for solvability of a problem for second-order differential equations with deviation depending on the unknown solution and its derivative. (Russian. English and Azerbaijani summaries) 84f:34095

Ntouyas, S. K. Boundary value problem for second order functional-differential equations. (See 84c:34002)

A boundary value problem for second order functional-differential equations. 84c:34105

Onose, Hiroshi See Graef, John R.; et al., 84c:34074

Seidor, Z. B. A boundary value problem for [differential] equations with retarded argument. (Russian) 84c:34099

Shamilov, A. Kh. See Maksudov, F. G.; et al., 84f:34095

Spikes, Paul W. See Graef, John R.; et al., 84c:34074

Stoeva, K. S. See Anastsova, K. I., (See 84c:34002)

Tankiev, I. A. See Bykov, Ya. V., 84d:34074

Venkatesulu, M. See Das, P. C., 84b:34096

Wyrwinski, Aleksandra On the functional integrability and asymptotic behaviours of a certain differential equation with delay. (Russian summary) 84d:34077

secondary classifications:

Azbelev, N. V. (with Maksimov, V. P.) Equations with retarded argument. (Russian) (84d:34070)

Brodorskiĭ, V. G. Fredholmity of a boundary value problem for a linear

functional-differential equation. (Russian. Kazakh summary) (84c:47020)

Burns, John A. (with Herdman, Terry L.; Stech, Harlan W.) Differential-boundary operators and associated neutral functional-differential equations. (84j:34062)

Herdman, Terry L. See Burns, John A.; et al., (84j:34062)

Jóó, István (with Nersisyan, A. B.) The rate of equiconvergence of spectral expansions of some functional-differential operators in certain classes of functions of bounded variation. (Russian) (84m:47059)

Maksimov, V. P. See Azbelev, N. V., (84d:34070)

Nersisyan, A. B. See Jóó, István, (84m:47059)

Stech, Harlan W. See Burns, John A.; et al., (84j:34062)

Stépan, G. On the stability of linear differential equations with delay. (84d:34082)

Zakharov, V. V. A dynamic game-theoretic model of preservation of the environment. (Russian) (84b:90130)

34K15 Qualitative theory

Alliev, R. G. An estimate of the characteristic exponent of an equation with retarded argument in Hilbert space by the freezing method. (Russian) 84c:34084

Angelova, D. C. (with Bainov, D. D.) On the oscillation of solutions to second order functional-differential equations. 84c:34085

Arolska, M. At. (with Bainov, D. D.) On periodic solutions of a neutral type equation. 84b:34097

Atkinson, F. V. (with Haddock, John R.) Criteria for asymptotic constancy of solutions of functional-differential equations. 84f:34096

Bainov, D. D. (with Milusheva, S. D.) Application of the partially-multiplicative averaging for a class of functional-differential equations with impulses. 84c:34086

See also Angelova, D. C., 84c:34085; Arolska, M. At., 84b:34097; Milusheva, S. D., 84b:34102 and 84c:34077

Bastin, H. (with Delchambre, M.) Phénomène de saut dans un oscillateur de van der Pol du 3e ordre avec retard. [Jump phenomenon in a third-order van der Pol oscillator with delay] 84f:34097

Bellen, A. (with Zennaro, M.) Maximum principles for periodic solutions of linear delay differential equations. 84m:34100

Borzdiko, V. I. Existence of positive periodic solutions for functional-differential equations. (Russian. Tajiki summary) 84c:34086

Casal, A. (with Somolinos, A.) Entrainment in a nonlinear functional differential equation—applications. (See 84m:35001)

Cherevko, I. M. See Fodchuk, V. I., 84b:34098 and 84f:34098

Collatz, L. Einschließung periodischer Lösungen bei einer Klasse von Differenzen-Differentialgleichungen. (English summary) [Inclusion of periodic solutions in a class of differential-difference equations] (See 84k:34005)

Corduneanu, C. Integro-differential equations with almost periodic solutions. (See 84c:45002)

Dahiya, R. S. Oscillation and asymptotic behavior of bounded solutions of functional-differential equations with delay. 84c:34106

Delchambre, M. See Bastin, H., 84f:34097

Fodchuk, V. I. (with Cherevko, I. M.) Integral manifolds for singularly perturbed functional-differential equations. (Russian) 84f:34098

(with Cherevko, I. M.) On the theory of integral manifolds of singularly perturbed differential-difference equations. (Russian) 84b:34098

Foltyśka, Izabela (with Werbowski, Jarosław) On the oscillatory behavior of solutions of systems of differential equations with deviating arguments. 84d:34078

Fridman, E. M. See Strygin, V. V., 84m:34105

Fuchs, Erich The degeneracy property in linear autonomous functional-differential equations of the neutral type. 84b:34101

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Gopalsamy, K. A delay induced bifurcation to oscillations. 84j:34079

Grace, S. R. (with Lalli, B. S.) Oscillation theorems for n th order delay differential equations. 84b:34099

(with Lalli, B. S.) A note on G. Ladas' paper: "Oscillatory effect of retarded actions" [J. Math. Anal. Appl. 60 (1977), no. 2, 410–416; MR 56 #6056]. 84j:34080

(with Lalli, B. S.) An oscillation criterion for n th order nonlinear differential equations with functional arguments. 84b:34100

(with Lalli, B. S.) On oscillation of solutions of n th-order delay differential equations. 84c:34075a

(with Lalli, B. S.) Oscillation theorems for n th-order delay differential equations. 84b:34075b

Graef, John R. Nonoscillation of higher order functional-differential equations. 84c:34076

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Halany, Aristide (with Răsvan, Vl.) Approximations of delays by ordinary differential equations. 84f:34099

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- Ladas, Gerasimos (with Stavroulakis, I. P.) On delay differential inequalities of higher order. **84c:34088**
(with Sficas, Y. G.; Stavroulakis, I. P.) Necessary and sufficient conditions for oscillations. **84j:34082**
See also Grace, S. R.; et al., **84j:34080**
- Lalli, B. S. See Grace, S. R., **84b:34099**; **84b:34100**; **84j:34080**; **84c:34075a** and **84c:34075b**
- Maistrenko, Yu. L. See Sharkovskii, A. N.; et al., (See **84c:34002**)
- Martynuk, D. I. The Bubnov-Galerkin method of finding periodic and quasiperiodic solutions of systems with lag. (Russian) (See **84c:34002**)
- Marušák, Pavol Some results on the oscillatory and asymptotic behavior of solutions of nonlinear delay differential inequalities. **84j:34083**
- Milushcheva, S. D. (with Bainov, D. D.) Justification of the averaging method for a class of functional-differential equations with impulses. **84b:34102**
(with Bainov, D. D.) Justification of partially-multiplicative averaging for a class of functional-differential equations with impulses. **84c:34077**
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- Mollova, K. G. Construction of periodic solutions of second-order quasilinear differential equations with retarded argument by the iteration method and estimation of their domain of convergence. (Bulgarian. English and Russian summaries) **84b:34103**
- Nussbaum, Roger D. Asymptotic analysis of some functional-differential equations. **84b:34104**
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Asymptotic analysis of functional-differential equations and solutions of long period. **84c:34107**
- Oláh, Rudolf Note on the oscillation of differential equations with deviating argument. (Czech summary) **84b:34103**
- Onose, Hiroshi On the probability density functions and the oscillations. **84b:34106**
- Parhi, N. Periodic solutions of neutral functional-differential equations containing a small parameter. **84j:34084**
- Philos, Christos G. Oscillation and asymptotic properties of strongly sublinear differential equations with deviating arguments. (Russian and Czech summaries) **84g:34122**
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- Răsvan, Vl. See Halanay, Aristide, **84f:34099**
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- Ryabov, Yu. A. (with Khusanov, D. Kh.) Periodic solutions of a second-order integro-differential equation in the nonresonance case. (Russian) **84d:34080**
- Sabev, P. See Terzieva, Veselina Denkova, (See **84c:34002**)
- Saupe, Dietmar Characterization of periodic solutions of special differential delay equations. **84c:34102**
- Sficas, Y. G. See Ladas, Gerasimos; et al., **84j:34082**
- Sharkovskii, A. N. (with Maistrenko, Yu. L.; Romanenko, E. Yu.) Asymptotically periodic solutions of differential-difference equations of neutral type. (Russian) (See **84c:34002**)
Asymptotic behavior of solutions of differential-difference equations. (Russian) **84b:34107**
- Shevelo, V. N. (with Varkh, N. V.) Oscillatory properties of solutions of certain systems of functional-differential equations with a general character of deviation of the argument. (Russian) **84c:34103**
- Singh, Bhagat Oscillation of a second order nonlinear functional equation via oscillating coefficients. **84j:34085**
Nonlinear oscillations in disconjugate forced functional equations with deviating arguments. **84c:34108**
- Skobelev, V. G. Oscillation properties of second-order differential equations with deviating argument and rapidly growing leading coefficient. (Russian) **84c:34104**
- Šoltes, Vincent Asymptotic properties of solutions of an n th order nonlinear differential equation with deviating argument. **84c:34109**
- Somolinos, A. See Casal, A., (See **84m:35001**)
- Staffans, Olof J. On weighted measures and a neutral functional-differential equation. (See **84b:45002**)
- Stavroulakis, I. P. Nonlinear delay differential inequalities. **84c:34110**
See also Ladas, Gerasimos, **84c:34088** and **84j:34082**
- Strygin, V. V. (with Fridman, E. M.) On the question of the asymptotic representation of an integral manifold for systems of differential equations with retarded argument. (Russian) **84m:34105**
- Takahasi, Nobuhiro Some appending results of Galerkin's procedure for nonlinear periodic functional-differential equations. **84b:34104**
- Terzieva, Veselina Denkova Periodic solutions of a differential equation in Banach space. (See **84c:34002**)
(with Sabev, P.) Property of certain nonlinear delay differential equation. (See **84c:34002**)
- Trybuk, Václav The most general transformation of homogeneous retarded linear differential equations of the n th order. (Russian summary) **84b:34108**
- Varkh, N. V. See Shevelo, V. N., **84c:34103**
- Walther, Hans-Otto Bifurcation from periodic solutions in functional-differential equations. **84c:34078**
- Werbowski, Jarosław On oscillation behavior of solutions of differential equations generated by deviating arguments. (See **84c:34002**)
Oscillations of nonlinear differential equations caused by deviating arguments. **84j:34086**
See also Foltynska, Izabela, **84d:34078**
- Zanolin, Fabio On forced nonlinear oscillations for some second order delay-differential systems. **84f:34101**
- Zennaro, M. See Bellen, A., **84m:34100**
- Zhang, Bing Gen Oscillation of the solutions of the first-order advanced type differential equations. (Chinese summary) **84j:34087**
- Zubov, N. V. Investigation of forced oscillations in systems with aftereffect. (Russian. English summary) **84i:34087**
secondary classifications:
- Agarwal, Ravi P. Oscillation and asymptotic behaviour of solutions of differential equations with nested arguments. **84c:34083**
- Arohska, M. At. (with Bainov, D. D.) Periodic solutions of differential equations with maxima. (Bulgarian. English and Russian summaries) **84f:34057**
- Badli, M. (with Schiavino, A.) Asymptotic behaviour of positive solutions of periodic delay logistic equations. **84b:92038**
- Bainov, D. D. (with Milushcheva, S. D.) Application of the averaging method for functional-differential equations with impulses. **84m:34108**
See also Arohska, M. At., **84f:34057**
- Banks, H. T. (with Burns, John A.; Cliff, Eugene M.) Parameter estimation and identification for systems with delays. **84c:93050**
- Bardi, Martino Predator-prey models in periodically fluctuating environments. **84c:92025**
- Blythe, S. P. (with Nisbet, R. M.; Gurney, W. S. C.) Instability and complex dynamic behaviour in population models with long time delays. **84b:92026**
- Brykalov, S. A. Existence of a solution that satisfies a functional-differential equation almost everywhere. (Russian) **84c:34073**
- Burns, John A. See Banks, H. T.; et al., **84c:93050**
- Bykov, Ya. V. (with Matakaev, A. I.) Oscillatory properties of solutions of difference and differential-difference equations with deviating arguments. (Russian) **84j:39084**
- Cahlon, Baruch Safe solution of a car-following problem. **84d:90050**
- Cliff, Eugene M. See Banks, H. T.; et al., **84c:93050**
- Doedel, Eusebius J. (with Leung, Patrick P. C.) A numerical technique for bifurcation problems in delay differential equations. **84f:65065**
- Fowler, A. C. Approximate solution of a model of biological immune responses incorporating delay. **84c:92010**
An asymptotic analysis of the delayed logistic equation when the delay is large. **84c:92047**
- Garay, B. M. On controllably periodic perturbations of autonomous functional-differential equations. **84b:34109**
- Goryachenko, V. D. (with Koltunova, E. S.) Investigation on a phase plane of a nonlinear model of the dynamics of breeding environments. (Russian) **84j:92034**
- Grace, S. R. (with Lalli, B. S.) On oscillatory behavior of general functional integro-differential equations. **84g:45010**
- Gurney, W. S. C. See Blythe, S. P.; et al., **84b:92026**
- Khusanov, D. Kh. Estimation in trigonometric norm of periodic solutions of linear and integro-differential equations. (Russian) **84c:45019**
- Kodama, Shinzo See Maeda, Hajime; et al., **84g:92014**
- Koltunova, E. S. See Goryachenko, V. D., **84j:92034**
- Konishi, Tomohisa See Maeda, Hajime; et al., **84g:92014**
- Kouda, A. (with Mori, Shinsaku) Mode analysis of a system of mutually coupled van der Pol oscillators with coupling delay. (French and German summaries) **84c:92019**
- Kulenović, M. R. S. Summability methods in second order nonlinear oscillations. (Serbo-Croatian summary) **84c:34047**
- Lalli, B. S. See Grace, S. R., **84g:45010**
- Leung, Patrick P. C. See Doedel, Eusebius J., **84f:65065**
- Luca, N. The behaviour of the solutions of an integro-differential system with infinite delays. **84j:45045**
- Maeda, Hajime (with Kodama, Shinzo; Konishi, Tomohisa) Stability theory and existence of periodic solutions of time delayed compartmental systems. **84g:92014**
- Magomedov, A. R. Stability of periodic solutions of differential equations with maxima. (Russian) **84m:34106**
- Matakaev, A. I. See Bykov, Ya. V., **84j:39084**
- Milushcheva, S. D. See Bainov, D. D., **84m:34108**
- Mori, Shinsaku See Kouda, A., **84c:92019**
- Nisbet, R. M. See Blythe, S. P.; et al., **84b:92026**
- Nosirov, F. U. The effect of lag on gyroscopic systems with slowly changing parameters. (Russian) **84j:70040**
- Novakovskaya, L. I. The effect of lag on forced oscillations of a linear system with bounded excitation. (Russian) **84g:70027a**
The effect of lag on oscillations of a nonlinear system with bounded excitation. (Russian) **84g:70027b**
- Omari, Pierpaolo (with Zanolin, Fabio) Remarks on periodic solutions for first order nonlinear differential systems. (Italian summary) **84g:34076**
- Peters, Hubert Chaos in einer zeitverzögerten Differentialgleichung. [Chaos in a differential equation with time delay] **84c:58055**
- Ponomarev, V. D. Existence and continuous dependence of the solution of a system of operator equations. (Russian) **84j:47102**
- Schiavino, A. See Badli, M., **84b:92038**
- Sharkovskii, O. M. See Oscillation and stability of solutions of functional-differential equations. **84c:34003**
- Shvets, A. Yu. The effect of time lag on oscillatory-rotary motions of a double pendulum. (Russian) **84c:70034**
- Tatarkiewicz, Krzysztof Sur certains systèmes d'équations différo-fonctionnelles et différentielles du second ordre. [Certain systems of second-order différo-functional and differential equations] **84i:34041**
- Turincic, Mihai Function-differential inequalities via maximality procedures. **84c:34016**
- Volz, Rudolf Global asymptotic stability of a periodic solution to an epidemic model. **84c:92051**
- Zabrejko, P. P. General ordinary differential equations and the problem of prolongation of their bounded solutions. **84f:34064**
- Zanolin, Fabio See Omari, Pierpaolo, **84g:34076**
- Oscillation and stability of solutions of functional-differential equations ★ Осьцилляція и устойчивость решений дифференциально-функциональных уравнений [Oscillation and stability of solutions of functional-differential equations] **84i:34003**

34K20 Stability theory

- Atkinson, F. V. (with Haddock, John R.; Staffans, Olof J.) Integral inequalities and exponential convergence of solutions of differential equations with bounded delay. **84g:34123**
- Borówko, Piotr On the stability of solutions of differential equations with random retarded argument. (Russian and Polish summaries) **84g:34124**
- Brierley, S. D. (with Chiasson, J. N.; Lee, E. Bruce; Žak, Stanisław H.) On stability independent of delay for linear systems. **84b:34105**
- Busenberg, Stavros N. (with Travis, Curtis C.) On the use of reducible-functional-differential equations in biological models. **84f:34102**
- Carroll, Robert L. Comments on: "Stability of time-delay systems" [IEEE Trans. Automat. Control **26** (1981), no. 4, part 1, 951-953; MR 83b:34085] by T. N. Lee and S. Dianat. **84c:34111**
- Chiasson, J. N. See Brierley, S. D.; et al., **84b:34105**
- Chong, Chan Bok Partial and asymptotic stability of solutions for simultaneous systems of differential equations with delay variables. (Korean. English summary) **84b:34106**
- Cooke, Kenneth L. (with Grossman, Zvi) Discrete delay, distributed delay and stability switches. **84b:34107**
(with Ferreira, José M.) Stability conditions for linear retarded functional-differential equations. **84b:34079**
- Datko, Richard An example of an unstable neutral differential equation. **84b:34080** (Dianat, S.) See Carroll, Robert L., **84c:34111**
- Ferreira, José M. See Cooke, Kenneth L., **84b:34079**
- Gao, Guo Zhu Uniformly asymptotic stability of functional-differential equations of neutral type. (Chinese. English summary) **84c:34101**
- Ginchev, Ivan Stability of the solutions of a linear differential-difference equation. (See **84c:34002**)
- Gromova, P. S. On comparison methods for systems with delay. **84b:34108**
Stability in the large of systems with lag. (Russian) **84c:34102**
Inversion of B. S. Razumikhin's theorem. (Russian) **84c:34103**
- Grossman, Zvi See Cooke, Kenneth L., **84b:34107**
- Haddock, John R. (with Terjeki, J.) Liapunov-Razumikhin functions and an invariance principle for functional-differential equations. **84f:34104**
See also Atkinson, F. V.; et al., **84g:34123**
- Hong, Ji Ping A result on the stability of systems of differential equations with variable time lag. (Chinese) **84b:34081**
- Infante, Ettore F. A note on the stability in retarded delay equations for all delays. (See **84c:00005**)
Some results on the Liapunov stability of functional equations. (See **84b:45002**)
- Jury, E. I. (with Mansour, M.) Comments on: "The Routh-Hurwitz method for stability determination of linear differential-difference systems" [Internat. J. Control **33** (1981), no. 5, 991-995; MR 82i:34095] by A. Thowsen. **84b:34109**
- Kang, Dae Sik Stability and boundedness of solutions for nonlinear delay differential equations. (Korean. English summary) **84b:34110**
- Khusainov, D. Ya. (with Yun'kova, E. A.) Estimate of the magnitude of delay in linear differential systems with deviating argument. (Russian) **84f:34105**
- Kim, Du Jin On uniformly asymptotic stability and instability of solutions for delay differential equations. (Korean. English summary) **84b:34081**
On the uniform asymptotic stability and instability of solutions to differential equations with a delayed variable. (Korean. English summary) **84g:34125**
- Kim, Pyong San Asymptotic stability of a set with respect to a nonautonomous delay-differential system. (Korean. English summary) **84c:34103**
See also Li, Ok Yon, **84b:34082**
- Kolmanovskii, V. B. (with Nosov, V. R.) Stability of neutral-type functional-differential equations. **84c:34112**
(with Nosov, V. R.) Instability of systems with aftereffect. **84c:34088**
- Lee, E. Bruce See Brierley, S. D.; et al., **84b:34105**
- (Lee, T. N.) See Carroll, Robert L., **84c:34111**
- Li, Ok Yon (with Kim, Pyong San) Stability of the set with respect to nonautonomous delay differential systems. (Korean. English summary) **84b:34082**
- Magomedov, A. R. Stability of periodic solutions of differential equations with maxima. (Russian) **84m:34106**
- Mansour, M. See Jury, E. I., **84b:34109**
- Nosov, V. R. See Kolmanovskii, V. B., **84c:34112** and **84f:34088**
- Peña, Marcos Lizana On the stability of systems of neutral type. **84j:34088**
About the stability of high-dimensional systems of functional-differential equations. **84g:34126**
- Rashkov, P. I. Conditional stability of the zero solution of a second-order system with lag in the critical case. (Russian) (See **84c:34002**)
- Sharifova, T. Stability of differential-difference systems of neutral type. (Russian) **84c:34089**
- Si, Li Geng Stability of linear delay systems of neutral type with variable coefficients. (Chinese) **84g:34127**
- Staffans, Olof J. See Atkinson, F. V.; et al., **84g:34123**
- Stépan, G. On the stability of linear differential equations with delay. **84d:34082**
- Tang, Guang Song On the stability of infinite-dimensional nonlinear systems of differential equations with time lag (including neutral form). (Chinese. English summary) **84f:34106**
- Terjeki, J. See Haddock, John R., **84f:34104**
- (Thowsen, Arild) See Jury, E. I.; et al., **84b:34109**
- Travis, Curtis C. See Busenberg, Stavros N., **84f:34102**
- Ventura, Aldo Asymptotic equivalence between systems of autonomous linear functional-differential equations of neutral type and their perturbations. (Portuguese) **84g:34128**
- Wu, Jiong Yu Applications of a fixed-point theorem to stability theory. (Chinese. English summary) **84b:34111**
- Yun'kova, E. A. See Khusainov, D. Ya., **84f:34105**
- Žak, Stanisław H. See Brierley, S. D.; et al., **84b:34105**
- secondary classifications:
- Abrahamson, D. L. (with Infante, Ettore F.) A Liapunov functional for linear Volterra integro-differential equations. **(84g:45009)**
- Atkinson, F. V. (with Haddock, John R.) Criteria for asymptotic constancy of solutions of functional-differential equations. **(84f:34096)**
- Bainov, D. D. See Konstantinov, M. M., **(84d:34076)**
- Bel, L. Spontaneous predictivisation. **(84m:58077)**
- Blythe, S. P. (with Nisbet, R. M.; Gurney, W. S. C.) Instability and complex dynamic behaviour in population models with long time delays. **(84h:92026)**
- Braddock, R. D. (with van den Driessche, P.) On a two-lag differential delay equation. **(84d:92027)**
- Cooke, Kenneth L. (with Kaplan, James L.; Sorg, M.) Stability of a functional-differential equation for the motion of a radiating charged particle. **(84c:78009)**
- Di Blasio, Gabriella (with Iannelli, Mimmo; Sinestrari, Eugenio) Approach to equilibrium in age structured populations with an increasing recruitment process. **(84b:92041)**
- van den Driessche, P. See Braddock, R. D., **(84d:92027)**
- Ginchev, Ivan Stability of a linear retarded equation. **(84d:45014)**
- Gopalsamy, K. Time lags and global stability in two-species competition. **(84b:92068)**
A delay induced bifurcation to oscillations. **(84j:34079)**
Harmless delays in model systems. **(84i:92060)**
- Goryachenko, V. D. Investigation of the dynamics of species abundance as delay objects. (Russian. English summary) (See **84a:92001**)
- Gumowski, I. Qualitative properties of some dynamic systems with pure delay. **(84b:58076)**
- Gurney, W. S. C. See Blythe, S. P.; et al., **(84h:92026)**
- Haddock, John R. See Atkinson, F. V., **(84f:34079)**
- Hastings, Alan Age-dependent predation is not a simple process. I. Continuous time models. **(84i:92065)**
- Iannelli, Mimmo See Di Blasio, Gabriella; et al., **(84b:92041)**
- Infante, Ettore F. See Abrahamson, D. L., **(84g:45009)**
- Kahn, Peter B. See Lin, Juan, **(84b:92053)**
- Kaplan, James L. See Cooke, Kenneth L.; et al., **(84c:78009)**
- Karakostas, George On the delay population equation with seasonal variations. **(84j:92038)**
- Kolchin, V. A. Stability and auto-oscillation of the population space density distribution in a biological reactor. (Russian. English summary) (See **84a:92001**)
- Konstantinov, M. M. (with Bainov, D. D.) Stability and approximate solution of regularly perturbed boundary value problems for differential delayed equations. **(84b:34076)**
- Koreniv'skii, D. G. On the construction of a stochastic Lyapunov functional by the perturbation method. I. Linear dynamic systems with parametric quasistationary random perturbations of constant spectral density and with constant lags. (Russian) **(84c:60081)**
Construction of a stochastic Lyapunov functional for systems with delay by the perturbation method. A generalization. (Russian. English summary) **(84f:93060)**
- Lin, Juan (with Kahn, Peter B.) Phase and amplitude instability in delay-diffusion population models. **(84b:92053)**
- Marcati, Pierangelo On the global stability of the logistic age-dependent population growth. **(84g:92034)**
- Nisbet, R. M. See Blythe, S. P.; et al., **(84h:92026)**
- Noonburg, V. W. Effects of behavioral adaptation on a predator-prey model. **(84h:92041)**
- Novakorskaya, L. I. The effect of lag on forced oscillations of a linear system with bounded excitation. (Russian) **(84g:70027a)**
The effect of lag on oscillations of a nonlinear system with bounded excitation. (Russian) **(84g:70027b)**
- Pozio, M. Assunta Decay estimates for partial functional-differential equations. **(84b:35115)**
- Ruan, Jiong Absolute stability of linear functional regulated system with M nonlinear regulators. (Chinese summary) **(84d:93045)**
- (Sharikovskii, O. M.) See Oscillation and stability of solutions of functional-differential equations. **(84i:34003)**
- Sinestrari, Eugenio See Di Blasio, Gabriella; et al., **(84b:92041)**
- Sopronyuk, F. O. A means of investigating the asymptotic stability of solutions of integral equations with small parameters. (Russian) **(84d:45037)**
- Sorg, M. See Cooke, Kenneth L.; et al., **(84c:78009)**
- Staffans, Olof J. On weighted measures and a neutral functional-differential equation. (See **84b:45002**)
- Yasin'skaya, L. I. Stability of a trivial solution of functional-differential systems with respect to perturbations of their parameters. (Ukrainian. Russian summary) **(84m:34081)**
- Zabov, N. V. Investigation of forced oscillations in systems with aftereffect. (Russian. English summary) **(84c:34087)**
- Oscillation and stability of solutions of functional-differential equations ★ Осушляющая и устойчивость решений дифференциально-функциональных уравнений. [Oscillation and stability of solutions of functional-differential equations] **(84i:34003)**

34K25 Asymptotic theory

- Agarwal, Ravi P. Oscillation and asymptotic behaviour of solutions of differential equations with nested arguments. **84c:34083**
- Arino, O. (with Györi, István) Asymptotic integration of functional-differential systems which are asymptotically autonomous. (See **84j:00010**)
(with Séguier, P.) About the behaviour at infinity of solutions of $x'(t) = f(t-1, x(t-1)) - f(t, x(t))$. **84m:34107**
- Bainov, D. D. (with Milusheva, S. D.) Application of the averaging method for functional-differential equations with impulses. **84m:34108**

Ding, Tong Ren Asymptotic behavior of solutions of some retarded differential equations. **84h:34112**

Feshchenko, T. S. See Romanenko, E. Yu., (See **84c:34002**)

Futák, Ján The monotonicity and oscillatory nature of solutions of a fourth-order nonlinear differential equation with retarded argument. (Slovak. English, German and Russian summaries) **84c:34113**

Asymptotic equivalence of systems of ordinary differential equations and systems of differential equations with retarded argument. (Russian) **84g:34129**

Garay, B. M. On controllably periodic perturbations of autonomous functional-differential equations. **84h:34109**

Graef, John R. (with Grammatikopoulos, Myron K.; Spikes, Paul W.) Asymptotic properties of solutions of generalized Emden-Fowler equations. (See **84c:00005**)

(with Spikes, Paul W.; Grammatikopoulos, Myron K.) On the positive solutions of a higher order functional-differential equation with a discontinuity. **84f:34107**

Grammatikopoulos, Myron K. See Graef, John R.; et al. **84f:34107** and (See **84c:00005**)

Györi, István On existence of the limits of solutions of functional-differential equations. **84g:34130**

See also Arino, O., (See **84j:00010**)

Haddock, John R. Functional-differential equations for which all solutions tend to constant limits. (See **84a:34003**)

Hale, Jack K. (with Magalhães, Luis) An example of boundary layer in delay equations. (See **84h:45002**)

Karaseva, K. Asymptotic behavior with respect to a large parameter for a second-order differential equation with retarded argument with point transfer. (Russian) **84c:34104**

Khabibullin, I. T. See Novokshenov, V. Yu., **84j:34089**

Ladas, Gerasimos (with Sficas, Y. G.; Stavroulakis, I. P.) Asymptotic behavior of solutions of retarded differential equations. **84f:34108**

Magalhães, Luis See Hale, Jack K., (See **84h:45002**)

Miloserdova, I. V. (with Potapov, A. I.) Parametric instability of systems described by first-order differential-difference equations. (Russian) **84c:34090**

Milushova, S. D. See Bainov, D. D., **84m:34108**

Morukhovich, B. Sh. Duality in control and observation problems for hereditary systems. **84f:34109**

Novokshenov, V. Yu. (with Khabibullin, I. T.) Asymptotic behavior of certain nonlinear differential-difference wave systems integrable by the method of the inverse scattering problem. (Russian) **84j:34089**

Olah, Rudolf Asymptotic properties of solutions of differential equations with retarded argument. (Slovak. English, German and Russian summaries) **84c:34114**

Potapov, A. I. See Miloserdova, I. V., **84c:34090**

Romanenko, E. Yu. (with Feshchenko, T. S.) Asymptotic behavior of solutions of functional-differential equations $a(t)x(g(t)) + b(t)x(t) = F(t, x(t), x(q(t)))$. (Russian) (See **84c:34002**)

See also Sharkovskii, O. M., **84h:34110**

Seguier, P. See Arino, O., **84m:34107**

Sficas, Y. G. See Ladas, Gerasimos; et al., **84f:34108**

Sharkovskii, O. M. (with Romanenko, E. Yu.) The asymptotic behavior of solutions of differential-difference equations. (Russian) **84h:34110**

Spikes, Paul W. See Graef, John R.; et al., **84f:34107** and (See **84c:00005**)

Stavroulakis, I. P. See Ladas, Gerasimos; et al., **84f:34108**

Ved', Yu. A. Power asymptotic behavior of solutions of differential equations with retarded argument. (Russian) **84h:34113**

Voronoi, O. M. Construction of formal solutions of a linear system of integro-differential equations with a small parameter and variable delay. (Russian) **84c:34105**

secondary classifications:

Bainov, D. D. See Milushova, S. D., (**84c:34077**)

Cherevko, I. M. See Fodchuk, V. I., (**84f:34098**)

Fodchuk, V. I. (with Cherevko, I. M.) Integral manifolds for singularly perturbed functional-differential equations. (Russian) (**84f:34098**)

Fowler, A. C. An asymptotic analysis of the delayed logistic equation when the delay is large. (**84a:92047**)

Marcus, Moshe (with Mizel, Victor) Limiting equations for problems involving long range memory. (**84j:54029**)

Marušák, Pavol Some results on the oscillatory and asymptotic behavior of solutions of nonlinear delay differential inequalities. (**84j:34083**)

Milushova, S. D. (with Bainov, D. D.) Justification of partially-multiplicative averaging for a class of functional-differential equations with impulses. (**84c:34077**)

Mizel, Victor See Marcus, Moshe, (**84j:54029**)

Nussbaum, Roger D. Asymptotic analysis of some functional-differential equations. (**84h:34104**)

Asymptotic analysis of functional-differential equations and solutions of long period. (**84c:34107**)

Philos, Christos G. Oscillation and asymptotic properties of strongly sublinear differential equations with deviating arguments. (Russian and Czech summaries) (**84g:34122**)

Skolbeev, V. G. Oscillation properties of second-order differential equations with deviating argument and rapidly growing leading coefficient. (Russian) (**84m:34104**)

Wywinińska, Aleksandra On the functional integrability and asymptotic behaviours of a certain differential equation with delay. (Russian summary) (**84d:34077**)

34K30 Equations in abstract spaces

Abdullaev, A. R. On the question of a functional-differential equation with an internal superposition operator. (Russian) **84m:34109**

Aliiev, R. G. On necessary and sufficient conditions for unique solvability of an equation with deviating argument and unbounded operator coefficients in Hilbert space. (Russian) **84d:34083**

Aliiev, Rashid Musa (with Bagirov, R. Yu.) Bounded solutions of integro-differential equations of neutral type. (Russian. English and Azerbaijani summaries) **84g:34131**

Angelov, V. G. (with Bainov, D. D.) Existence and uniqueness of the bounded solution of functional-differential equations of neutral type in Banach space. (Russian) **84a:34089**

Bagirov, R. Yu. See Aliiev, Rashid Musa, **84g:34131**

Bainov, D. D. See Angelov, V. G., **84a:34089**

Czerwik, S. Random solutions of a system of functional-differential equations in a Banach space. **84g:34132**

Delfour, M. C. (with Manitius, A.) The structural operator F and its role in the theory of retarded systems. II. **84h:34111**

Engler, Hans Invariant sets for functional-differential equations in Banach spaces and applications. **84c:34084**

Finogenko, I. A. Solutions of certain functional-differential inclusions in a Banach space. (Russian) **84d:34084**

Kisielewicz, Michał Generic properties of functional-differential equations of neutral type in separable Banach spaces. **84h:34112**

Lightbourne, James H., III (with Rankin, Samuel M., III) A partial functional-differential equation of Sobolev type. **84g:34133**

Manitius, A. See Delfour, M. C., **84h:34111**

Parrott, Mary E. Approximation of generalized solutions of an abstract functional-differential equation. (See **84c:00005**)

Rankin, Samuel M., III See Lightbourne, James H., III, **84g:34133**

secondary classifications:

Aliiev, A. B. Solvability "in the large" of the Cauchy problem for quasilinear equations of hyperbolic type with a nonlocal nonlinearity. (Russian. English and Azerbaijani summaries) (**84c:35073**)

Ardito, Ada (with Vernole, Paola) Existence and regularity for delay differential equations in interpolation spaces. (**84f:35143**)

Brewer, Dennis W. A parameter dependence problem in functional-differential equations. (**84j:34074**)

Kubiacyzyk, Ireneusz A functional-differential equation in Banach spaces. (**84f:34089**)

Kunisch, Karl (with Schappacher, W.) Necessary conditions for partial differential equations with delay to generate C_0 -semigroups. (**84c:35139**)

Oja, Pääterä The Galerkin method for parabolic equations with operators of local type. (Russian. English and German summaries) (**84m:34094**)

Rankin, Samuel M., III Existence and asymptotic behavior of a functional-differential equation in Banach space. (**84h:35160**)

Renardy, Michael A class of quasilinear parabolic equations with infinite delay and application to a problem of viscoelasticity. (**84c:35133**)

Schappacher, W. See Kunisch, Karl, (**84c:35139**)

Vernole, Paola See Ardito, Ada, (**84f:35143**)

34K35 Control problems

Rodionov, A. M. A study of the stabilizability and stability of self-tuning algorithms in systems with delay. (Russian) **84c:34085**

secondary classifications:

Angelov, V. G. (with Bainov, D. D.) Absolutely continuous solutions of some functional extremal equations of neutral type. (**84g:34116**)

Bainov, D. D. See Konstantinov, M. M., (**84d:34076**) and Angelov, V. G., (**84g:34116**)

Konstantinov, M. M. (with Bainov, D. D.) Stability and approximate solution of regularly perturbed boundary value problems for differential delayed equations. (**84d:34076**)

Mansimov, K. B. On the theory of necessary conditions for optimality of singular controls in a minimax problem. I. (Russian. English and Azerbaijani summaries) (**84i:49024**)

Miloserdova, I. V. (with Potapov, A. I.) Parametric instability of systems described by first-order differential-difference equations. (Russian) (**84c:34090**)

O'Connor, Daniel A. (with Tarn, T. J.) On stabilization by state feedback for neutral differential-difference equations. (**84i:93101**)

(with Tarn, T. J.) On the function space controllability of linear neutral systems. (**84g:93019**)

Olbrot, Andrzej W. (with Żak, Stanisław H.) Sufficient and necessary conditions for spectral controllability and observability of linear retarded systems. (Russian summary) (**84g:93020**)

Potapov, A. I. See Miloserdova, I. V., (**84c:34090**)

Seménova, V. N. Solution of control problems described by equations with deviating argument. (Russian) (**84d:93029**)

Tarn, T. J. See O'Connor, Daniel A., (**84g:93019**) and (**84i:93101**)

Voigt, Wolfgang Das Differenzenverfahren bei nichtlinearen parabolischen Differential-Funktional-Gleichungen mit Rand-Funktional-Bedingungen. [The difference method in nonlinear parabolic functional-differential equations with boundary-functional conditions] (**84c:35144b**)

Vu Kuok Khan' On the question of the controllability of nonstationary systems with variable delay. (Russian. English summary) (**84a:93022**)

Żak, Stanisław H. See Olbrot, Andrzej W., (**84g:93020**)

34K99 None of the above, but in this section

Bainov, D. D. See Kazakova, N. G., **84g:34134**

Banks, H. T. Identification of nonlinear delay systems using spline methods. (See **84c:00009**)

Bickart, Theodore A. P -stable and $P[\alpha, \beta]$ -stable integration/interpolation methods in the solution of retarded differential-difference equations. **84j:34090**

Bleyer, Andrés On global methods to solve difference-differential equations with retarded argument. **84c:34115**

Capel, H. W. See Nijhoff, F. W.; et al., **84f:34110**

Dolinski, R. (with Zima, K.) On weak differential-functional inequalities. **84i:34091**

Jackiewicz, Z. (with Kwapisz, M.) Some results on convergence of multistep methods of approximate solving the functional-differential equations. (See **84c:34002**)

- Kazakova, N. G. (with Bainov, D. D.) On the convergence of the method of finite differences applied to the solving of the initial value problem for functional-differential neutral type equations. **84g:34134**
- Kwapisz, M. See Jackiewicz, Z., (See **84c:34002**)
- Narita, Kazuaki Soliton solution to extended Volterra equation. **84c:34116**
- Nijhoff, F. W. (with Quispel, G. R. W.; Capel, H. W.) Linearization of nonlinear differential-difference equations. **84f:34110**
- Olemlskoi, Yu. V. Positive solutions of a linear differential equation with deviating argument. (Russian. English summary) **84f:34111**
- Oussalah, Amar Méthodes numériques pour la détermination de solutions périodiques d'équations différentielles périodiques à argument retardé. [Numerical methods for determining periodic solutions of periodic delay equations] (See **84a:34003**)
- Quispel, G. R. W. See Nijhoff, F. W.; et al., **84f:34110**
- Staikos, V. A. (with Tsamatos, P. Ch.) On the terminal value problem for differential equations with deviating arguments. (See **84c:34002**)
- Tsamatos, P. Ch. See Staikos, V. A., (See **84c:34002**)
- Zima, K. See Dolinski, R., **84i:34091**

secondary classifications:

- Bickart, Theodore A. F -stable and $F[a, \beta]$ -stable integration/interpolation methods in the solution of retarded differential-difference equations. (**84d:65043**)
- Clarke, C. J. S. (with Rosenblum, Arnold) The existence and uniqueness of small-angle scattering solutions to equations of particle motion with radiation reaction. (**84c:78012**)
- Jackiewicz, Zdzisław Global error estimation in the numerical solution of retarded differential equations by Euler's method. (Russian and Czech summaries) (**84g:65089**)
- Kurbatov, V. G. A generalization of an operator of inner superposition. (Russian) (**84b:47047**)
- Rosenblum, Arnold See Clarke, C. J. S., (**84c:78012**)
- Salamon, Dietmar Observability of nontrivial small solutions for neutral systems. (**84i:93039**)
- Smitalova, Kristina On chaos in difference and differential-difference equations. (See **84i:00016**)

35-XX PARTIAL DIFFERENTIAL EQUATIONS

35-01 Elementary exposition, textbooks

- Bitsadze, A. V. ★Уравнения математической физики. (Russian) [Equations of mathematical physics] **84f:35001**
(with Kalinichenko, D. F.) ★A collection of problems on the equations of mathematical physics. **84j:35001**
- Huberman, Richard ★Elementary applied partial differential equations. **84a:35001**
- Kalinichenko, D. F. See Bitsadze, A. V., **84f:35001**
- Mikhailov, V. P. ★Дифференциальные уравнения в частных производных. (Russian) [Partial differential equations] **84f:35002**
- Thayer, Francisco Javier ★Notes on partial differential equations. **84b:35001**
(Volosov, V. M.) See Bitsadze, A. V.; et al., **84j:35001**
(Volosova, I. G.) See Bitsadze, A. V.; et al., **84j:35001**
- Wloka, Joseph ★Partielle Differentialgleichungen. (German) [Partial differential equations] **84a:35002**
- Zauderer, Erich ★Partial differential equations of applied mathematics. **84g:35001**

secondary classifications:

- Bogdanov, Yu. S. (with Syroid, Yu. B.) ★Дифференциальные уравнения. (Russian) [Differential equations] (**84m:34001**)
- Choquet-Bruhat, Yvonne (with DeWitt-Morette, Cécile; Dillard-Bleick, Margaret) ★Analysis, manifolds and physics. (**84c:58002**)
- DeWitt-Morette, Cécile See Choquet-Bruhat, Yvonne; et al., (**84c:58002**)
- Dillard-Bleick, Margaret See Choquet-Bruhat, Yvonne; et al., (**84c:58002**)
- Iooss, Gérard (with Joseph, Daniel D.) ★Элементарная теория устойчивости и бифуркаций. (Russian) [Elementary stability and bifurcation theory] (**84j:34001**)
- Joseph, Daniel D. See Iooss, Gérard, (**84j:34001**)
- Marcowitz, Ulrich See Meis, Theodor, (**84g:65002**)
- Meis, Theodor (with Marcowitz, Ulrich) ★Numerical solution of partial differential equations. (**84g:65002**)
- (Moiseev, N. N.) See Iooss, Gérard; et al., (**84j:34001**)
- (Rubanovskii, V. N.) See Iooss, Gérard; et al., (**84j:34001**)
- Syroid, Yu. B. See Bogdanov, Yu. S., (**84m:34001**)
- Triebel, Hans ★Analysis und mathematische Physik. (German) [Analysis and mathematical physics] (**84c:00003**)
- (Wadsack, Peter R.) See Meis, Theodor; et al., (**84g:65002**)

35-02 Advanced exposition (research surveys, monographs, etc.)

- (Barut, Asim Orhan) See Nonlinear equations in physics and mathematics, **84k:35001**
- Cardoso, Fernando Remarks on the local theory of linear partial differential operators. (Portuguese) **84i:35001**
- Dubinskii, Yu. A. The algebra of infinite-order differential operators and pseudodifferential equations with an analytic symbol. (Russian) **84d:35001b**
An algebra of pseudodifferential operators with analytic symbols and its application to mathematical physics. (Russian) **84d:35001a**
- Hua, Luo Geng Geometrical theory of partial differential equations. (See **84i:00020**)
- Smoller, Joel A. ★Shock waves and reaction-diffusion equations. **84d:35002**
- Strocchi, F. Classification of solutions of nonlinear hyperbolic equations and nonlinear elliptic problems. **84c:35001**
- Istanbul ★Nonlinear equations in physics and mathematics. **84k:35001**

NATO Advanced Study Institute:

Nonlinear Equations in Physics and Mathematics ★Nonlinear equations in physics and mathematics. **84k:35001**

Nonlinear equations in physics and mathematics ★Nonlinear equations in physics and mathematics. **84k:35001**

secondary classifications:

- Calogero, Francesco (with Degasperis, Antonio) ★Spectral transform and solitons. Vol. I. (**84f:35121**)
- Degasperis, Antonio See Calogero, Francesco, (**84f:35121**)
- Roach, Gary F. ★Green's functions. (**84a:34001**)
- Schröder, Johann Estimates for vector-valued elliptic-parabolic problems of the second order. (See **84k:00009**)

35-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (d'Alembert, Jean le Rond) See Demidov, S. S., (**84d:01022**)
- Atkinson, F. V. Christoffel's work on shock waves. (**84c:01027**)
- Demidov, S. S. Mathématiques et réalité physique dans la discussion sur la vibration d'une corde en XVIIIe siècle. [Mathematics and physical reality in the 18th century discussion of the vibration of a string] (**84c:01028**)
The study of partial differential equations of the first order in the 18th and 19th centuries. (**84c:01034**)
On the history of the theory of first-order partial differential equations. C. G. J. Jacobi's "first method". (Russian) (**84i:01059**)
Création et développement de la théorie des équations différentielles aux dérivées partielles dans les travaux de J. d'Alembert. (English summary) [Creation and development of the theory of partial differential equations in the works of J. d'Alembert] (**84d:01022**)
- Garding, Lars Functional analysis in the theory of partial differential equations. (See **84m:01001**)
- Kreith, Kurt PDE generalizations of the Sturm comparison theorem. (See **84m:01001**)

35-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Ganzha, V. G. (with Meleshko, S. V.; Murzin, F. A.; Shapeev, V. P.; Yanenko, N. N.) Computer realization of an algorithm for investigating the compatibility of systems of partial differential equations. (Russian) (**84d:58001**)
- Meleshko, S. V. See Ganzha, V. G.; et al., (**84d:58001**)
- Murzin, F. A. See Ganzha, V. G.; et al., (**84d:58001**)
- Shapeev, V. P. See Ganzha, V. G.; et al., (**84d:58001**)
- Yanenko, N. N. See Ganzha, V. G.; et al., (**84d:58001**)

35-06 Proceedings, conferences, etc.

- (Ball, John MacLeod) See Systems of nonlinear partial differential equations, **84j:35004**
- (Bardos, Claude W.) See Contributions to nonlinear partial differential equations, **84m:35001**
- (Birman, M. Sh.) See Spectral theory. Wave processes, **84b:35004**
- (Brezis, Haim) See Nonlinear partial differential equations and their applications. Collège de France Seminar, **84i:35004** and Nonlinear partial differential equations and their applications. Collège de France seminar, **84j:35003**
- (Damblamian, A.) See Contributions to nonlinear partial differential equations, **84m:35001**
- (Diaz Diaz, Jesus Ildefonso) See Contributions to nonlinear partial differential equations, **84m:35001**
- (Fujita, Hiroshi) See Nonlinear partial differential equations in applied science, **84m:35002**
- (Goulaouic, C.) See Seminar: Goulaouic-Meyer-Schwartz, **84i:35006**
- (Hernández, J.) See Contributions to nonlinear partial differential equations, **84m:35001**
- (Janušauskas, Algimantas) See Analytic methods in the theory of elliptic equations, **84i:35002**
- (Ladyzhenskaya, O. A.) See Boundary value problems of mathematical physics and related problems in the theory of functions, **84c:35001**
- (Lax, Peter D.) See Nonlinear partial differential equations in applied science, **84m:35002**
- (Lions, Jacques-Louis) See Nonlinear partial differential equations and their applications. Collège de France Seminar, **84i:35004** and Nonlinear partial differential equations and their applications. Collège de France seminar, **84j:35003**
- (Littman, Walter) See Studies in partial differential equations, **84i:35007**
- (Meyer, Yves) See Seminar: Goulaouic-Meyer-Schwartz, **84i:35006**
- (Rasulov, M. L.) See Boundary value problems for partial differential equations, **84c:35003**
- (Schwartz, Laurent) See Seminar: Goulaouic-Meyer-Schwartz, **84i:35006**
- (Smoller, Joel A.) See Nonlinear partial differential equations, **84f:35004**
- (Sobolev, S. L.) See Partial differential equations, **84i:35005**
- (Strang, Gilbert) See Nonlinear partial differential equations in applied science, **84m:35002**
- (Strygin, V. V.) See Approximate methods for investigating differential equations and their applications, **84f:35003**
- (Uspenskii, S. V.) See Partial differential equations, **84i:35005**
- (Volkodavov, V. F.) See Studies in differential equations, **84k:35002**
- (Vragov, V. N.) See Nonclassical problems of the equations of mathematical physics, **84m:35003**
- (Witten, Matthew) See Hyperbolic partial differential equations, **84d:35003**

- (Zhaitykov, O. A.) See *Differential equations and their applications*, 84b:35002
- Analytic methods in the theory of elliptic equations** ★ Аналитические методы в теории эллиптических уравнений. (Russian) [Analytic methods in the theory of elliptic equations] 84i:35002
- Approximate methods for investigating differential equations and their applications** ★ Приближенные методы исследования дифференциальных уравнений и их приложений. (Russian) [Approximate methods for investigating differential equations and their applications] 84f:35003
- Astérisque** ★ Astérisque. 95. (French) 84c:35002
- Boundary value problems for partial differential equations** ★ Краевые задачи для дифференциальных уравнений с частными производными. (Russian) [Boundary value problems for partial differential equations] 84c:35003
- Boundary value problems of mathematical physics and related problems in the theory of functions** ★ Краевые задачи математической физики и смежные вопросы теории функций. 15. (Russian) [Boundary value problems of mathematical physics and related problems in the theory of functions. 15] 84c:35001
- Conference:**
- Nonlinear Partial Differential Equations** ★ Nonlinear partial differential equations. 84f:35004
- Partial differential equations** ★ Journées "Équations aux Dérivées Partielles". (French) [Conference on Partial Differential Equations] 84i:35003
- Contributions to nonlinear partial differential equations** ★ Contributions to nonlinear partial differential equations. 84m:35001
- Differential equations and their applications** ★ Дифференциальные уравнения и их приложения. (Russian) [Differential equations and their applications] 84b:35002
- Durham, N.H.** ★ Nonlinear partial differential equations. 84f:35004
- Hyperbolic partial differential equations** ★ Hyperbolic partial differential equations. 84d:35003
- Limit problems for elliptic and parabolic partial differential equations** ★ The limit problems for elliptic and parabolic partial differential equations. 84h:35001
- Madrid** ★ Contributions to nonlinear partial differential equations. 84m:35001
- Meeting:**
- Nonlinear partial differential equations** ★ Contributions to nonlinear partial differential equations. 84m:35001
- Methods of functional analysis applied to differential equations** ★ Métodos de análise funcional aplicados a equações diferenciais. (Portuguese) [Methods of functional analysis applied to differential equations] 84j:35002
- NATO advanced study institute:**
- Systems of nonlinear partial differential equations** ★ Systems of nonlinear partial differential equations. 84j:35004
- Nonclassical problems of the equations of mathematical physics** ★ Неклассические задачи уравнений математической физики. (Russian) [Nonclassical problems of the equations of mathematical physics] 84m:35003
- Nonlinear partial differential equations** ★ Nonlinear partial differential equations. 84f:35004
- Nonlinear partial differential equations and their applications. Collège de France Seminar** ★ Nonlinear partial differential equations and their applications. Collège de France Seminar. Vol. IV. 84i:35004
- ★ Nonlinear partial differential equations and their applications. Collège de France seminar. Vol. V. 84j:35003
- Nonlinear partial differential equations in applied science** ★ Nonlinear partial differential equations in applied science. 84m:35002
- Oxford** ★ Systems of nonlinear partial differential equations. 84j:35004
- Paris** ★ Nonlinear partial differential equations and their applications. Collège de France Seminar. Vol. IV. 84i:35004
- ★ Nonlinear partial differential equations and their applications. Collège de France seminar. Vol. V. 84j:35003
- Partial differential equations** ★ Дифференциальные уравнения с частными производными. (Russian) [Partial differential equations] 84i:35005
- Proceedings of the S. L. Sobolev Seminar** ★ Дифференциальные уравнения с частными производными. (Russian) [Partial differential equations] 84i:35005
- Saint-Jean-de-Monts** ★ Journées "Équations aux Dérivées Partielles". (French) [Conference on Partial Differential Equations] 84i:35003
- Seminar:**
- Applied Mathematics** ★ Nonlinear partial differential equations and their applications. Collège de France Seminar. Vol. IV. 84i:35004
- ★ Nonlinear partial differential equations and their applications. Collège de France seminar. Vol. V. 84j:35003
- Goulaouic-Meyer-Schwartz** ★ Séminaire Goulaouic-Meyer-Schwartz, 1982-1983. (French) [Goulaouic-Meyer-Schwartz Seminar, 1982-1983] 84i:35006
- Hyperbolic and Holomorphic Partial Differential Equations** ★ Séminaire sur les Équations aux Dérivées Partielles Hyperboliques et Holomorphes. Année 1981-82. (French) [Seminar on Hyperbolic and Holomorphic Partial Differential Equations. 1981-82] 84b:35003
- U.S.-Japan, nonlinear partial differential equations in applied science** ★ Nonlinear partial differential equations in applied science. 84m:35002
- Solutions of the Navier-Stokes equations** ★ Solutions of the Navier-Stokes equations. (Japanese) 84c:35002
- ★ Solutions of the Navier-Stokes equations. (Japanese) 84f:35005
- Spectral theory. Wave processes** ★ Спектральная теория. Волновые процессы. (Russian) [Spectral theory. Wave processes] 84b:35004
- Studies in differential equations** ★ Исследования по дифференциальным уравнениям. (Russian) [Studies in differential equations] 84c:35002
- Studies in partial differential equations** ★ Studies in partial differential equations. 84i:35007
- Symposium:**
- Solutions of the Navier-Stokes Equations** ★ Solutions of the Navier-Stokes equations. (Japanese) 84c:35002
- ★ Solutions of the Navier-Stokes equations. (Japanese) 84f:35005

- Systems of nonlinear partial differential equations** ★ Systems of nonlinear partial differential equations. 84j:35004
- Tokyo** ★ Nonlinear partial differential equations in applied science. 84m:35002

secondary classifications:

- (Brosowski, Bruno) See *Methods and techniques of mathematical physics*, (84b:00004)
- (Calapso, Renato) See *Proceedings: Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso*, (84f:00012)
- (Chern, S. S.) See *Proceedings: Beijing symposium on differential geometry and differential equations*, (84i:00020)
- (Doebner, Heinz-Dietrich) See *Twistor geometry and nonlinear systems*, (84c:32001)
- (Everitt, W. N.) See *Ordinary and partial differential equations*, (84b:34002)
- (Fasano, Antonio) See *Free boundary problems: theory and applications*, (84b:00003)
- (Fushchich, V. I.) See *Algebra-theoretic investigations in mathematical physics*, (84a:81001)
- (Gherardelli, Francesco) See *Monge-Ampère equations and related topics*, (84c:53004)
- (Gorenflo, Rudolf) See *Applied nonlinear functional analysis*, (84a:49002)
- (Hoffmann, Karl Heinz) See *Applied nonlinear functional analysis*, (84a:49002)
- (Leifman, Lev J.) See *American Mathematical Society Translations, Ser. 2*, (84b:00007)
- (Martensen, Erich) See *Methods and techniques of mathematical physics*, (84b:00004)
- (Palev, Tchavdar D.) See *Twistor geometry and nonlinear systems*, (84c:32001)
- (Primicerio, Mario) See *Free boundary problems: theory and applications*, (84b:00003)
- (Pustomel'nikov, I. P.) See *Differential equations and their applications*, (84b:65006)
- (Sabatier, P. C.) See *Inverse problems*, (84m:00012)
- (Sleeman, B. D.) See *Ordinary and partial differential equations*, (84b:34002)
- (Wu, Wen Jun) See *Proceedings: Beijing symposium on differential geometry and differential equations*, (84i:00020)
- Algebra-theoretic investigations in mathematical physics** ★ Теоретико-алгебраические исследования в математической физике. (Russian) [Algebra-theoretic investigations in mathematical physics] (84a:81001)
- American Mathematical Society Translations, Ser. 2** ★ American Mathematical Society Translations, Ser. 2, Vol. 118. (84b:00007)
- Anniversary:**
- Birth of Calapso, Renato** ★ Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)
- Applied nonlinear functional analysis** ★ Applied nonlinear functional analysis. (84a:49002)
- Beijing** ★ Proceedings of the 1980 Beijing Symposium on Differential Geometry and Differential Equations. Vol. 1, 2, 3. (84i:00020)
- Berlin** ★ Applied nonlinear functional analysis. (84a:49002)
- Conference:**
- Calapso, Renato** ★ Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)
- Methods and techniques of mathematical physics** ★ Methods and techniques of mathematical physics. (84b:00004)
- Ordinary and Partial Differential Equations** ★ Ordinary and partial differential equations. (84b:34002)
- Differential equations and their applications** ★ Дифференциальные уравнения и их приложения. (Russian) [Differential equations and their applications] (84b:65006)
- Dundee** ★ Ordinary and partial differential equations. (84b:34002)
- Florence** ★ Monge-Ampère equations and related topics. (84c:53004)
- Free boundary problems: theory and applications** ★ Free boundary problems: theory and applications. Vol. I, II. (84b:00003)
- Inverse problems** ★ Problèmes inverses. (French) [Inverse problems] (84m:00012)
- Meeting:**
- RCP, interdisciplinary study of inverse problems** ★ Problèmes inverses. (French) [Inverse problems] (84m:00012)
- Messina** ★ Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)
- Methods and techniques of mathematical physics** ★ Methods and techniques of mathematical physics. (84b:00004)
- Monge-Ampère equations and related topics** ★ Monge-Ampère equations and related topics. (84c:53004)
- Montecatini** ★ Free boundary problems: theory and applications. Vol. I, II. (84b:00003)
- Montpellier** ★ Problèmes inverses. (French) [Inverse problems] (84m:00012)
- Oberwolfach** ★ Methods and techniques of mathematical physics. (84b:00004)
- Ordinary and partial differential equations** ★ Ordinary and partial differential equations. (84b:34002)
- Primorsko** ★ Twistor geometry and nonlinear systems. (84c:32001)
- Problems inverses** ★ Problèmes inverses. (French) [Inverse problems] (84m:00012)
- Proceedings:**
- Beijing symposium on differential geometry and differential equations** ★ Proceedings of the 1980 Beijing Symposium on Differential Geometry and Differential Equations. Vol. 1, 2, 3. (84i:00020)
- Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso** ★ Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)
- Seminar:**
- Monge-Ampère Equations and Related Topics** ★ Monge-Ampère equations and related topics. (84c:53004)
- Spectral scattering theory** ★ Spectral scattering theory. (Japanese) (84b:81002)
- Summer School:**
- Bulgarian, Mathematical Problems of Quantum Field Theory** ★ Twistor geometry and nonlinear systems. (84c:32001)

Symposium:

- Beijing, differential geometry and differential equations** ★Proceedings of the 1980 Beijing Symposium on Differential Geometry and Differential Equations. Vol. 1, 2, 3. (84i:00020)
- Free boundary problems: theory and applications** ★Free boundary problems: theory and applications. Vol. I, II. (84i:00003)
- Spectral Scattering Theory** ★Spectral scattering theory. (Japanese) (84b:81002)
- Taormina** ★Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84i:00012)
- Twistor geometry and nonlinear systems** ★Twistor geometry and nonlinear systems. (84c:32001)
- Workshop:**
- Applied Nonlinear Functional Analysis** ★Applied nonlinear functional analysis. (84c:49002)

35Axx General theory

35A05 General existence and uniqueness theorems

- Alinhac, S.** Unicité du problème de Cauchy pour des opérateurs du second ordre à symbole réel. [Uniqueness of the Cauchy problem for second-order operators with real symbol] (See 84i:35006)
- Burskii, V. P.** The solvability of the Garabedian-Grushin equation. (Russian) 84a:35003
- Chau, N. N.** Obtaining uniqueness classes for the solution of the Cauchy problem from the triviality classes for the solution. (Russian) 84m:35004
- Gershtein, L. M.** Coercive solvability of the Cauchy problem for a class of second-order differential equations. (Russian) 84i:35006
- Lascar, Richard** (with Zuily, C.) Unicité et non unicité du problème de Cauchy pour une classe d'opérateurs différentiels à caractéristiques doubles. [Uniqueness and nonuniqueness of the Cauchy problem for a class of differential operators with double characteristics] 84j:35005
- Lerner, Nicolas** Unicité de Cauchy pour des opérateurs faiblement principalement normaux. [Cauchy uniqueness for weakly principally normal operators] (See 84i:35003)
- Saint Raymond, X.** L'unicité pour des problèmes de Cauchy caractéristiques. [Uniqueness for characteristic Cauchy problems] 84g:35002
- Saut, Jean-Claude** (with Scheurer, Bruno) Sur l'unicité du problème de Cauchy et le prolongement unique pour des équations elliptiques à coefficients non localement bornés. [On the uniqueness of the Cauchy problem and unique continuation for elliptic equations with not locally bounded coefficients] 84b:35005
- Scheurer, Bruno** See Saut, Jean-Claude, 84b:35005
- Yanov, S. I.** Reduction of mixed problems for a class not of Cauchy-Kovalevskaya type to Fredholm equations of the second kind. (Russian) 84c:35004
- Zuily, C.** See Lascar, Richard, 84j:35005

secondary classifications:

- Cattabriga, Lamberto** Existence of a fundamental solution with singular support contained in a half space and surjectivity of differential operators with constant coefficients. (Italian. English summary) (84i:35033)
- Cinquini Cibrario, Maria** A class of systems of partial differential equations in many independent variables. (Italian. English summary) (84g:35034)
- Kamont, Zdzisław** On the Cauchy problem for nonlinear systems of partial differential-functional equations of the first order. (84f:35145)
- Karapetyan, G. A.** Existence and behavior of solutions of a class of hypoelliptic equations in unbounded domains. (Russian. Armenian summary) (84c:35037)
- Li, Da Qian** (with Shi, Jia Hong) Singularities of solutions for first order quasilinear hyperbolic systems. (84g:35114)
- Nacinovich, Mauro** On the solvability of systems of differential equations. (Italian) (84m:58133)
- Rothschild, Linda Preiss** (with Tartakoff, David S.) Inversion of analytic matrices and local solvability of some invariant differential operators on nilpotent Lie groups. (84g:22026)
- Shi, Jia Hong** See Li, Da Qian, (84g:35114)
- Tartakoff, David S.** See Rothschild, Linda Preiss, (84g:22026)
- Yanov, S. I.** Formulation of mixed problems for a class of systems not of the Cauchy-Kovalevskaya type. (Russian) (84j:35039)
- Zaitseva, O. V.** Conditions for well-posedness of the Cauchy problem for a model equation. (Russian) (84a:35054)

35A07 Local existence and uniqueness theorems [See also 35H05, 35Sxx.]

- Boev, T. B.** Uniqueness of the Cauchy problem in case of multiple variable characteristics. 84i:35009a
- Uniqueness for the Cauchy problem in case of double variable characteristic. 84i:35009b
- Egorov, Yu. V.** Equations of principal type. Sufficient conditions for local solvability. (Russian) 84j:35006
- Houine, Jorge** (with Melo, Maria Eulalia Moraes) Uniqueness in the Cauchy problem for a class of differential operators with double characteristics. 84g:35003
- Melo, Maria Eulalia Moraes** See Houine, Jorge, 84g:35003
- Nakane, Shizuo** Uniqueness and nonuniqueness in the Cauchy problem for a class of operators of degenerate type. 84c:35005
- Okaji, Takashi** On local solvability of the operator $D^3 + a^k D_x^k$. 84a:35004
- On local solvability of some non-Kowalevskian partial differential operators. 84j:35007
- Uryu, Hitoshi** Uniqueness for the characteristic Cauchy problem and its applications. 84i:35003

- Yakhno, V. G.** Theorem on existence "in the small" of a multidimensional inverse problem. (Russian) (See 84m:35003)
- Zachmanoglou, E. C.** Nonanalytic solutions of certain linear PDEs. 84m:35005

secondary classifications:

- Elschner, Johannes** (with Lorenz, Michael) An unsolvable hypoelliptic differential operator degenerating at one point. (84h:35034)
- Gindikin, S. G.** See Volevich, L. R., (84m:58147) and (84m:58148)
- Lorenz, Michael** See Elschner, Johannes, (84h:35034)
- Saint Raymond, X.** L'unicité pour des problèmes de Cauchy caractéristiques. [Uniqueness for characteristic Cauchy problems] (84g:35002)
- Treppeau, J.-M.** Sur la résolubilité microlocale des opérateurs de type principal. [Microlocal solvability of principal operators] (84a:58079)
- Volevich, L. R.** (with Gindikin, S. G.) Differential operators with constant coefficients of principal type with respect to a Newton polyhedron. (Russian) (84m:58147)
- (with Gindikin, S. G.) Differential operators with variable coefficients of principal type with respect to a Newtonian polyhedron. (Russian) (84m:58148)
- Zajczkowski, W. M.** Local solvability of a nonstationary leakage problem for an ideal incompressible fluid. III. (84h:76016)

35A08 Fundamental solutions

secondary classifications:

- Rothschild, Linda Preiss** (with Tartakoff, David S.) Analyticity of relative fundamental solutions and projections for left invariant operators on the Heisenberg group. (84d:22017)

Tartakoff, David S. See Rothschild, Linda Preiss, (84d:22017)

35A10 Cauchy-Kowalevski theorems

- Keller, Klaus** (with Schneider, Albert) Ein funktionalanalytischer Beweis des Satzes von Cauchy-Kowalevsky. (English summary) [A functional-analytic proof of the Cauchy-Kowalevski theorem] 84i:35010
- Schneider, Albert** See Keller, Klaus, 84i:35010

secondary classifications:

- Baouendi, M. S.** (with Goulaouic, C.) Sharp estimates for analytic pseudodifferential operators and application to Cauchy problems. (84g:35173)
- Goulaouic, C.** See Baouendi, M. S., (84g:35173)
- Hamada, Yûsaku** (with Leray, Jean; Takeuchi, Akira) Sur le domaine d'existence de la solution de certains problèmes de Cauchy. (English summary) [On the domain of existence of the solution of certain Cauchy problems] (84d:35004)
- Kobayashi, Takao** On the singular Cauchy problem for operators with variable involutive characteristics. (84d:35005)
- Leray, Jean** See Hamada, Yûsaku; et al., (84d:35004)
- Mizohata, Sigeru** On the hyperbolicity in the domain of real analytic functions and Gevrey classes. (84k:35088)
- Takeuchi, Akira** See Hamada, Yûsaku; et al., (84d:35004)
- Yamanaka, Takeshi** The Cauchy-Kovalevskaya theorem with a vector valued time variable. (84j:35155)

35A15 Variational methods

35A20 Analytic methods, singularities

- Baouendi, M. S.** Analytic approximation for homogeneous solutions of linear PDEs. (See 84i:35003)
- Chen, Yin Tong** (with Yu, Chang An) The structure of the analytic solution of Cauchy's problem for a linear partial differential equation of the third order. (Chinese. English summary) 84k:35004
- Dal Fabbro, Florangela** (with Furioli Martinolli, Antonella) Analysis of the solutions of a partial differential equation of hypergeometric type with respect to one variable. II. (Italian) 84i:35011
- Dubinskii, Yu. A.** Cauchy problems for partial differential equations with complex variables. (Russian) 84i:35005
- Furioli Martinolli, Antonella** See Dal Fabbro, Florangela, 84i:35011
- Garnir, H. G.** Propagation des singularités analytiques dans les problèmes aux limites de la physique mathématique par les méthodes de Kawai-Kashiwara et Sjöstrand. I. Introduction: cas de l'espace indéfini. [Propagation of analytic singularities in boundary value problems of mathematical physics using the Kawai-Kashiwara and Sjöstrand methods. I. Introduction: the case of infinite space] (See 84b:35003)
- Grigis, A.** Propagation des singularités le long de courbes microbicaucaractéristiques pour des opérateurs pseudodifférentiels à caractéristiques doubles. I. [Propagation of singularities along microbicaucaractéristic curves for pseudodifferential operators with double characteristics. I.] 84c:35003
- Propagation des singularités sur des groupes de Lie nilpotents de rang 2. II. [Propagation of singularities on nilpotent Lie groups of rank 2. II.] 84c:35004
- Grigor'ev, Yu. M.** See Naumov, V. V., 84h:35004
- Gronau, Detlef** Meromorphe Lösungen linearer partieller Differentialgleichungen—ein Überblick. [Meromorphic solutions of linear partial differential equations—a survey] 84b:35006
- Hamada, Yûsaku** (with Takeuchi, Akira) Sur le problème de Goursat holomorphe pour certains opérateurs à caractéristiques en involution. [The holomorphic Goursat problem for certain operators with characteristics in involution] (See 84b:35003)
- (with Takeuchi, Akira) Sur le prolongement analytique de la solution du problème de Cauchy. [Analytic continuation of the solution of the Cauchy problem] 84c:35006

- (with Leray, Jean; Takeuchi, Akira) Sur le domaine d'existence de la solution de certains problèmes de Cauchy. (English summary) [On the domain of existence of the solution of certain Cauchy problems] **84d:35004**
- (with Takeuchi, Akira) Sur le prolongement analytique de la solution du problème de Cauchy. (English summary) [Analytic continuation of the solution of the Cauchy problem] **84h:35002**
- (with Takeuchi, Akira) Le domaine d'existence et le prolongement analytique des solutions des problèmes de Goursat et de Cauchy à données singulières. (English summary) [Existence domain and analytic continuation for the solutions of Goursat and Cauchy problems with singular data] **84h:35003**
- (with Leray, Jean; Takeuchi, Akira) Prolongements analytiques de la solution du problème de Cauchy linéaire. (English summary) [Analytic continuations of the solution of the linear Cauchy problem] **84h:35006**
- Januszkas, Algimantas Some problems of the analytic theory of partial differential equations. (Russian) **84h:35007**
- Kaneko, Akira On the propagation of micro-analyticity along the boundary. **84c:35005**
- Kobayashi, Takao On the singular Cauchy problem for operators with variable involutive characteristics. **84d:35005**
- Lascar, Richard ★ Propagation des singularités des solutions d'équations pseudo-différentielles à caractéristiques de multiplicités variables. (French) [Propagation of singularities of solutions of pseudodifferential equations with characteristics of variable multiplicities] **84c:35006**
- Laubin, P. Propagation des singularités analytiques pour des opérateurs à caractéristiques de multiplicité variable. (English summary) [Propagation of analytic singularities for operators with characteristics of variable multiplicity] **84g:35004**
- Leray, Jean See Hamada, Yūsaku; et al., **84d:35004**; **84c:35002**
- Lousberg, Pierre Singularités des solutions des problèmes aux limites non diffractifs pour les systèmes de multiplicité constante. [Singularities of solutions of nondiffractive boundary value problems for systems of constant multiplicity] **84h:35008a**
- Singularités des solutions des problèmes aux limites non diffractifs pour les systèmes de multiplicité constante. II. [Singularities of solutions of nondiffractive boundary value problems for systems of constant multiplicity. II] **84h:35008b**
- Singularités des solutions des problèmes aux limites non diffractifs pour les systèmes de multiplicité constante. III. [Singularities of solutions of nondiffractive boundary value problems for systems of constant multiplicity. III] **84h:35008c**
- Propagation des singularités analytiques dans les problèmes aux limites de la physique mathématique par les méthodes de Kawai-Kashiwara et Sjöstrand. II. Cas des problèmes aux limites. [Propagation of analytic singularities in boundary value problems of mathematical physics using the Kawai-Kashiwara and Sjöstrand methods. II. The case of boundary value problems] (See **84b:35003**)
- Sur les ondes de surface analytiques de nature non diffractive. (English summary) [On analytic surface waves of nondiffractive type] **84h:35009**
- Mikhailov, L. G. A method of analytic continuation for certain partial differential equations with several independent variables. (Russian. Tajiki summary) **84m:35006**
- Naumov, V. V. (with Grigor'ev, Yu. M.) The Laurent series for the Moisil-Theodorescu system. (Russian) **84h:35004**
- Persson, Jan Singular holomorphic solutions of linear partial differential equations with holomorphic coefficients and nonanalytic solutions of equations with analytic coefficients. **84c:35007**
- Tahara, Hidetoshi Fundamental systems of analytic solutions of Fuchsian type partial differential equations. **84i:35012**
- Takeuchi, Akira See Hamada, Yūsaku, **84c:35006**; **84d:35004**; **84h:35002**; **84h:35003**; **84h:35006** and (See **84b:35003**)
- Wagschal, Claude Problème de Cauchy ramifié à caractéristiques multiples holomorphes de multiplicité variable. [Ramified Cauchy problem with holomorphic multiple characteristics of variable multiplicity] **84g:35005**
- Wu, J. Propagation des singularités analytiques dans les problèmes aux limites de la physique mathématique par les méthodes de Kawai-Kashiwara et Sjöstrand. III. Diffraction des singularités analytiques. [Propagation of analytic singularities in boundary value problems of mathematical physics using the Kawai-Kashiwara and Sjöstrand methods. III. Diffraction of analytic singularities] (See **84b:35003**)
- Yagdzhyan, K. A. Distribution of singularities of solutions of equations with real characteristics of variable multiplicity. (Russian) (See **84m:35003**)
- Yu, Chang An See Chen, Yin Tong, **84k:35004**
- Zil'bergleit, L. V. Asymptotic solutions of differential equations with analytic coefficients. (Russian) **84i:35013**
- secondary classifications:
- Agabekov, R. I. Analytic theory of partial differential equations. (Russian) (**84k:35048**)
- Aviles, Patricia (with Weitsman, Allen) On the singularities of certain nonlinear partial differential equations. (**84b:35043**)
- Bengel, Gunter (with Gérard, Raymond) Formal and convergent solutions of singular partial differential equations. (**84d:35024**)
- Boev, T. B. Propagation of singularities for a class of operators with involutive characteristics. (**84c:35159**)
- Dencker, Nils On the propagation of singularities for pseudodifferential operators of principal type. (**84c:58216**)
- van den Essen, Arno Un \mathbb{Q} -module holonome tel que le conoyau de l'opérateur $\partial/\partial x_n$ soit non-holonome. (English summary) [A holonomic \mathbb{Q} -module such that the cokernel of the operator $\partial/\partial x_n$ is not holonomic] (**84c:58076**)
- Gérard, Raymond See Bengel, Gunter, (**84d:35024**)
- Gilbert, Robert P. (with Wei, Lin) Algorithms for generalized Cauchy kernels. (**84i:35027**)
- Gronau, Detlef Meromorphic solutions and solutions by differential operators of linear partial differential equations with constant coefficients. (**84f:35022**)
- Kawai, Takahiro An example of a complex of linear differential operators of infinite order. (**84i:58112**)
- Kobayashi, Takao Elementary solutions and propagation of singularities for hyperbolic operators with involutive characteristics. (**84k:35098**)
- Lascar, Bernard (with Sjöstrand, Johannes) Équation de Schrödinger et propagation des singularités pour des opérateurs pseudo-différentiels à caractéristiques réelles de multiplicité variable. [Schrödinger equation and propagation of singularities for pseudodifferential operators with real characteristics of variable multiplicity] (**84m:35127**)
- (with Sjöstrand, Johannes) Équation de Schrödinger et propagation des singularités. II. [Schrödinger equation and propagation of singularities. II] (See **84c:35003**)
- Laubin, P. Sur le wave front set analytique d'une distribution. [The analytic wave front set of a distribution] (**84d:46052**)
- Front d'onde analytique et décomposition microlocale des distributions. [Analytic wave front and microlocal decomposition of distributions] (See **84h:35003**)
- Liess, Otto Necessary and sufficient conditions for propagation of singularities for systems of linear partial differential operators with constant coefficients. (**84h:35031**)
- Maksimov, V. M. Equations of Cauchy-Riemann type associated with commutative algebras. (Russian) (**84c:30073**)
- Mukherjee, J. See Roy Chowdhury, A.; et al., (**84i:58107**)
- Nacimovich, Mauro On the absence of Poincaré lemma for some systems of partial differential equations. (**84m:58132**)
- Nishitani, Tatsuo Une remarque sur le problème de Goursat. [A remark on the Goursat problem] (**84m:35009**)
- Reed, Michael C. Recent progress in the singularity theory for semilinear waves. (See **84h:82004**)
- Roy, T. See Roy Chowdhury, A.; et al., (**84i:58107**)
- Roy Chowdhury, A. (with Roy Chowdhury, K.; Mukherjee, J.; Roy, T.) Lie Bäcklund type symmetry and Bäcklund transformation for similarity solutions of cylindrical KdV equation. (**84i:58107**)
- Roy Chowdhury, K. See Roy Chowdhury, A.; et al., (**84i:58107**)
- Shtalov, V. E. See Sternin, B. Yu., (**84c:58219**)
- Sjöstrand, Johannes Singularités analytiques microlocales. [Microlocal analytic singularities] (**84m:58151**)
- See also Lascar, Bernard, (**84m:35127**) and (See **84c:35003**)
- Sternin, B. Yu. (with Shtalov, V. E.) Characteristic Cauchy problem on a complex-analytic manifold. (Russian) (**84c:58219**)
- Tajima, Shinichi Analyse microlocale sur les variétés de Cauchy-Riemann et problème du prolongement des solutions holomorphes des équations aux dérivées partielles. [Microlocal analysis on Cauchy-Riemann manifolds and the extension problem for holomorphic solutions of partial differential equations] (**84i:32031**)
- Vaillant, J. Intégrales singulières holomorphes. [Holomorphic singular integrals] (See **84i:35003**)
- Wei, Lin See Gilbert, Robert P., (**84i:35027**)
- Weitsman, Allen See Aviles, Patricia, (**84b:35043**)
- Asterisque ★ Asterisque. 95. (French) (**84c:35002**)
- 35A22 Transform methods
- secondary classifications:
- Foias, Ciprian (with Saut, Jean-Claude) Transformation fonctionnelle linéarisant les équations de Navier-Stokes. (English summary) [Functional transform linearizing the Navier-Stokes equations] (**84c:35089**)
- Saut, Jean-Claude See Foias, Ciprian, (**84c:35089**)
- Wallner, Herbert Associated differential equations and their Bergman kernels. (**84h:35018**)
- 35A25 Other special methods
- Bluman, George W. On mapping linear partial differential equations to constant coefficient equations. **84c:35010**
- Carroll, Robert Wayne On the characterization of transmutations. **84c:35005**
- Lavrov, A. M. Ill-posed Cauchy problems and a uniqueness theorem for partial differential equations. (Russian) **84c:35008**
- secondary classifications:
- Prosser, Reese T. Formal solutions of inverse scattering problems. IV. Error estimates. (**84b:81095**)
- 35A30 Geometric theory, characteristics, transformations
- Adams, Ernst See Ames, W. F.; et al., (See **84k:00009**)
- Ames, W. F. (with Lohner, R. J.; Adams, Ernst) Group properties of $u_n = [f(u)u]_n$. (See **84k:00009**)
- Batyrov, S. Group classification of potentials for a second-order linear differential equation. (Russian. English summary) **84b:35007**
- The symmetry group of a second-order nonlinear parabolic equation. (Russian. English summary) **84b:35008**
- Bluman, George W. See Kumei, Sukeyuki, **84k:35011**
- Chakyr, E. I. A linear system of first-order partial differential equations admitting a group of rotations. (Russian) (See **84c:34002**)
- Chugunov, V. A. Group properties of an equation describing glacial flow. (Russian) **84c:35009**
- Fushchich, V. I. Symmetry in problems of mathematical physics. (Russian. English summary) **84c:35007**
- (with Tychinin, V. A.) Linearization of some nonlinear equations by means of nonlocal transformations. (Russian) **84f:35006**
- (with Shteln', V. M.) Invariant solutions of the nonlinear Dirac equation. (Russian) **84c:35006**
- Hlavaty, Ladislav (with Wolf, Kurt Bernardo; Steinberg, Stanly) Integral and Bäcklund transforms within symmetry groups of certain families of nonlinear differential equations. **84j:35008**

- Khapiro, S. V. Motion of an ideal fluid with a free boundary with a nonlinear velocity field. (Russian) **84c:35014**
- Kumel, Sukeyuki (with Bluman, George W.) When nonlinear differential equations are equivalent to linear differential equations. **84c:35011**
- Lohner, R. J. See Ames, W. F.; et al., (See **84c:00009**)
- Nicorovici-Forumbaru, N. The symmetry group of the free Schrödinger equation. (Romanian. English summary) **84c:35007**
- Ruiz, Ceferino Determination of the automorphisms of a differential operator. (Spanish) **84c:35006**
- Senshov, S. I. Group classification of equations of the plane inhomogeneous theory of elasticity. (Russian) **84c:35008**
- Shtelen', V. M. Group analysis of a system of parabolic equations. (Russian. English summary) **84c:35006**
- See also Fushchich, V. I., **84c:35006**
- Stangor, Roger A new proof of existence of similarity solutions. **84c:35009**
- Steinberg, Stanly See Hlavaty, Ladislav; et al., **84j:35008**
- Strampp, W. Partially invariant solutions of systems of differential equations in two independent variables. **84c:35012**
- Tychinin, V. A. See Fushchich, V. I., **84c:35006**
- Wolf, Kurt Bernardo See Hlavaty, Ladislav; et al., **84j:35008**

secondary classifications:

- Ames, Karen A. (with Ames, W. F.) On group analysis of the von Kármán equations. (84b:73011)
- Ames, W. F. See Ames, Karen A., (84b:73011) and Zulehner, W., (84j:35009)
- Bais, F. A. (with Sasaki, Ryu) Solution generation techniques for static axially symmetric self-dual gauge field equations. (84c:81033a)
- (with Sasaki, Ryu) Algebraic construction of static axially symmetric self-dual gauge fields for an arbitrary group. (84c:81033b)
- Bhutani, O. P. (with Sharma, N. L.) On the similarity solutions of the generalized Boussinesq equation in hydrology via transformation groups. (84c:58199)
- (with Mital, Poornima) On the solution of hydrodynamical equations via Lie groups. (84c:76066)
- Bunimovich, A. I. (with Krasnoslobodtsev, A. V.) Group-invariant solutions of kinetic equations. (84c:76056)
- Cullen, John J. See Ray, John R.; et al., (84b:58099)
- Dorodnitsyn, V. A. (with Knyazeva, I. V.; Svirshchevskii, S. R.) Group properties of the nonlinear heat equation with a source in the two- and three-dimensional cases $T_t = \sum_i (K(T)T_{x_i})_{x_i} + Q(T)$. (Russian. English summary) (84c:58234)
- Fava, Franco Classical transformations and jet bundles. (Italian) (84m:58118)
- Fushchich, V. I. (with Serova, M. M.) On the maximal invariance group and general solution of one-dimensional equations of gas dynamics. (Russian) (84c:58152)
- Harnad, J. (with Winternitz, P.) Group theoretical methods and the nonlinear Schrödinger equation. (See **84c:58109**)
- Hermann, Robert Geometric construction and properties of some families of solutions of nonlinear partial differential equations. I. (84c:58006)
- Huang, Xun Cheng A one-parameter Bäcklund transformation for the Euclidean Liouville and wave equations. (84c:58107)
- Hussain, Munawar Noether's theorem for a nonholonomic system. (Russian and Polish summaries) (84j:70017)
- Kalnins, E. G. (with Miller, Willard, Jr.) Nonpolynomial constants of the motion and partial separation of the Hamilton-Jacobi equation. (84g:53101)
- Knyazeva, I. V. See Dorodnitsyn, V. A.; et al., (84c:58234)
- Kobussen, J. A. On symmetries and first integrals. (84b:58098)
- Krasnoslobodtsev, A. V. See Bunimovich, A. I., (84c:76056)
- Lopatnikov, A. K. On the question of constructing an integral manifold of a Pfaffian system in involution. (Russian) (84c:58013)
- Meleshko, S. V. Differential constraints and one-parameter groups of Lie-Bäcklund transformations. (Russian) (84c:58236)
- Michalec, J. Group analysis of a set of equations describing isentropic shock waves in solids. (Russian and Polish summaries) (84b:76030)
- Miller, Willard, Jr. See Kalnins, E. G., (84g:53101)
- Mital, Poornima See Bhutani, O. P., (84c:76066)
- Molino, Pierre Systèmes différentiels extérieurs et équations d'évolution. [Exterior differential systems and evolution equations] (84c:58007)
- Morioka, Hisasi On fundamental systems of differential semi-invariants in several variables. (84d:12023)
- Nôno, Takayuki See Sato, Ryuzo, (84m:90023)
- Oevel, W. See Strampp, W.; et al., (84m:35112)
- Olver, Peter J. ★Applications of Lie groups to differential equations. (84c:58197)
- Orsyannikov, L. V. ★Лекции по основам газовой динамики. (Russian) [Lectures on the fundamentals of gas dynamics] (84f:76041)
- Ray, John R. (with Reid, James L.; Cullen, John J.) Lie and Noether symmetry groups of nonlinear equations. (84b:58099)
- Reid, James L. See Ray, John R.; et al., (84b:58099)
- Rogers, Colin (with Shadwick, W. F.) ★Bäcklund transformations and their applications. (84c:58002)
- Sasaki, Ryu See Bais, F. A., (84c:81033a) and (84c:81033b)
- Sato, Ryuzo (with Nôno, Takayuki) Invariance principle and "G-neutral" types of technical change. (84m:90023)
- Seitz, Károly Investigations in the theory of partial differential equations of infinite order. (See **84b:34002**)
- Serova, M. M. See Fushchich, V. I., (84c:58152)
- Shadwick, W. F. See Rogers, Colin, (84c:58002)
- Sharma, N. L. See Bhutani, O. P., (84c:58199)
- Steeb, Willi-Hans See Strampp, W.; et al., (84m:35112)
- Strampp, W. (with Oevel, W.; Steeb, Willi-Hans) Similarity, Bäcklund transformations and rational solutions. (84m:35112)
- Svirshchevskii, S. R. See Dorodnitsyn, V. A.; et al., (84c:58234)

- Tajiri, Masayoshi Similarity reductions of the one- and two-dimensional nonlinear Schrödinger equations. (84c:35154)
- Talshev, A. A. Higher-order tangent transformations of partial differential systems. (Russian) (84c:58137)
- Vladimirov, V. A. Group properties of a class of systems of second-order differential equations. (Russian) (84b:81055)
- Winternitz, P. See Harnad, J., (See **84c:00009**)
- Zhang, Gong Qing Morse theory and the partial differential equation. (See **84c:00020**)
- Zolésio, Jean-Paul The material derivative (or speed) method for shape optimization. (84f:49017)
- Zulehner, W. (with Ames, W. F.) Group analysis of a semilinear vector diffusion equation. (84j:35094)

35A35 Theoretical approximation to solutions

- Ardelyan, N. V. (with Gushchin, I. S.) An approach to the construction of completely conservative difference schemes. (Russian) **84c:35015**
- Dzyadik, V. K. (with Ostrovets'kii, L. A.) An approximate method for solving the Goursat problem for linear hyperbolic equations with polynomial coefficients. (Russian) **84c:35010**
- Gushchin, I. S. See Ardelyan, N. V., **84c:35015**
- Maksudov, F. G. (with Rasulov, T. M.) Solution of problems for a nonlinear system of integro-differential equations that characterizes the process of displacement of petroleum from strata by mineral solutions. (Russian) **84m:35007**
- Marinets, T. I. See Marinets, V. V., **84c:35011**
- Marinets, V. V. (with Marinets, T. I.) Construction of iteration methods for approximate integration of differential equations of implicit form. (Russian) **84c:35011**
- Ostrovets'kii, L. A. See Dzyadik, V. K., **84c:35010**
- Pate, Thomas H. A characterization of a Neuberger type iteration procedure that leads to solutions of classical boundary value problems. **84f:35007**
- Rasulov, T. M. See Maksudov, F. G., **84m:35007**
- Skripnik, I. V. Convergence of solutions of a nonlinear Dirichlet problem with refinement of the boundary of the domain. (Russian) **84c:35012**
- Teodoru, Georgeta On the nonconvergence of the sequence of successive approximants in the Darboux problem for the equation $u_{xy} = f(x, y, z, u)$. (Romanian. French summary) **84c:35013**
- Tutschke, Wolfgang A general method for approximate solving of mixed problems in the theory of partial differential equations. **84c:35005**
- Tyukhtin, V. B. The rate of convergence of approximation methods of solution of one-sided variational problems. II. (Russian. English summary) **84m:35008**
- Zolin, A. F. Error estimation in the solution of the Goursat problem by the least squares method. (Russian) **84c:35014**

secondary classifications:

- Bacchelli, Valeria ★Approssimazione delle soluzioni del problema di Neumann per equazioni ellittiche del secondo ordine. (Italian) [Approximation of the solutions of the Neumann problem for second-order elliptic equations] (84c:35049)
- Boitsun, S. A. See Kovach, Yu. I., (84d:65073)
- Chandirov, G. I. (with Rzaev, E. A.) Approximation of solutions of nonregular mixed problems for equations of parabolic type with discontinuous and constant coefficients by solutions of regular problems. (Russian) (84c:35071)
- Chen, Feng Su (with Hsieh, D. Y.) A Galerkin method and nonlinear oscillations and waves. (84f:34019)
- Galitsyn, A. S. (with Zhukovskii, A. N.) A projection algorithm for solving essentially inhomogeneous boundary value problems for equations of parabolic type. (Russian) (84c:65101)
- Hsieh, D. Y. See Chen, Feng Su, (84f:34019)
- Kovach, Yu. I. (with Boitsun, S. A.) The Cauchy problem for a nonlinear partial differential equation. (Russian) (84d:65073)
- Rautmann, Reimund On error bounds for nonstationary spectral Navier-Stokes approximations. (84c:35092)
- Rosinger, Elemer E. ★Nonlinear equivalence, reduction of PDEs to ODEs and fast convergent numerical methods. (84g:65005)
- Rzaev, E. A. See Chandirov, G. I., (84c:35071)
- Saranen, Jukka A least squares approximation method for first order elliptic systems in the plane. (84f:65083)
- Sobolevskii, P. E. Approximation of the Stokes problem by Neumann problems. (Russian) (84c:65118)
- Zhukovskii, A. N. See Galitsyn, A. S., (84c:65101)

35A40 Numerical approximation to solutions {For numerical analysis, see 65Mxx, 65Nxx, 65P05.}

35A99 None of the above, but in this section

- Konyaev, Yu. A. Solvability of nonstandard problems for partial differential equations. (Russian) **84g:35009**
- Netesova, T. M. Some questions of invariance of initial-boundary value problems. (Russian) (See **84c:78002**)
- Nishitani, Tatsuo Une remarque sur le problème de Goursat. [A remark on the Goursat problem] **84m:35009**
- Pate, Thomas H. A unifying context for the classical Cauchy initial value problem and the type of problem solvable using an iteration procedure suggested by Neuberger. **84j:35009**

secondary classifications:

- Altin, Abdullah Solutions of type r^m for a class of singular equations. (84c:35023)
- Andronikof, E. Systèmes déterminés d'équations aux dérivées partielles. [Determinant systems of partial differential equations] (84c:58066)

- Bagirov, G. A. Application of the method of residues to the solution of mixed problems for nonselfadjoint boundary conditions. (Russian. Russian and Azerbaijani summaries) (84c:35038)
- Bahouri, H. Sur la propriété de prolongement unique pour les opérateurs d'Hörmander. [The unique extension property for Hörmander operators] (See 84c:35063)
- Chou, Chin Ch'ing Quelques exemples d'homologies sectionnaires de Shih. [Some examples of Shih's sectional homologies] (84c:55002)
- Gao, Long Chang On a property of Dulac functions. (Chinese. English summary) (84g:34052)
- Geng, Guang See Ling, Ling, (84g:35122)
- Hildebrandt, Stefan Partielle Differentialgleichungen und Differentialgeometrie. [Partial differential equations and differential geometry] (84g:53001)
- Iwan, W. D. (with Krougrill, C. M., Jr.) Equivalent linearization for continuous dynamical systems. (84c:93076)
- Iwaniec, Tadeusz Systems of partial differential equations in the theory of quasiconformal mapping in \mathbb{R}^n . (84m:30031)
- Katrakhov, V. V. A method of transformation operators in the theory of general weighted boundary value problems for singular and degenerate elliptic equations with a parameter. (Russian) (84c:35061)
- Khazan, M. I. Nonlinear and quasilinear evolution equations: existence, uniqueness and comparison of solutions; the rate of convergence of the difference method. (Russian. English summary) (84c:34080)
- Krasnov, Ya. A. Significance of the theory of functions that are conjugate in V. I. Smirnov's sense. (Russian) (84c:30080)
- Krougrill, C. M., Jr. See Iwan, W. D., (84c:93076)
- Ling, Ling (with Geng, Guang) The elementary solution of the ultrahyperbolic equation and Asger's theorem. (Chinese) (84g:35122)
- Sibony, Nessim Constructions de fonctions holomorphes bornées. [Constructions of bounded holomorphic functions] (See 84c:5006)
- Wünsch, Volkmar Cauchy-Problem und Huygensches Prinzip bei einigen Klassen spinorieller Feldgleichungen. I. [Cauchy problem and Huygens principle in some classes of spinorial field equations. I] (84f:58118a)
- Cauchy-Problem und Huygensches Prinzip bei einigen Klassen spinorieller Feldgleichungen. II. [Cauchy problem and Huygens principle in some classes of spinorial field equations. II] (84f:58118b)
- Xu, Yi Chao On the invariant differential operators of order 2 over N -Siegel domains. (Chinese) (84c:32048)

35Bxx Qualitative properties of solutions

secondary classifications:

- Alidakos, Nicholas D. Quantitative maximum principles and strongly coupled gradient-like reaction-diffusion systems. (84g:35083)
- 35B05 Comparison theorems; oscillation, zeros and growth of solutions
- Cheng, Sui Sheng Sturmian theorems for components of coupled elliptic systems. (84c:35007)
- Coffman, Charles V. On the structure of solutions $\Delta^2 u = \lambda u$ which satisfy the clamped plate conditions on a right angle. (84c:35015)
- Dobrotvor, I. G. See Gorbachuk, V. I., (84c:35016)
- Fiedler, Frank (with Grigo, Peter) Oszillationskriterien vom Nehari-Typ für eine Klasse elliptischer Differentialoperatoren vierter Ordnung. [Nehari-type oscillation criteria for a class of fourth-order elliptic differential operators] (84g:35010)
- Gorbachuk, V. I. (with Dobrotvor, I. G.) Investigation of the oscillation of solutions of a class of equations with biharmonic operator, using the mean-value theorem. (Russian) (84c:35016)
- Goyal, Vinod B. (with Schaefer, Philip W.) Comparison principles for some fourth order elliptic problems. (See 84b:34002)
- Grigo, Peter See Fiedler, Frank, (84g:35010)
- Kreith, Kurt Qualitative behavior of solutions of hyperbolic partial differential equations. (84c:35007)
- Qualitative theory of hyperbolic characteristic initial value problems. (See 84b:34002)
- Picone-type theorems for hyperbolic partial differential equations. (84c:35017)
- Oscillation properties of weakly time dependent hyperbolic equations. (84c:35008)
- Picone-type theorems for semidiscrete hyperbolic equations. (84c:35009)
- (with Pagan, Gordon) Qualitative theory for hyperbolic characteristic initial value problems. (84g:35011)
- Kura, Takeshi Oscillation criteria for a class of sublinear elliptic equations of the second order. (84b:35010)
- Pagan, Gordon See Kreith, Kurt, (84g:35011)
- Pokhozhaev, S. I. The comparison theorem and absence of solutions of nonlinear boundary value problems. (Russian) (84j:35010)
- Schaefer, Philip W. See Goyal, Vinod B., (See 84b:34002)
- Swanson, Charles A. Bounded positive solutions of quasilinear Schrödinger equations. (84d:35008)
- Criteria for oscillatory sublinear Schrödinger equations. (84c:35008)
- Szarski, Jan Comparison theorem for infinite systems of parabolic differential-functional equations and strongly coupled infinite systems of parabolic equations. (Russian summary) (84f:35008)
- Torae, A. On the oscillatory behavior of solutions of equations of elliptic type. (Russian) (84c:35018)
- Warstat, Birgit Über die Verteilung stationärer Nullstellen der Lösungen linearer homogener elliptischer Differentialgleichungen zweiter Ordnung. [On the distribution of stationary zeros of solutions of linear homogeneous elliptic differential equations of second order] (84c:35009)

secondary classifications:

- Douchet, Jacques Pairs of positive solutions of elliptic partial differential equations with discontinuous nonlinearities. (84b:35044)
- Giarrusso, Ester Remark on a second-order parabolic equation. (Italian. English summary) (84g:35075)
- Hayasida, Kazuya (with Tachi, Hideaki) On the three circles theorem for solutions of elliptic equations with two variables. (84c:35056)
- Kawano, Nichiro (with Kusano, Takaki; Naito, Manabu) Nonoscillatory solutions of forced differential equations of the second order. (84c:34046)
- Kusano, Takaki See Kawano, Nichiro; et al., (84c:34046)
- Lewis, Roger T. Applications of a comparison theorem for quasi-accretive operators in a Hilbert space. (See 84b:34002)
- Müller-Pfeiffer, E. On the existence of nodal domains for elliptic differential operators. (84b:35121)
- Naito, Manabu See Kawano, Nichiro; et al., (84c:34046)
- Rofe-Beketov, F. S. Oscillation properties of the solutions of systems of (ordinary and partial) differential equations. (Russian) (See 84c:41003)
- Swanson, Charles A. Extremal positive solutions of semilinear Schrödinger equations. (84c:35057)
- Tachi, Hideaki See Hayasida, Kazuya, (84c:35056)

35B10 Periodic solutions

- Alymkulov, K. A. See Imanaliev, M. I., (84c:35020)
- Asorov, A. See Khudaverdiev, K. I., (84g:35013)
- Brézis, Haim Periodic solutions of nonlinear vibrating strings and duality principles. (84c:35010)
- Castro, Alfonso (with Lazer, Alan C.) Results on periodic solutions of parabolic equations suggested by elliptic theory. (Italian summary) (84f:35009)
- Cesari, Lamberto (with Kannan, Rangachary) Periodic solutions of nonlinear wave equations. (84c:35011)
- Coron, Jean-Michel Erratum: "Minimal period for a vibrating string of infinite length" [C. R. Acad. Sci. Paris Sér. I Math. 294 (1982), no. 3, 127-129; MR 83d:35008]. (French. English summary) (84c:35019)
- Nontrivial periodic solutions of a nonlinear wave equation. (See 84m:35001)
- Periodic solutions of a nonlinear wave equation without assumption of monotonicity. (84c:35010)
- Fu, Hong Yuan See Zhou, Yu Lin, (84m:35011)
- Haimovici, Adolf Generalized periodic solutions of hyperbolic partial differential equations. (84c:35013)
- Imanaliev, M. I. (with Alymkulov, K. A.) Periodic solutions of a nonlinear Klein-Gordon equation. (Russian) (84c:35020)
- Kannan, Rangachary (with Lakshmikantham, V.) Periodic solutions of nonlinear hyperbolic problems. (84g:35012)
- (with Lakshmikantham, V.) Existence of periodic solutions of semilinear parabolic equations and the method of upper and lower solutions. (84c:35014)
- See also Cesari, Lamberto, (84c:35011)
- Kawohl, Bernhard (with Rühl, R.) Periodic solutions of nonlinear heat equations under discontinuous boundary conditions. (See 84j:00010)
- Khudaverdiev, K. I. (with Asorov, A.) Some difficulties that arise in the investigation of periodic (with respect to time) solutions of nonlinear hyperbolic equations. (Russian) (84g:35013)
- Klenina, L. I. Existence of periodic solutions for infinite-order nonlinear elliptic equations. (Russian) (84c:35016)
- Kopčáková, Marie On periodic solution of a nonlinear beam equation. (Russian and Czech summaries) (84c:35011)
- Korman, Philip Existence of solutions for a class of nonlinear noncoercive problems. (84f:35010)
- Existence of periodic solutions for a class of nonlinear problems. (84c:35017)
- Krejčí, Pavel On solvability of equations of the 4th order with jumping nonlinearities. (Russian summary) (84c:35018)
- Lakshmikantham, V. See Kannan, Rangachary, (84g:35012 and 84c:35014)
- Laver, A. G. On the question of the existence of periodic solutions in a class of singularly perturbed parabolic equations. (Russian) (84c:35021)
- Lazer, Alan C. See Castro, Alfonso, (84f:35009)
- Li, Shu Jie See Zhang, Gong Qing; et al., (84b:35011)
- Lovica, Vladimir Free vibrations for the equation $u_{tt} - u_{xx} + f(u) = 0$ with f sublinear. (84m:35010)
- Pikulin, V. P. Periodic and almost periodic solutions of some quasilinear parabolic equations. (Russian) (84c:35019)
- Periodic and almost periodic solutions for a class of quasilinear parabolic equations. (Russian) (84c:35009)
- Rühl, R. See Kawohl, Bernhard, (See 84j:00010)
- Štědrý, Milan (with Vejvoda, Otto) Time periodic solutions of a one-dimensional two-phase Stefan problem. (84b:35006)
- Vasil'eva, A. B. On the theory of periodic solutions of partial differential equations with small parameters. (Russian) (84c:35022)
- Periodic solutions of equations of elliptic type with small parameters. (Russian) (84c:35012)
- Vejvoda, Otto See Štědrý, Milan, (84b:35006)
- Wu, Shao Ping See Zhang, Gong Qing; et al., (84b:35011)
- Zhang, Gong Qing (with Wu, Shao Ping; Li, Shu Jie) Multiple periodic solutions for an asymptotically linear wave equation. (84b:35011)
- Zhou, Yu Lin (with Fu, Hong Yuan) Periodic solutions (boundary problems) and initial value problems for nonlinear pseudoparabolic systems of higher order. (84m:35011)

secondary classifications:

- Borrelli, Robert L. Shaking a piece of string to rest. (See 84j:00019)
- Brézis, Haim Periodic solutions of nonlinear vibrating strings. (84c:35100)

- Butuzov, V. F. (with Vasil'eva, A. B.) Singularly perturbed differential equations of parabolic type. (84c:35015)
- Canfora, Albino On the existence of periodic solutions for certain totally nonlinear elliptic equations. (Italian. English summary) (84b:35049)
- Capasso, Vincenzo (with Maddalena, Lucia) Periodic solutions for a reaction-diffusion system modelling the spread of a class of epidemics. (84m:35057)
- Cesari, Lamberto (with Kannan, Rangachary) Periodic solutions of nonlinear wave equations with damping. (84g:35119a)
(with Kannan, Rangachary) Solutions of nonlinear wave equations with nonlinear damping. (84g:35119b)
- Cheng, Kuo Shun Decay rate of periodic solutions for a conservation law. (84a:35160)
- Degiovanni, Marco (with Marino, Antonio; Spagnolo, Sergio) Some first-order nonlinear differential systems on the torus. (Italian. English summary) (84c:35022)
- Gardner, Robert A. (with Smoller, Joel A.) The existence of periodic travelling waves for singularly perturbed predator-prey equations via the Conley index. (84c:35061)
- Hall, William S. Recent results for wave equations of Rayleigh and van der Pol type. (84m:35081)
- Holmes, Philip J. Space- and time-periodic perturbations of the sine-Gordon equation. (84f:58102)
- Kannan, Rangachary See Cesari, Lamberto, (84g:35119a) and (84g:35119b)
- Kuchment, P. A. Representations of solutions of periodic partial differential equations. (Russian) (84j:35028)
- Maddalena, Lucia See Capasso, Vincenzo, (84m:35057)
- Marino, Antonio See Degiovanni, Marco; et al., (84c:35022)
- Ollivry, Jean-Pascal Vibrations forcées pour une équation d'onde non linéaire. (English summary) [Forced vibrations for a nonlinear wave equation] (84j:35101)
- Orlov, A. V. On the question of finding the critical points of continuous nonlinear functionals. (Russian) (84d:58017)
- Smoller, Joel A. See Gardner, Robert A., (84c:35061)
- Spagnolo, Sergio See Degiovanni, Marco; et al., (84c:35022)
- Vasil'eva, A. B. See Butuzov, V. F., (84c:35015)
- (Verhulst, Ferdinand) See Butuzov, V. F.; et al., (84c:35015)
- Wu, Shao Ping A resonance case for an asymptotically linear vibrating string equation. (84d:35101)
- Zarubin, A. G. Existence of periodic solutions in the problem of current circulation in a barotropic ocean. (Russian) (84c:86006)

35B15 Almost periodic solutions

- Miao, Lung Chi Almost periodic solutions of linear partial differential equations. (84c:35012)
- Shtabalyuk, P. I. Almost periodic solutions of a linear system of differential equations with constant coefficients. (Russian) (84m:35012)
- Štěrý, Milan On quasiperiodic motions in a one-dimensional two-phase Stefan problem. (Czech summary) (84d:35013)
- secondary classifications:
- Cabannes, Henri See Haraux, Alain, (84j:73062)
- Corduneanu, C. Bounded and almost periodic solutions of certain nonlinear parabolic equations. (84a:35114)
- Haraux, Alain (with Cabannes, Henri) Almost periodic motion of a string vibrating against a straight fixed obstacle. (84j:73062)
- Pikulín, V. P. Periodic and almost periodic solutions of some quasilinear parabolic equations. (Russian) (84c:35019)
- Periodic and almost periodic solutions for a class of quasilinear parabolic equations. (Russian) (84c:35009)
- Yamaguchi, Masaru Almost periodic solutions of some wave equations with Dirichlet boundary values. (84m:34087)

35B20 Perturbations

- Browning, G. (with Kreiss, Heinz-Otto) Problems with different time scales for nonlinear partial differential equations. (84g:35014)
- Kreiss, Heinz-Otto See Browning, G., (84g:35014)
- Sysoeva, T. N. See Vasil'eva, A. B., (84j:35011)
- Vasil'eva, A. B. (with Sysoeva, T. N.) Application of the method of boundary functions to a first-order singularly perturbed partial differential equation. (Russian) (84j:35011)
- secondary classifications:
- Bardos, Claude W. (with Guillot, Jean-Claude; Ralston, James) La relation de Poisson pour l'équation des ondes dans un ouvert non borné. Application à la théorie de la diffusion. [The Poisson relation for the wave equation in an unbounded open set. Application to scattering theory] (84d:35120)
- Guillot, Jean-Claude See Bardos, Claude W.; et al., (84d:35120)
- Maz'ya, V. G. (with Nazarov, S. A.; Plamenevskii, B. A.) On the asymptotic behavior of solutions of elliptic boundary value problems with irregular perturbations of the domain. (Russian) (84c:35037)
- Nazarov, S. A. See Maz'ya, V. G.; et al., (84c:35037)
- Plamenevskii, B. A. See Maz'ya, V. G.; et al., (84c:35037)
- Ralston, James See Bardos, Claude W.; et al., (84d:35120)
- Sevost'yanova, E. V. Properties of a perturbed elliptic operator with periodic coefficients. (Russian) (84g:35044)
- Štěrý, Milan (with Vejvoda, Otto) Time periodic solutions of a one-dimensional two-phase Stefan problem. (84c:35006)
- Trudinger, P. L. The inverse scattering problem for perturbed wave equations. (84d:35149)
- Vejvoda, Otto See Štěrý, Milan, (84c:35006)

35B25 Singular perturbations

- Bardos, Claude W. (with Rauch, Jeffrey) Maximal positive boundary value problems as limits of singular perturbation problems. (84j:35012)
- Bongers, Achim (with Heinz, Hans-Peter; Küpper, Tassilo) Existence and bifurcation theorems for nonlinear elliptic eigenvalue problems on unbounded domains. (84c:35007)
- Brauer, Claude (with Nicolaenko, Basil) Regularization and bounded penalization in free boundary problems. (84c:35013)
- Butuzov, V. F. (with Vasil'eva, A. B.) Singularly perturbed differential equations of parabolic type. (84c:35015)
- Diekmann, Odo (with Hilhorst, D.) Variational analysis of a perturbed free boundary problem. (84c:35014)
- Gao, Ru Xi Singular perturbation for second-order elliptic equations with turning points. (Chinese. English summary) (84c:35012)
- Heinz, Hans-Peter See Bongers, Achim; et al., (84c:35007)
- Hilhorst, D. See Diekmann, Odo, (84c:35014)
- Hosono, Yuzo (with Mimura, Masayasu) Singular perturbation approach to traveling waves in competing and diffusing species models. (84d:35014)
- Howes, F. A. Perturbed elliptic problems with essential nonlinearities. (84m:35013)
- Kadykenov, B. M. Asymptotic behavior of the solution of a singularly perturbed mixed problem with an initial jump for second-order hyperbolic equations. (Russian) (84m:35014)
- Kamin, Shoshana On singular perturbation problems with several turning points. (84g:35015)
- Elliptic singular perturbation problems with turning points. (French summary) (See 84j:35003)
- Krivenko, E. V. Averaging of singularly perturbed parabolic operators and stabilization of the solution of the Cauchy problem. (Russian) (84c:35010)
- Küpper, Tassilo See Bongers, Achim; et al., (84c:35007)
- Laver, A. G. On the question of the periodicity of zeroth and first approximations of solutions of certain singularly perturbed parabolic equations. (Ukrainian. Russian summary) (84c:35008)
- Lelikova, E. F. Asymptotic behavior of the solution of an elliptic equation with small parameter in a region with a conic point. (Russian) (84j:35013)
- Lin, Zong Chi Singular perturbation of general boundary value problem for higher-order elliptic equation containing two parameters. (84f:35011)
- Mimura, Masayasu See Hosono, Yuzo, (84d:35014)
- Moet, H. J. K. Asymptotic analysis of the free boundary in singularly perturbed elliptic variational inequalities. (84f:35012)
- Nicolaenko, Basil See Brauer, Claude, (84c:35013)
- Rauch, Jeffrey See Bardos, Claude W., (84j:35012)
- Sánchez Mañes, Eva A singular perturbation in a nonlinear transmission problem. (Spanish. English summary) (84j:35014)
- Štěrý, Milan (with Vejvoda, Otto) Small time-periodic solutions of equations of magnetohydrodynamics as a singularly perturbed problem. (Russian and Czech summaries) (84j:35015)
- Sysoeva, T. N. A singularly perturbed system of first-order partial differential equations. (Russian. English summary) (84f:35013)
- Tsymbal, V. N. Angular boundary layer in a mixed singularly perturbed problem for a hyperbolic equation. (Russian) (84c:35023)
- Vasil'eva, A. B. See Butuzov, V. F., (84c:35015)
- Vejvoda, Otto See Štěrý, Milan, (84j:35015)
- (Verhulst, Ferdinand) See Butuzov, V. F.; et al., (84c:35015)
- Weinacht, Richard J. A singular perturbation problem for the Lavrent'ev-Bitsadze equation. (84g:35016)
- secondary classifications:
- Akhmetov, R. G. The asymptotic behavior of the solution to a second-order elliptic equation with a small parameter multiplying the highest derivatives. (Russian) (84a:35099)
- Bemouna, O. On singular perturbations in variational inequalities. (84m:49020)
- Cioranescu, Doina (with Murat, François) Un terme étrange venu d'ailleurs. (English summary) [A strange term brought from somewhere else] (84c:35039a)
(with Murat, François) Un terme étrange venu d'ailleurs. II. (English summary) [A strange term brought from somewhere else. II] (84c:35039b)
- Do, Duong D. On the zero-order chemical kinetics in a single catalyst pellet. (84d:80008)
- Felgenhauer, Andreas Projektionsverfahren für singular gestörte Gleichungen. [Projection methods for singularly perturbed equations] (84c:65121)
- Foias, Ciprian Toeplitz operators and the theory of homogenization for partial differential equations. (84d:47042)
- Frank, Léonid S. (with Wendt, W. D.) Coercive singular perturbations: reduction and convergence. (84b:47030)
(with Wendt, Wolfgang D.) Sur une perturbation singulière parabolique en théorie cinétique des enzymes. (English summary) [On a parabolic singular perturbation in the kinetic theory of enzymes] (84a:35124)
- Inégalité de Garding et perturbations singulières elliptiques aux différences finies. (English summary) [Gårding's inequality and elliptic singular perturbations with finite differences] (84b:65098)
- Friedlin, M. I. On elliptic differential equations with small parameter. (84c:35050)
- Henker, P. W. Numerical aspects of singular perturbation problems. (84c:65069)
- Hosono, Yuzo (with Mimura, Masayasu) Singular perturbations for pairs of two-point boundary value problems of Neumann type. (84b:35022)
- Hughes, Rhonda J. Singular perturbations in the interaction representation. II. (84c:35122)
- Iannelli, Annamaria (with Norando, Tullia) Singular perturbations of almost periodic solutions of variational inequalities. I. (Italian) (84c:49010)
- Jiang, Fu Ru On the construction of boundary layer terms in a singular perturbation problem. (Chinese) (84c:35031)

- Kawohl, Bernhard A singular perturbation approach to nonlinear elliptic boundary value problems. (84j:35073)
- Laver, A. G. (with Sidenko, N. R.) Homogenization of a time-periodic boundary value problem for a singularly perturbed parabolic equation. (Russian) (84c:35081)
- Lax, Peter D. Singular perturbation of partial differential equations of mathematical physics. (See 84i:00020)
- Lobo Hidalgo, Miguel (with Sánchez Mañes, Eva) On a class of singular perturbations with nonconvex limit problems. (Italian summary) (84c:49014)
- Lomov, S. A. Asymptotic integration of singularly perturbed problems for partial differential equations. (Russian) (84c:35032)
- Analytical solutions of singularly perturbed problems. (Russian) (84f:34083)
- Lube, Gert See Tobiska, Lutz, (84c:35033)
- Mimura, Masayasu See Hosono, Yuzo, (84b:35022)
- Murat, François See Cioranescu, Doina, (84c:35039a) and (84c:35039b)
- Norando, Tullia See Iannelli, Annamaria, (84c:49010)
- Sánchez Mañes, Eva See Lobo Hidalgo, Miguel, (84c:49014)
- Sánchez-Palencia, Enrique Asymptotic expansions for eigenvalues and scattering frequencies in stiff problems and singular perturbations. (See 84c:73010)
- Schneider, Klaus R. A note on the existence of periodic travelling wave solutions with large periods in generalized reaction-diffusion systems. (German summary) (84h:80013)
- Sidenko, N. R. See Laver, A. G., (84c:35081)
- Tobiska, Lutz (with Lube, Gert) Die asymptotische Lösung singular gestörter elliptischer Probleme 2. Ordnung. [The asymptotic solution of second-order singularly perturbed elliptic problems] (84c:35033)
- Wendt, W. D. See Frank, Léonid S., (84b:47030) and (84c:35124)

35B30 Dependence of solutions on initial and boundary data, parameters

- Kersten, H. Ein Approximationssatz zum Neumann Problem der Prä-Maxwell Gleichungen. [An approximation theorem for the Neumann problem for the pre-Maxwell equations] (84b:35013)
- Kok, B. (with Penning, F. D.) Continuous dependence of the solutions of elliptic boundary value problems on the coefficients, right hand sides and boundary conditions. (84b:35014)
- Penning, F. D. See Kok, B., (84b:35014)

secondary classifications:

- Alexiades, Vasilios See Solomon, A. D.; et al., (84b:35123)
- Aron, Marian See Breuer, Shlomo, (84d:73039)
- Breuer, Shlomo (with Aron, Marian) Sufficient conditions for continuous dependence in a nonlinear hyperelasticity. (84d:73039)
- Galdi, Giovanni P. (with Rionero, Salvatore) Continuous dependence theorems in linear elasticity on exterior domains. (84g:73014)
- Korevaar, Nicholas J. Capillary surface convexity above convex domains. (84b:35054)
- Krakoviak, Anna Differentiability of solutions of elliptic problems with respect to coefficients. (84d:35045)
- Pisani, Raffaele (with Tucci, Maria) Nonlinear parabolic problems depending on a parameter. (Italian. English summary) (84c:35127)
- Rionero, Salvatore See Galdi, Giovanni P., (84g:73014)
- Scarpetta, Edoardo On continuous dependence and uniqueness in finite elastostatics for unbounded domains. (Italian summary) (84f:73029)
- Solomon, A. D. (with Alexiades, Vasilios; Wilson, D. G.) The Stefan problem with a convective boundary condition. (84b:35123)
- Tucci, Maria See Pisani, Raffaele, (84c:35127)
- White, L. W. Approximation of point controls of second-order evolution equations of Sobolev type. (84b:49009)
- Wilson, D. G. See Solomon, A. D.; et al., (84b:35123)

35B32 Bifurcation

- Alexander, Roger K. See Fleishman, Bernard A., (See 84i:00009)
- Amick, C. J. (with Toland, John F.) Nonlinear elliptic eigenvalue problems on an infinite strip—global theory of bifurcation and asymptotic bifurcation. (84g:35017)
- Barrow, D. L. (with Bates, Peter W.) Bifurcation of periodic travelling waves for a reaction-diffusion system. (84g:35018)
- Bates, Peter W. See Barrow, D. L., (84g:35018)
- Fleishman, Bernard A. (with Alexander, Roger K.) Perturbation and bifurcation in a discontinuous nonlinear eigenvalue problem. (See 84i:00009)
- Senn, Stefan On a nonlinear elliptic eigenvalue problem with Neumann boundary conditions, with an application to population genetics. (84m:35015)
- Shishikov, A. E. Bifurcation points of general nonlinear elliptic boundary value problems. (Russian) (84a:35024)
- Toland, John F. See Amick, C. J., (84g:35017)
- Vanderbauwhede, André Bifurcation at double eigenvalues for a class of symmetric Dirichlet problems. (84c:35015)
- Bifurcation problems with triangular symmetry. (84g:35019)
- Vegas, José M. Bifurcations caused by perturbing the domain in an elliptic equation. (84g:35020)
- Zwahlen, Bruno The behaviour of the critical value of an equation under small perturbations. (84h:35009)

secondary classifications:

- Cohen, Donald S. (with Erneux, Thomas) Transitions between nonsymmetric and symmetric steady states near a triple eigenvalue. (84i:92010b)
- See also Erneux, Thomas, (84i:92010a)
- Conrad, Francis (with Issard-Roch, Françoise) Étude locale de branches de solutions dans une classe d'équations variationnelles. (English summary) [Local study of branches of solutions in a variational inequality class] (84i:49015)

- Cushing, J. M. Bifurcation of time periodic solutions of the McKendrick equations with applications to population dynamics. (84g:92028)
- Do, Claude Flambement élastoplastique d'une plaque mince. [Elastoplastic buckling of a thin plate] (84f:73044)
- Erneux, Thomas (with Cohen, Donald S.) Imperfect bifurcation near a double eigenvalue: transitions between nonsymmetric and symmetric patterns. (84i:92010a)
- See also Cohen, Donald S., (84i:92010b)
- Fitzpatrick, P. M. (with Massabo, Ivor; Pejsachowicz, J.) Complementing maps, continuation and global bifurcation. (84c:47044a)
- (with Massabo, Ivor; Pejsachowicz, J.) Global several-parameter bifurcation and continuation theorems: a unified approach via complementing maps. (84c:47044b)
- Fujii, Hiroshi (with Mimura, Masayasu; Nishiura, Y.) A picture of the global bifurcation diagram in ecological interacting and diffusing systems. (84c:92056)
- Issard-Roch, Françoise See Conrad, Francis, (84i:49015)
- James, Richard D. The equilibrium and post-buckling behavior of an elastic curve governed by a nonconvex energy. (84h:73023)
- Keener, James P. Infinite period bifurcation and global bifurcation branches. (84h:58109)
- Keller, Herbert B. Two new bifurcation phenomena. (84c:58026)
- Kirchglassner, Klaus Wave-solutions of reversible systems and applications. (84i:58030)
- Loginov, B. V. Application of bifurcation theory with group invariance in the construction of periodic solutions of a problem on phase transitions in the statistical theory of a crystal. (Russian) (84i:82034)
- Massabo, Ivor See Fitzpatrick, P. M.; et al., (84c:47044a) and (84c:47044b)
- Mimura, Masayasu See Fujii, Hiroshi; et al., (84c:92056)
- Nishiura, Y. See Fujii, Hiroshi; et al., (84c:92056)
- Pejsachowicz, J. See Fitzpatrick, P. M.; et al., (84c:47044a) and (84c:47044b)
- Pounder, J. R. (with Rogers, Thomas D.) Global stability in population models. (84c:92048)
- Rappaz, Jacques Numerical analysis of bifurcation problems for partial differential equations. (84m:58130)
- Razzevaikin, V. N. Study of spatial structures in problems of mathematical ecology. (Russian) (84f:35078)
- Reiss, Edward L. Cascading bifurcations. (84c:58022)
- Rogers, Thomas D. See Pounder, J. R., (84c:92048)
- Schmitt, Klaus ★A study of eigenvalue and bifurcation problems for nonlinear elliptic partial differential equations via topological continuation methods. (84g:35064)
- Wang, Bao Han Nonequilibrium phase transition phenomena in a biopolymer replication model. (Chinese) (See 84m:82011)

35B35 Stability, boundedness

- Atamanov, E. R. (with Mamayusupov, M. Sh.) Estimate of the stability and uniqueness of the solution of a general mixed problem for the heat equation in an unbounded domain. (Russian) (84a:35025)
- Ciborowska-Wojdya, Eugenia On Lyapunov's stability for solutions of hyperbolic type equations including some coefficients dependence on spatial variable. (84b:35010)
- Dozorov, V. A. (with Kirillov, Yu. P.) Conditions for stability of steady flows in diffusion systems with dynamic feedback. (Russian) (84i:35020)
- Golberg, S. M. See Konstantinov, A. B.; et al., (84m:35016)
- Gushchin, A. K. A criterion for uniform stabilization of solutions of the second mixed problem for a parabolic equation. (Russian) (84g:35021a)
- Uniform stabilization of solutions of the second mixed problem for a parabolic equation. (Russian) (84g:35021b)
- Kirillov, Yu. P. See Dozorov, V. A., (84i:35020)
- Konstantinov, A. B. (with Malomed, B. A.; Golberg, S. M.) Stability of one-dimensional stationary weakly supercritical structures. (Russian) (84m:35016)
- Malomed, B. A. See Konstantinov, A. B.; et al., (84m:35016)
- Mamayusupov, M. Sh. See Atamanov, E. R., (84a:35025)
- Otani, Mitsuharu Existence and asymptotic stability of strong solutions of nonlinear evolution equations with a difference term of subdifferentials. (84d:35015)
- Qin, Yuan Xun On stability of motion defined by partial differential equations. (See 84i:00020)
- Radzikowski, J. (with Sadkowski, W.) On the stability of solutions of some hyperbolic systems. (See 84c:34002)
- Sadkowski, W. See Radzikowski, J., (See 84c:34002)
- Sun, Shun Hua On the stability of linear coupled systems. (Chinese. English summary) (84c:35026)

secondary classifications:

- Atamanov, E. R. Stability and uniqueness of the solution of a mixed problem for a pseudoparabolic equation. (Russian) (84c:35086)
- Cerrai, Paola Stability problems in the study of two competing biological species. (Italian. English summary) (84f:92050)
- Investigation of a reaction-diffusion system for the dynamics of two competing biological species. (Italian. English summary) (84c:92022)
- Gakkhar, Sumita See Shukla, J. B., (84b:92058)
- Grigor'ev, E. A. Stability of positive solutions of inverse problems of heat conductivity. (Russian) (84c:35148)
- Hall, William S. Recent results for wave equations of Rayleigh and van der Pol type. (84m:35081)
- Laedke, E. W. (with Spatschek, K. H.) Thresholds and growth times of some nonlinear field equations. (84b:81027)
- Romanenko, R. V. Conditional stability of an inverse nonstationary scattering problem. (Russian) (84a:35153)
- Shukla, J. B. (with Gakkhar, Sumita) Effects of convective and dispersive interactions on the stability of two species. (84b:92058)
- Spatschek, K. H. See Laedke, E. W., (84b:81027)
- Temirbulatov, S. I. Heat conduction problem with a boundary condition containing higher-order derivatives. (Russian. Kazakh summary) (84b:35059)

35B37 Control [See also 49-XX, 93-XX.]

Tiba, D. Necessary conditions for some nonlinear control problems. (See 84c:34002)

secondary classifications:

- Banks, H. T. (with Kunisch, Karl) An approximation theory for nonlinear partial differential equations with applications to identification and control. (84f:93019)
- Bensoussan, Alain (with Lions, Jacques-Louis) ★Contrôle impulsif et inéquations quasi variationnelles. (French) [Impulse control and quasivariational inequalities] (84g:49012)
- Carmichael, N. (with Pritchard, A. J.; Quinn, M. D.) Control and state-estimate of nonlinear systems. (84d:93028)
- Kunisch, Karl See Banks, H. T., (84f:93019)
- Lasiecka, I. (with Triggiani, R.) Structural assignment of Neumann boundary feedback parabolic equations: the unbounded case in the feedback loop. (84c:49076)
- (with Triggiani, R.) Feedback semigroups and cosine operators for boundary feedback parabolic and hyperbolic equations. (84c:49077)
- Lions, Jacques-Louis Optimal control of non-well-posed distributed systems and related nonlinear partial differential equations. (84d:49020)
- See also Bensoussan, Alain, (84g:49012)
- Plotnikov, V. I. (with Sumin, M. I.) Optimal control of Goursat-Darboux systems with right-hand sides that are differentiable in the generalized sense. (Russian) (84c:49011)
- Pritchard, A. J. See Carmichael, N.; et al., (84d:93028)
- Quinn, M. D. See Carmichael, N.; et al., (84d:93028)
- Shashkov, V. M. Existence of the optimal control for elliptic systems with the control in the right-hand side. (Russian) (84c:49012)
- Sumin, M. I. See Plotnikov, V. I., (84c:49011)
- Triggiani, R. See Lasiecka, I., (84c:49076) and (84c:49077)
- Zolesio, Jean-Paul The material derivative (or speed) method for shape optimization. (84f:49017)

35B40 Asymptotic behavior of solutions

- Akhmetov, R. G. Asymptotic behavior of the solution of a boundary value problem for a diffusion equation in a half plane. (Russian) 84c:35016
- Alidakos, Nicholas D. Stabilization of solutions for a system with a continuum of equilibria and distinct diffusion coefficients. 84c:35016
- Alkhutov, Yu. A. See Novruzov, A. A., 84j:35018
- Babin, A. V. (with Vishik, M. I.) Attractors of the Navier-Stokes system and parabolic equations and estimates of their dimension. (Russian) 84d:35016
- Bazali, B. V. (with Shelepov, V. Yu.) Estimates of the rate of stabilization for the solution of the Stefan problem. (Russian. English summary) 84d:35017
- Bertsch, M. Asymptotic behavior of solutions of a nonlinear diffusion equation. 84d:35018
- Brunovský, Pavol Notes on chaos in the cell population partial differential equation. 84c:35011
- Cpkala, S. See Milicer-Gruzewska, Halina, 84c:35023
- Clement, Philippe (with Peletier, Lambertus Adrianus) Sur les solutions superharmoniques de problèmes aux valeurs propres elliptiques. (English summary) [Superharmonic solutions of elliptic eigenvalue problems] 84g:35022
- Dias, João-Paulo (with Figueira, Mário) Décroissance à l'infini de certaines solutions avec énergie positive de l'équation de Schrödinger-Hartree. (English summary) [Decay of some solutions with positive energy of the Schrödinger-Hartree equation] 84f:35014
- Fedoryuk, M. V. Asymptotic behavior of the solution of a boundary value problem with sliding rays for second-order differential equations. (Russian) 84g:35023
- Figueira, Mário See Dias, João-Paulo, 84f:35014
- Freidlin, M. I. On wave fronts propagation in multicomponent media. 84a:35027
- Glasse, Robert T. (with Pecher, Hartmut) Time decay for nonlinear wave equations in two space dimensions. 84a:35028
- Gmira, Abdellah (with Véron, Laurent) Asymptotic behaviour of the solution of a semilinear parabolic equation. 84c:35011
- Gonzalez de Paz, R. B. Sur le comportement à l'infini des solutions des équations de Stokes. [On the behavior at infinity of the solutions of Stokes equations] 84c:35012
- Grundy, R. E. (with McLaughlin, R.) Eigenvalues of the Barenblatt-Pattle similarity solution in nonlinear diffusion. 84c:35013
- Haraux, Alain Almost-periodic forcing for a wave equation with a nonlinear, local damping term. 84c:35012
- Hegedüs, J. Asymptotic behavior of the solution of the Cauchy problem for a hyperbolic equation with a large parameter. (Russian) 84c:35017
- Ikawa, Mitsuru Decay of solutions of the wave equation in the exterior of two convex obstacles. 84c:35018
- Iosif'yan, G. A. See Oleinik, O. A.; et al., 84a:35029
- Kadyrov, R. R. On the asymptotic behavior of solutions of second-order parabolic equations. (Russian) 84c:35014
- Kahane, Charles S. On the asymptotic behavior of solutions of parabolic equations. 84c:35017
- Kameev, D. A. On the Hopf conjecture for a class of equations of chemical kinetics. (Russian) 84d:35019
- Karp, Leon Asymptotic behavior of solutions of elliptic equations. I. Liouville-type theorems for linear and nonlinear equations on \mathbb{R}^n . 84c:35021a
- Asymptotic behavior of solutions of elliptic equations. II. Analogues of Liouville's theorem for solutions of inequalities on \mathbb{R}^n , $n \geq 3$. 84c:35021b
- Keller, Clayton Large-time asymptotic behavior of solutions of nonlinear wave equations perturbed from a stationary ground state. 84j:35016
- Klainerman, Sergiu Long-time behavior of solutions to nonlinear evolution equations. 84b:35015
- Kobayashi, Kusuo On the asymptotic properties for simple semilinear heat equations. 84c:35019
- Kopachek, I. (with Oleinik, O. A.) On the behavior of solutions of a system of equations of elasticity theory in the neighborhood of nonregular boundary points and at infinity. (Russian) 84b:35016
- Kruzhkov, S. N. (with Peregrudov, A. N.) The Cauchy problem for a system of equations of chemical kinetics: solvability and asymptotic behavior of solutions as $t \rightarrow \infty$. (Russian) 84g:35024
- (with Petrosyan, N. S.) The asymptotic behavior of solutions of the Cauchy problem for first-order quasilinear equations. (Russian) 84c:35022
- Ladyzhenskaya, O. A. The finite-dimensionality of bounded invariant sets for the Navier-Stokes system and other dissipative systems. (Russian. English summary) 84c:35020
- Li, Ming De See Sid, Xian Liang; et al., 84g:35026
- Lions, Pierre-Louis Asymptotic behavior of some nonlinear heat equations. 84j:35017
- Massatt, Paul Asymptotic behavior for a strongly damped nonlinear wave equation. (See 84c:00009)
- Masuda, Kyōya On the global existence and asymptotic behavior of solutions of reaction-diffusion equations. 84m:35017
- McLaughlin, R. See Grundy, R. E., 84c:35013
- Meshkov, V. Z. Exponential decrease of solutions of a class of partial differential equations. (Russian) 84d:35020
- Milicer-Gruzewska, Halina (with Cpkala, S.) Sur l'existence de limite, $t \rightarrow \infty$, de la solution du problème lié au système parabolique. [On the existence of the limit, as $t \rightarrow \infty$, of the solution of a problem associated with the parabolic system] 84c:35023
- Nazarov, S. A. (with Slutskii, A. S.) A property of solutions of nonlinear equations of equilibrium near a singularity. (Russian) 84c:35021
- Novruzov, A. A. (with Alkhutov, Yu. A.) On growth at infinity of solutions of second-order elliptic equations. (Russian. English and Azerbaijani summaries) 84j:35018
- Oleinik, O. A. (with Iosif'yan, G. A.; Tavkhelidze, I. N.) Asymptotic behavior of the solution of a biharmonic equation in the neighborhood of nonregular points of the boundary of the domain and at infinity. (Russian) 84a:35029
- See also Kopachek, I., 84b:35016
- Pao, C. V. See Zhou, Li, 84d:35021
- Pecher, Hartmut See Glassey, Robert T., 84a:35028
- Peletier, Lambertus Adrianus See Clement, Philippe, 84g:35022
- Peregrudov, A. N. See Kruzhkov, S. N., 84g:35024
- Petrosyan, N. S. See Kruzhkov, S. N., 84c:35022
- Proka, D. V. On the asymptotic behavior of solutions of boundary value problems for the heat equation. (Russian) 84c:35024
- Qin, Yu Chun See Shi, Xian Liang; et al., 84g:35026
- Rothe, Franz Asymptotic behavior of a nonhomogeneous predator-prey system with one diffusing and one sedentary species. 84g:35025
- Rudakova, Z. G. Exponential growth of solutions of some partial differential equations. (Russian) 84m:35018
- Samar'skii, A. A. New methods for investigating the asymptotic properties of parabolic equations. (Russian) 84f:35015
- Sampson, J. H. Eine parabolische Gleichung mit vergänglichen Lösungen. (English summary) [A parabolic equation with blow-up solutions] 84f:35016
- Shelepov, V. Yu. See Bazali, B. V., 84d:35017
- Shi, Xian Liang (with Li, Ming De; Qin, Yu Chun) On the asymptotic behavior of solutions of the Cauchy problem for nonlinear parabolic equations. (Chinese) 84g:35026
- Slutskii, A. S. See Nazarov, S. A., 84c:35021
- Sokolovskii, V. B. Asymptotic behavior of solutions of the Dirichlet and Poisson problems in a ball of the space \mathbb{R}^n as $n \rightarrow \infty$. (Russian) 84j:35019
- Suveika, I. V. Necessary and sufficient conditions for the stabilization of solutions of the Cauchy problem for systems of nonstationary equations of nonclassical type. (Russian) 84b:35013
- Tavkhelidze, I. N. See Oleinik, O. A.; et al., 84a:35029
- Topil'er, N. G. Behavior of the solution of the Cauchy problem for the equation $u_{xx} - q(x)u_y = 0$ for large time values t . (Russian) 84f:35017
- Vázquez, Juan Luis Asymptotic behaviour and propagation properties of the one-dimensional flow of gas in a porous medium. 84b:35014
- Véron, Laurent Comportement asymptotique des solutions d'équations elliptiques semi-linéaires dans \mathbb{R}^N . (English summary) [Asymptotic behavior of the solutions of semilinear elliptic equations in \mathbb{R}^N] 84a:35030
- See also Gmira, Abdellah, 84c:35011
- Vishik, M. I. See Babin, A. V., 84d:35016
- Zhou, Li (with Pao, C. V.) Asymptotic behavior of a competition-diffusion system in population dynamics. 84d:35021

secondary classifications:

- Aronson, Donald (with Crandall, Michael G.; Peletier, Lambertus Adrianus) Stabilization of solutions of a degenerate nonlinear diffusion problem. (84j:35099)
- Aviles, Patricio On isolated singularities in some nonlinear partial differential equations. (84b:35053)
- Babin, A. V. (with Vishik, M. I.) Attractors of evolution partial differential equations and estimates of their dimension. (Russian) (84c:58133)
- Bazant, Zdeněk P. (with Estenssoro, Luis F.) Erratum: "Surface singularity and crack propagation" [Internat. J. Solids and Structures 15 (1979), no. 5, 405-426; MR 80d:73109]. (84m:73079)
- Belolipetskii, A. A. (with Ter-Krikorov, A. M.) Asymptotic properties of solutions of a mixed problem for the nonlinear heat equations. (Russian) (84m:35061)
- Berestycki, Henri (with Cazenave, Thierry) Instabilité des états stationnaires dans les équations de Schrödinger et de Klein-Gordon non linéaires. (English summary) [Instability of stationary states in nonlinear Schrödinger and Klein-Gordon equations] (84f:35120)
- Bondareva, I. N. Growing solutions of the Korteweg-de Vries equation with a given asymptotic behavior. (Russian) (84j:35141)

- Brenner, Philip** On L_p -decay and scattering for nonlinear Klein-Gordon equations. (84c:35094)
- Breuer, Shlomo** (with Roseman, Joseph J.) Saint-Venant's principle in nonlinear plane elasticity with sufficiently small strains. (84c:73023)
- Cazenave, Thierry** See Berestycki, Henri, (84f:35120)
- Chabrowski, Jan** (with Watson, N. A.) Properties of solutions of weakly coupled parabolic systems. (84f:35074)
- Crandall, Michael G.** See Aronson, Donald; et al., (84j:35099)
- Dai, You Xin** Properties of the solutions of a class of nonlinear parabolic equations. (Chinese. English summary) (84d:35071)
- Damlamian, A.** (with Li, Da Qian) Comportement limite des solutions de certains problèmes mixtes pour des équations paraboliques. II. [Boundary behavior of solutions of certain mixed problems for parabolic equations. II.] (84f:35067b)
- (with Li, Da Qian) Comportement limite des solutions de certains problèmes mixtes pour les équations paraboliques. [Boundary behavior of solutions of certain mixed problems for parabolic equations] (84f:35067a)
- Diaz Diaz, Jesús Ildefonso** On a fully nonlinear parabolic equation and the asymptotic behaviour of its solutions. (84g:35094)
- Drozhzhinov, Yu. N.** A multidimensional Tauberian theorem for holomorphic functions of bounded argument and the quasiasymptotic behavior of passive systems. (Russian) (84g:32001)
- Dumontet, Hélène** Homogénéisation d'un matériau à structure périodique stratifié, de comportement élastique linéaire et non linéaire et viscoélastique. (English summary) [Homogenization of a stratified material with periodic structure and linear, nonlinear elastic and linear viscoelastic behavior] (84c:73056)
- Ermakova, V. D.** The asymptotics of the solution of the Cauchy problem for the Korteweg-de Vries equation with nondecreasing initial data of special type. (Russian. English summary) (84a:35256)
- Estenssoro, Luis F.** See Bažant, Zdeněk P., (84m:73079)
- Ewer, J. P. G.** On the asymptotic properties of a class of nonlinear parabolic equations. (84i:35085)
- Falques, Albert** Asymptotic behavior of the equations of generalized thermoelasticity. (Spanish. English summary) (84h:73052)
- Francfort, Gilles A.** (with Leguillon, Dominique; Suquet, Pierre) Homogénéisation de milieux viscoélastiques linéaires de Kelvin-Voigt. (English summary) [Homogenization for linearly viscoelastic bodies] (84c:73041)
- Galdi, Giovanni P.** (with Rionero, Salvatore) Global solution of a system of linear parabolic equations and related problems of mathematical physics. (84a:35239)
- Gibert, Philippe** Les basses et moyennes fréquences dans des structures fortement hétérogènes. (English summary) [Low and medium frequencies in highly heterogeneous structures] (84f:73034)
- Gröger, Konrad** On the asymptotic behavior of some diffusion-reaction systems. (84i:35087)
- Hirsch, Morris W.** Differential equations and convergence almost everywhere in strongly monotone semiflows. (84h:34095)
- Holland, Charles J.** Limiting behavior of a class of nonlinear reaction diffusion equations. (84h:35082)
- Iosif, G. A.** Damping in the interior of the domain of generalized solutions of boundary value problems for second-order elliptic equations with oscillating boundary conditions and right-hand sides. (Russian) (84d:35040)
- Itaya, Nobutoshi** On some subjects related to the blowing-up problem in nonlinear parabolic equations. (84j:35089)
- Irs, A. R.** Asymptotic behavior of the solutions to the nonlinear Schrödinger equation, and isomonodromic deformations of systems of linear differential equations. (Russian) (84c:58238)
- (with Petrov, V. É.) "Isomonodromic" solutions of the sine-Gordon equation and the time asymptotics of its rapidly decreasing solutions. (Russian) (84c:35096)
- Jones, Christopher K. R. T.** Some ideas in the proof that the FitzHugh-Nagumo pulse is stable. (84h:35083)
- Asymptotic behaviour of a reaction-diffusion equation in higher space dimensions. (84m:35059)
- Knight, B. W.** See Sirovich, Lawrence, (84d:47022)
- Kozel, V. O.** Behavior at infinity of finite zone solutions of the sine-Gordon equation. (Russian. English summary) (84h:35146)
- Krivenko, E. V.** Averaging of singularly perturbed parabolic operators and stabilization of the solution of the Cauchy problem. (Russian) (84c:35010)
- Kruzhkov, S. N.** Asymptotic behavior with respect to time as $t \rightarrow +\infty$ of generalized solutions of the Cauchy problem for first-order nonlinear equations. (Russian) (84f:35077)
- Leguillon, Dominique** See Francfort, Gilles A.; et al., (84c:73041)
- Li, Da Qian** See Damlamian, A., (84f:35067a) and (84f:35067b)
- Matano, Hiroshi** Nonincrease of the lap-number of a solution for a one-dimensional semilinear parabolic equation. (84m:35060)
- Maz'ya, V. G.** (with Nazarov, S. A.; Plamenevskii, B. A.) On the asymptotic behavior of solutions of elliptic boundary value problems with irregular perturbations of the domain. (Russian) (84c:35037)
- (with Nazarov, S. A.; Plamenevskii, B. A.) Homogeneous solutions of the Dirichlet problem in the exterior of a thin cone. (Russian) (84c:35040)
- (with Nazarov, S. A.; Plamenevskii, B. A.) Absence of a De Giorgi-type theorem for strongly elliptic equations with complex coefficients. (Russian) (84j:35059)
- Menzala, Gustavo Perla** On a semilinear wave equation: the Cauchy problem and the asymptotic behavior of solutions. (84m:35083)
- Mignot, F.** (with Puel, J.-P.; Suquet, Pierre) Homogenization and bifurcation of perforated plates. (84c:73046)
- Nakao, Mitsuhiro** On solutions to the initial-boundary value problem for $(\partial/\partial t)u - \Delta \beta(u) = f$. (84a:35135)
- Nazarov, S. A.** (with Piletskas, K. I.) Behavior of solutions of Stokes and Navier-Stokes systems in domains with periodically changing cross-section. (Russian) (84m:35099)
- See also Maz'ya, V. G.; et al., (84c:35037); (84c:35040) and (84j:35059)
- Nishida, Takaaki** Asymptotic behaviour of solutions of the Boltzmann equation. (84i:76088)
- Noussair, Ezzat S.** (with Swanson, Charles A.) Existence theorems for generalized Klein-Gordon equations. (84c:35068)
- Novokshenov, V. Yu.** Asymptotic behavior as $t \rightarrow \infty$ of the solution of a two-dimensional generalization of the Toda lattice. (Russian) (84c:35139)
- Pecher, Hartmut** Decay and asymptotics for higher-dimensional nonlinear wave equations. (84c:35077)
- Peletier, Lambertus Adrianus** See Aronson, Donald; et al., (84j:35099)
- Petrosyan, N. S.** Asymptotic behavior of the solution of the Cauchy problem for a first-order quasilinear equation with nonconvex state function. (Russian) (84f:35090)
- Petrov, V. É.** See Irs, A. R., (84c:35096)
- Piletskas, K. I.** See Nazarov, S. A., (84m:35099)
- Plamenevskii, B. A.** See Maz'ya, V. G.; et al., (84c:35037); (84c:35040) and (84j:35059)
- Puel, J.-P.** See Mignot, F.; et al., (84c:73046)
- Redinger, Reinhard** Über die C^2 -Kompaktheit der Bahn von Lösungen semilinearer parabolischer Systeme. (English summary) [On the C^2 -compactness of the orbit of solutions of semilinear parabolic systems] (84f:35079)
- Rionero, Salvatore** See Galdi, Giovanni P., (84a:35239)
- Roseman, Joseph J.** See Breuer, Shlomo, (84f:73023)
- Sirovich, Lawrence** (with Knight, B. W.) On the eigentheory of operators which exhibit a slow variation. (84d:47022)
- Sukhanov, V. V.** Asymptotic behavior of solutions of the Cauchy problem for a system of KdV type for large times. (Russian) (84m:35113)
- Suquet, Pierre** See Francfort, Gilles A.; et al., (84c:73041) and Mignot, F.; et al., (84c:73046)
- Swanson, Charles A.** See Noussair, Ezzat S., (84c:35068)
- Tarzia, Domingo Alberto** Étude de l'inéquation variationnelle proposée par Duvaut pour le problème de Stefan à deux phases. I. (Italian summary) [Study of the variational inequality proposed by Duvaut for the two-phase Stefan problem. I.] (84c:35067)
- Ter-Krikorov, A. M.** See Belolipetskiĭ, A. A., (84m:35061)
- Tsutsumi, Masayoshi** Scattering of solutions of nonlinear Klein-Gordon equations in three space dimensions. (84m:35085)
- Vainberg, B. R.** Local decrease of energy of solutions of hyperbolic systems. (Russian. English summary) (84j:35110)
- Veling, E. J. M.** Pushed travelling waves in an initial-boundary value problem for Fisher type equations. (84h:35064)
- Vishik, M. I.** See Babin, A. V., (84i:58133)
- Wang, Jing Hua** The asymptotic behavior of solutions of a single conservation law. (84a:35165)
- Watson, N. A.** See Chabrowski, Jan, (84f:35074)

35B45 A priori estimates

- Gel'man, I. V.** (with Maz'ya, V. G.) ★Abschätzungen für Differentialoperatoren im Halbraum. (German) [Estimates for differential operators in the half space] 84g:35027
- (Herbst, Ehrhard) See Gel'man, I. V.; et al., 84g:35027
- Laurent'ev, M. M., Jr.** A priori estimates of solutions of nonlinear parabolic equations. (Russian) 84c:35025
- Maz'ya, V. G.** See Gel'man, I. V., 84g:35027
- (Pflücke, Werner) See Gel'man, I. V.; et al., 84g:35027
- Saranen, Jukka** On an inequality of Friedrichs. 84d:35022
- Schröder, Johann** Estimates for vector-valued elliptic-parabolic problems of the second order. (See 84c:00009)
- (Wildenhain, Günther) See Gel'man, I. V.; et al., 84g:35027

secondary classifications:

- Bandle, Catherine** (with Marcus, Moshe) A priori estimates and the boundary values of solutions for a problem arising in plasma physics. (84c:35051)
- Castro, Abel** See Kruzhkov, S. N.; et al., (84c:35060)
- Cosner, Chris** Pointwise a priori bounds for strongly coupled semilinear systems of parabolic partial differential equations. (84a:35118)
- Indionkov, A. V.** Some second-order quasilinear elliptic systems. (Russian) (84c:35066)
- Kamynin, L. I.** (with Khimchenko, B. N.) A priori estimates of the solution of a second-order parabolic equation in the neighborhood of the lower cap of the parabolic boundary. (Russian) (84h:35072)
- Khimchenko, B. N.** See Kamynin, L. I., (84h:35072)
- Kopachek, I.** (with Oleinik, O. A.) On the behavior of solutions of a system of equations of elasticity theory in the neighborhood of nonregular boundary points and at infinity. (Russian) (84h:35016)
- Korennyak, V. V.** The Gårding inequality for a system of pseudodifferential equations. (Russian) (84c:35147)
- Kruzhkov, S. N.** (with Castro, Abel; López, Martín) Schauder estimates and existence theorems for the solutions of the Cauchy problem for linear and nonlinear parabolic equations. II. (Spanish) (84h:35060)
- López, Martín** See Kruzhkov, S. N.; et al., (84h:35060)
- Marcus, Moshe** See Bandle, Catherine, (84c:35051)
- Meyer, Yves** Nouvelles estimations pour les solutions d'équations aux dérivées partielles non linéaires. [New estimates for the solutions of nonlinear partial differential equations] (84j:35161)
- Oleinik, O. A.** See Kopachek, I., (84h:35016)
- Pokhozhaev, S. I.** On the general theory of a priori estimates of solutions of nonlinear equations. (Russian) (84g:35063)
- A priori estimates for solutions of quasilinear elliptic equations of arbitrary order. (Russian) (84h:35047)
- Rothe, Franz** Uniform bounds from bounded- L_p -functionals in reaction-diffusion equations. (84a:35129)
- Shcherbina, V. P.** See Shishkov, E. A., (84c:35057)

- Shen, Yao Tian A priori estimates in W^2_2 for second-order elliptic systems with piecewise smooth boundary. (Chinese) (84g:35047)
- Shishkov, E. A. (with Shcherbina, V. P.) Coercivity inequalities for pairs of linear parabolic operators. (Russian) (84a:35057)

35B50 Maximum principles

- Hill, James M. See Lee, Alexander I. (84f:35018)
- Kamynin, L. I. (with Khimchenko, B. N.) An aspect of the development of the theory of the anisotropic strict extremum principle of A. D. Aleksandrov. (Russian) (84c:35015)
- Khimchenko, B. N. See Kamynin, L. I. (84c:35015)
- Lee, Alexander I. (with Hill, James M.) On maximum principles for diffusion in the presence of three diffusion paths. (84f:35018)
- Lerner, M. E. The maximum principle for hyperbolic equations in simply and multiply connected domains of arbitrary form. (Russian) (See 84m:35003)
- Lu, Wen Duan (with Yang, Zhi Huo) Some results on maximum principles. (Chinese. English summary) (84c:35031)
- (with Wang, Jian Hua) Maximum principles for some semilinear elliptic equations of fourth order, and their application. (Chinese. English summary) (84c:35032)
- Majorov, I. V. An extremum principle for a degenerate hyperbolic system. (Russian) (84c:35016)
- Mureşan, Anton S. On the uniqueness of the solution of Dirichlet's problem relative to a strong elliptic system of second order partial differential equations. (84g:35028)
- Sperh, René P. ★ Maximum principles and their applications. (84c:35033)
- Thangaraj, D. (with Venkatarangan, S. N.) Dual variational principles for a class of nonlinear partial differential equations. (84c:35018)
- Venkatarangan, S. N. See Thangaraj, D. (84c:35018)
- Výborný, Rudolf Maximum principles for the heat equation. (84g:35029)
- Wang, Jian Hua See Lu, Wen Duan, (84c:35032)
- Yang, Zhi Huo See Lu, Wen Duan, (84c:35031)
- Zhang, Gong An Maximum principles for solutions of fourth-order parabolic partial differential equations. (Chinese. English summary) (84f:35019)

secondary classifications:

- Andreev, E. S. (with Kozmanov, M. Yu.; Rachilov, E. B.) The maximum principle for a system of energy and nonstationary radiative transfer equations. (Russian) (84c:85002)
- Bischoff, K. B. See Stakgold, I.; et al. (84e:76063)
- Chicco, Maurizio Generalizations of the maximum principle and majorization of the solutions for elliptic operators of variational type. (Italian. English summary) (84c:35049)
- Regularity and maximum principle for the solutions of a class of elliptic equations with discontinuous coefficients. (Italian. English summary) (84g:35042)
- Dubois, R.-M. Problème de Dirichlet pour certains systèmes couplés au premier ordre. [Dirichlet problem for certain first-order coupled systems] (84c:35051)
- Gohkale, V. V. See Stakgold, I.; et al. (84e:76063)
- Hile, Gerald N. (with Protter, M. H.) Gradient bounds for weakly coupled nonlinear elliptic systems. (84j:35068)
- Kamynin, L. I. (with Khimchenko, B. N.) On the strict anisotropic extremum principle for a second-order elliptic-parabolic equation. (Russian) (84f:35097)
- (with Khimchenko, B. N.) The strict extremum principle for a weakly parabolically connected, second-order operator. (Russian) (84b:35074)
- Khimchenko, B. N. See Kamynin, L. I. (84f:35097) and (84b:35074)
- Kozmanov, M. Yu. See Andreev, E. S.; et al. (84c:85002)
- Lions, Pierre-Louis A remark on Bony maximum principle. (84m:35044)
- Maz'ya, V. G. (with Plamenevskii, B. A.) On the maximum principle for the biharmonic equation in a domain with conical points. (Russian) (84b:35037)
- Mureşan, Anton S. The maximum modulus principle for hyperbolic systems of partial differential equations. (Romanian) (84f:35085)
- Plamenevskii, B. A. See Maz'ya, V. G., (84b:35037)
- Protter, M. H. See Hile, Gerald N., (84j:35068)
- Rachilov, E. B. See Andreev, E. S.; et al. (84c:85002)
- Ruas Santos, Vitoriano B. On the strong maximum principle for some piecewise linear finite element approximate problems of nonpositive type. (84b:65118)
- Stakgold, I. (with Bischoff, K. B.; Gohkale, V. V.) Validity of the pseudo-steady-state approximation. (84e:76063)

35B60 Continuation and prolongation [See also 58A15, 58A17, 58Hxx.]

- Vogelsang, Volker ★ Über das lokale Verhalten der Lösungen elliptischer Differentialgleichungen zweiter Ordnung. (German) [On the local behavior of solutions of second-order elliptic differential equations] (84g:35030)

secondary classifications:

- Bagirov, G. A. Application of the method of residues to the solution of mixed problems for nonselfadjoint boundary conditions. (Russian. Russian and Azerbaijani summaries) (84c:35038)
- Isakov, V. M. Uniqueness of the extension of solutions of hyperbolic equations. (Russian) (84b:35073)
- Millar, R. F. The analytic continuation of solutions of the generalized axially symmetric Helmholtz equation. (84f:35031)
- Saut, Jean-Claude (with Scheurer, Bruno) Remarques sur un théorème de prolongement unique de Mizohata. (English summary) [Remarks on a unique continuation theorem of Mizohata] (84c:35069)
- Scheurer, Bruno See Saut, Jean-Claude, (84c:35069)
- von Wahl, Wolf ★ Klassische Lösbarkeit im Großen für nichtlineare parabolische Systeme und das Verhalten der Lösungen für $t \rightarrow \infty$. (German) [Classical solvability in the large for nonlinear parabolic systems and the behavior of the solutions for $t \rightarrow \infty$] (84c:35082)

- Watanabe, Kinji Sur l'unicité du prolongement des solutions des équations elliptiques dégénérées. [On the uniqueness of the continuation of solutions of degenerate elliptic equations] (84a:35105)

35B65 Smoothness of solutions

- Bony, Jean-Michel See Meyer, Yves, (84c:35015)
- Faminskii, A. V. See Krushkov, S. N., (84m:35019)
- Krushkov, S. N. (with Faminskii, A. V.) Continuity properties of solutions of some classes of nonstationary equations. (Russian. English summary) (84m:35019)
- Meyer, Yves Régularité des solutions des équations aux dérivées partielles non linéaires (d'après J.-M. Bony). [Regularity of the solutions of nonlinear partial differential equations (according to J.-M. Bony)] (84c:35015)

secondary classifications:

- Alimov, Sh. A. On the smoothness of the solution of a problem with oblique derivative. (Russian) (84b:35030)
- Asakura, Fumioki A remark on the Hölder continuity of the solution for a certain elliptic equation with irregular coefficients. (84c:35041)
- Chicco, Maurizio Regularity and maximum principle for the solutions of a class of elliptic equations with discontinuous coefficients. (Italian. English summary) (84g:35042)
- Debbaj, O. Régularité hölderienne de certains problèmes aux limites elliptiques singuliers. [Hölder regularity of certain singular elliptic boundary value problems] (See 84c:35003)
- Domarkas, A. Regularity of solutions of one-sided problems for quasilinear parabolic equations. (Russian. English and Lithuanian summaries) (84c:35081)
- Frehse, Jens (with Mosco, Umberto) Sur la continuité ponctuelle des solutions locales faibles du problème d'obstacle. (English summary) [Pointwise continuity of local weak solutions of the obstacle problem] (84b:49011)
- Grisvard, Pierre Singularités des problèmes aux limites dans des polyèdres. [Singularities of boundary value problems in polyhedra] (84a:35061)
- Iordanov, Iordan V. Hypocoellipticity of quasilinear elliptic operators. (84j:35042)
- Langenbruch, Michael Differentiability and growth of solutions of partial differential equations. (84g:35033)
- Lewis, John L. Regularity of the derivatives of solutions to certain degenerate elliptic equations. (84m:35048)
- Mosco, Umberto See Frehse, Jens, (84b:49011)
- Zachmanoglou, E. C. Nonanalytic solutions of certain linear PDEs. (84m:35005)
- Zheng, Song Mu Differentiability of solutions to initial-boundary value problems for first-order symmetric hyperbolic systems with characteristic boundary. (Chinese. English summary) (84f:35088)

35B99 None of the above, but in this section

- Abdulkarimov, A. Zeros of the solution of the mixed problem for a differential equation. (Russian) (See 84m:35003)
- Artola, Michel (with Duvaut, Georges) Un résultat d'homogénéisation pour une classe de problèmes de diffusion non linéaires stationnaires. (English summary) [A homogenization result for a class of stationary nonlinear diffusion problems] (84j:35020)
- Bardos, Claude W. Apparition éventuelle de singularités dans des problèmes d'évolution non linéaires (d'après S. Klainerman, B. Glassey, J. Chadam, F. John (et d'autres)). [Possible appearance of singularities in nonlinear evolution problems (according to S. Klainerman, B. Glassey, J. Chadam, F. John (and others))] (84b:35017)
- (Chadam, J.) See Bardos, Claude W., (84b:35017)
- Denisov, V. N. On the question of the necessary condition for the stabilization of the solution of the Cauchy problem for a heat equation that is uniform on any compactum. (Russian) (84c:35016)
- On a necessary condition for the uniform stabilization of the solution of the Cauchy problem for the heat equation. (Russian) (84c:35017)
- Duvaut, Georges See Artola, Michel, (84j:35020)
- (Glassey, R.) See Bardos, Claude W., (84b:35017)
- Iosif'yan, G. A. (with Oleinik, O. A.; Shamaev, A. S.) Averaging of eigenvalues and eigenfunctions of a boundary value problem of elasticity theory in a perforated domain. (Russian. English summary) (84c:35019)
- (John, Fritz) See Bardos, Claude W., (84b:35017)
- Kalashnikov, A. S. Conditions for the positivity and boundedness of solutions of the second boundary value problem for parabolic equations. (Russian) (84d:35023)
- (Klainerman, Sergiu) See Bardos, Claude W., (84b:35017)
- Kozlova, O. N. Summability of positive solutions of systems of differential equations of Douglas-Nirenberg structure in the neighborhood of a characteristic point. (Russian) (84c:35022)
- Kuchment, P. A. Floquet theory for partial differential equations. (Russian) (84b:35018)
- Najman, Branko Eigenvalues of the Klein-Gordon operator. (Serbo-Croatian) (See 84a:65004)
- Nirenberg, Louis Methods for attacking nonlinear problems. (See 84m:00013)
- Oleinik, O. A. Homogenization of differential operators. (See 84i:00016)
- See also Iosif'yan, G. A.; et al., (84c:35019)
- Raitums, U. Some mathematical questions on averaging in finely dispersible media. (Russian) (84c:35026)
- Shamaev, A. S. See Iosif'yan, G. A.; et al., (84c:35019)
- Szép, András On the notion of regular singularity. (84b:35017)
- Vidossich, G. An invitation to multiplicity results for elliptic problems. (84a:35034)
- Vul'pe, I. M. Averaging of partial differential equations with respect to independent variables. (Russian) (84c:35035)
- Wang, Guang Yin Particular phenomena in the equations of nonprincipal type. (See 84i:00020)
- Ye, Shu Min Instability and uniqueness of the solution of the equation $C_1 \partial_t u + \partial_x^2 u = \partial_x^2 u + C_2 u$, and nonexistence of a nontrivial bounded solution. (Chinese. English summary) (84m:35020)

secondary classifications:

- Arnéodo, A. (with Coulet, P. H.; Spiegel, E. A.) Chaos in a finite macroscopic system. (84m:58082a)
(with Coulet, P. H.; Spiegel, E. A.) Errata: "Chaos in a finite macroscopic system". (84m:58082b)
- Aviles, Patricio (with Weitsman, Allen) On the singularities of certain nonlinear partial differential equations. (84b:35043)
- Bakhvalov, N. S. Averaging of partial differential equations with rapidly oscillating coefficients. (Russian) (84b:73018)
- Berdicherskii, V. L. (with Sutyin, V. G.) Dynamics of periodic structures. (Russian) (84f:73017)
- Brézis, Haim (with Nirenberg, Louis) Positive solutions of nonlinear elliptic equations involving critical Sobolev exponents. (84b:35059)
- Buldyrev, V. S. (with Lanin, A. I.) The field of radiation of whispering gallery waves over a concave-convex boundary. (Russian. English summary) (84b:76053a)
- Coulet, P. H. See Arnéodo, A.; et al., (84m:58082a) and (84m:58082b)
- Francfort, Gilles A. Homogenization and linear thermoelasticity. (84f:73096)
- Garnir, H. G. Propagation des singularités analytiques dans les problèmes aux limites de la physique mathématique par les méthodes de Kawai-Kashiwara et Sjöstrand. I. Introduction: cas de l'espace indéfini. [Propagation of analytic singularities in boundary value problems of mathematical physics using the Kawai-Kashiwara and Sjöstrand methods. I. Introduction: the case of infinite space] (See 84b:35003)
- Goyal, Vinod B. (with Schaefer, Philip W.) Liouville theorems for elliptic systems and nonlinear equations of fourth order. (84f:35039)
- Granhund, Seppo A Phragmén-Lindelöf principle for subsolutions of quasilinear equations. (84f:35051)
- Grundy, R. E. The small-time evolution of a nonlinear diffusion equation. (84d:35072)
- Gusarov, A. L. See Landis, E. M., (84b:35046)
- Gutowski, Roman Sensitivity of solutions of the linear equation of the vibrations of a membrane to variations in the coefficients of the equation. (Polish. English and Russian summaries) (84b:73040)
- Ibragimov, A. I. Some qualitative properties of solutions of elliptic equations with continuous coefficients. (Russian) (84m:35033)
- Some qualitative properties of solutions of a mixed problem for equations of elliptic type. (Russian) (84m:35034)
- Iwaniec, Tadeusz On L^p -integrability in PDEs and quasiregular mappings for large exponents. (84b:30026)
- Kerimov, T. M. (with Maz'ya, V. G.; Novruzov, A. A.) An analogue of Wiener's criterion for the Zarembka problem in a cylindrical domain. (Russian) (84b:31009)
- Kuchment, P. A. On the Floquet theory for parabolic and elliptic boundary value problems in a cylinder. (Russian) (84i:35028)
- Landis, E. M. (with Gusarov, A. L.) A variant of the three-balls theorem for solving an elliptic equation and a related theorem of Phragmén-Lindelöf type. (Russian. English summary) (84b:35046)
- Lanin, A. I. Comparison of the field of a whispering gallery wave that is calculated by Kirchhoff's method and by the method of a parabolic equation in the neighborhood of a boundary flex point. (Russian. English summary) (84b:76053b)
(with Popov, M. M.) The dynamics of rays in the neighborhood of points of straightening of a boundary. (Russian. English summary) (84b:76054)
See also Buldyrev, V. S., (84b:76053a)
- Leboritz, Norman R. Perturbation expansions on perturbed domains. (84d:35028)
- Lousberg, Pierre Propagation des singularités analytiques dans les problèmes aux limites de la physique mathématique par les méthodes de Kawai-Kashiwara et Sjöstrand. II. Cas des problèmes aux limites. [Propagation of analytic singularities in boundary value problems of mathematical physics using the Kawai-Kashiwara and Sjöstrand methods. II. The case of boundary value problems] (See 84b:35003)
- Malamud, M. M. Differential properties of functions and coercivity in spaces with a uniform norm. (Russian) (84d:46038)
- Maz'ya, V. G. See Kerimov, T. M.; et al., (84b:31009)
- Meier, Michael Liouville theorems for nondiagonal elliptic systems in arbitrary dimensions. (84a:35072)
- Menzala, Gustavo Perla A remark on an elliptic equation with a nonlocal nonlinearity. (Portuguese summary) (84f:35052)
- Nirenberg, Louis See Brézis, Haim, (84b:35059)
- Novruzov, A. A. Theorems of Phragmén-Lindelöf type for solutions of second-order linear and quasilinear elliptic equations with discontinuous coefficients. (Russian) (84b:35047)
See also Kerimov, T. M.; et al., (84b:31009)
- Oleinik, O. A. See Zhikov, V. V., (84d:73019)
- Popov, M. M. See Lanin, A. I., (84b:76054)
- Rubel, Lee A. The motions of a partial differential equation. (84j:35033)
- Schaefer, Philip W. See Goyal, Vinod B., (84f:35039)
- Sloan, Alan D. The strong convergence of Schrödinger propagators. (84c:47045)
- Spiegel, E. A. See Arnéodo, A.; et al., (84m:58082a) and (84m:58082b)
- Sutyin, V. G. See Berdicherskii, V. L., (84f:73017)
- Vázquez, Juan Luis Symétrisation pour $u_i = \Delta \varphi(u)$ et applications. (English summary) [Symmetrization for $u_i = \Delta \varphi(u)$ and applications] (84i:35090a)
Erratum: "Symmetrization for $u_i = \Delta \varphi(u)$ and applications". (French) (84i:35090b)
- Weitsman, Allen See Aviles, Patricio, (84b:35043)
- Williams, Mark Wavefront sets of extensions of solutions to diffractive boundary problems. (84i:58120)
- Wu, J. Propagation des singularités analytiques dans les problèmes aux limites de la physique mathématique par les méthodes de Kawai-Kashiwara et Sjöstrand. III. Diffraction des singularités analytiques. [Propagation of analytic singularities in boundary value problems of mathematical physics using the Kawai-Kashiwara and Sjöstrand methods. III. Diffraction of analytic singularities] (See 84b:35003)
- Zhikov, V. V. (with Oleinik, O. A.) Averaging of a system of elasticity theory with almost periodic coefficients. (Russian. English summary) (84d:73019)

35Cxx Representations of solutions

secondary classifications:

- Jamnikauskas, Algimantas Some problems of the analytic theory of partial differential equations. (Russian) (84b:35007)

35C05 Solutions in closed form

- Altin, Abdullah Solutions of type r'' for a class of singular equations. (84c:35023)
- Bakalets', V. A. (with Lyudkevich, I. V.) The method of indeterminate coefficients for solution of the Dirichlet problem for the Poisson equation. (Ukrainian. Russian summary) (84f:35020)
- Bauer, K. W. On a class of Riemann functions. (84b:35019)
- Chikhanov, Kh. A. (with Vu Kim Tuan) The third differential equation for certain Kummer series. (Russian) (84c:35024)
- Kalnins, E. G. (with Miller, Willard, Jr.) Intrinsic characterisation of orthogonal R separation for Laplace equations. (84c:35036)
- Kuznetskii, R. S. Solutions of a system of two partial differential equations. (Russian) (84c:35025)
- Lyudkevich, I. V. See Bakalets', V. A., (84f:35020)
- Miller, Willard, Jr. See Kalnins, E. G., (84c:35036)
- Narkun, Z. M. Formulas for mutual re-expansion of fundamental solutions of the Laplace equation in polar and elliptic coordinates. (Russian) (84g:35031)
- Vu Kim Tuan See Chikhanov, Kh. A., (84c:35024)

secondary classifications:

- Apresyan, L. A. Padé approximation. (Chinese) (84c:41009)
- Belopetskiĭ, V. M. Analytic solution for two-dimensional steady flows of a stratified fluid. (Russian) (84c:76069)
- Bondarenko, B. A. A multidimensional analogue of the statics equations of elasticity theory and their quasipolynomial solutions. (Russian) (84f:73008)
- (Cai, Xie Yong) See Apresyan, L. A., (84c:41009)
- Garifullin, R. M. Analytic solution of some quasilinear equations of elliptic type. (Russian) (84b:35050)
Exact solution of a symmetric and a skew-symmetric system. (Russian) (84f:35028)
- Hattori, Harumi The partial differential equation $u_x + f(u)_x = -cu$. (84a:35161)
- Hill, James M. ★Solution of differential equations by means of one-parameter groups. (84a:34002)
- Jaworski, M. (with Zagrodziński, J.) Quasiperiodic solutions of the sine-Gordon equation. (84c:35097)
- Kard, P. On the solution of one-dimensional wave equations. (Russian. English and Estonian summaries) (84d:34001)
- Saranchev, A. F. Classes of exact solutions of a system of differential quasistatic equations of thermoelasticity for an anisotropic medium. (Russian) (84h:73047)
- Satsuma, Junkichi Exact solutions of nonlinear equations with singular integral terms. (See 84j:58006)
- Shkhanukov, M. Kh. Some boundary value problems for a third-order equation and extremal properties of its solutions. (Russian) (84d:35030)
- Stanger, Roger A new proof of existence of similarity solutions. (84b:35009)
- Takeno, Shozo Multi-(resonant-soliton)-soliton solutions and vortex-like solutions to two- and three-dimensional sine-Gordon equations. (84c:35100)
- Zagrodziński, J. Dispersion equations and a comparison of different quasiperiodic solutions of the sine-Gordon equation. (84c:35098)
See also Jaworski, M., (84c:35097)

35C10 Series solutions, expansion theorems

- Bengel, Gunter (with Gérard, Raymond) Formal and convergent solutions of singular partial differential equations. (84d:35024)
- Brahimi, Mohamed (with Dauge, Monique) Analyticité et problèmes aux limites dans un polygone. (English summary) [Analyticity and boundary value problems in a polygon] (84a:35037)
- Brezhnev, A. L. (with Chernov, I. A.) Logarithmic self-similar solutions. (Russian) (84c:35018)
- Chernov, I. A. See Brezhnev, A. L., (84c:35018)
- Dauge, Monique See Brahimi, Mohamed, (84a:35037)
- Gallavotti, Giovanni The Dirichlet problem and the Perron-Frobenius theorem. (Italian summary) (84f:35021)
- Gérard, Raymond See Bengel, Gunter, (84d:35024)
- Gilbert, Robert P. (with Wei, Lin) Algorithms for generalized Cauchy kernels. (84i:35027)
- Gronau, Detlef Meromorphic solutions and solutions by differential operators of linear partial differential equations with constant coefficients. (84f:35022)
- Kemnitz, Hans Polynomial expansions for solutions of $D_x^r u(x, t) = D_y u(x, t)$, $r = 2, 3, 4, \dots$. (84c:35026)
- Kleinman, R. E. (with Roach, Gary F.) Operators of minimal norm via modified Green's functions. (84m:35021)
- Kuchment, P. A. On the Floquet theory for parabolic and elliptic boundary value problems in a cylinder. (Russian) (84i:35028)
- Lehnick, S. H. Biorthogonal sequences of solutions of the generalized Feller equation. (84a:35038)
- Nikolaev, A. G. See Protchenko, V. S., (84c:35021)
- Orlov, Konstantin The general method for solving of the boundary problems for the partial differential equations of any order. II. (84c:35020)
- Protchenko, V. S. (with Nikolaev, A. G.) Re-expansion formulas for solutions of the Laplace equation in cylindrical and elongated spheroidal coordinates. (Russian. English summary) (84c:35021)
- Roach, Gary F. See Kleinman, R. E., (84m:35021)
- Wei, Lin See Gilbert, Robert P., (84i:35027)

secondary classifications:

- Azhigulov, M. A. Construction of an asymptotic solution of a partial differential equation for rapid transients with a small parameter. (Russian) (84b:45028)
- Bagirov, G. A. Application of the method of residues to the solution of mixed problems for nonselfadjoint boundary conditions. (Russian. Russian and Azerbaijani summaries) (84b:35038)
- Boghenko, I. N. (with Boichuk, M. V.) Questions of improving the convergence of series in the solution of equations of elliptic type. (Russian) (84b:35031)
- Boichuk, M. V. See Boghenko, I. N., (84b:35031)
- Chen, Yin Tong (with Yu, Chang An) The structure of the analytic solution of Cauchy's problem for a linear partial differential equation of the third order. (Chinese. English summary) (84b:35004)
- Davis, Gregory B. (with Hill, James M.) A moving boundary problem for the sphere. (84b:35121)
- Faierman, Melvin (with Knowles, Ian) On a mixed problem for a hyperbolic equation with a discontinuity in the principal coefficients. (84b:35085)
- Gandel', Yu. V. Double Fourier series of some mixed boundary value problems of mathematical physics. (Russian) (84c:42033)
- Hill, James M. See Davis, Gregory B., (84b:35121)
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- Tuckin, Yu. A. (with Shestopalov, V. P.) On a model class of boundary value problems of electrodynamics. (Russian) (84c:45004)
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35C15 Integral representations

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- Baraniski, Feliks (with Musialek, Jan) On a certain limit problem for the rectangular parallelepiped. 84f:35023
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- Chekmar'ev, T. V. Formulas for solution of the Goursat problem for a linear system of partial differential equations. (Russian) 84a:35040
- Janišauskas, Algimantas Constructive formulas for Green and Neumann functions. (Russian) 84c:35022
- Langen, Eberhard Zur Behandlung pseudoparabolischer Differentialgleichungen mit funktionentheoretischen Methoden. [On the treatment of pseudoparabolic differential equations with function-theoretic methods] 84j:35021
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- Musialek, Jan See Baraniski, Feliks, 84c:35027 and 84f:35023
- Radzhabov, N. R. Integral representations and boundary value problems for an equation of Helmholtz type with several singular surfaces. (Russian) 84b:35023
- Rosculeț, Marcel N. Integral operators which generalize differential equations. VI. Mean value formula for analytic solutions of the polycaloric and metacaloric equations in p space variables. (Romanian. French summary) 84b:35024
- Seitkaziyaeva, A. S. Linear partial differential equations with exponential coefficients. (Russian) 84a:35041
- Shkhamukov, M. Kh. A method for solving boundary value problems for third-order equations. (Russian) 84c:35028
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- Watson, N. A. Solutions of parabolic equations with initial values locally in L^p . (84c:35113)

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- Buldyrev, S. V. Calculation of the coefficients of a formal expansion of the Green function of a multidimensional parabolic equation and the diagram technique. (Russian. English summary) 84c:35019
- Butuzov, V. F. (with Nesterov, A. V.) The asymptotics of the solution of an equation of parabolic type with small parameters multiplying the highest derivatives. (Russian) 84b:35020
- Eiyubov, R. A. Asymptotic solution of a boundary value problem for a nonlinear differential equation that degenerates to a parabolic equation. (Russian) 84c:35030
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- Iosif'yān, G. A. (with Oleinik, O. A.; Panasenko, G. P.) Asymptotic expansion of the solution of a system of elasticity theory with periodic rapidly oscillating coefficients. (Russian) 84a:35042
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- Tsimbal, V. M. Asymptotic expansion of the solution of a mixed problem for a sixth-order equation with a small parameter multiplying the highest derivative. (Ukrainian. Russian summary) **84d:35026**
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- Khabibullin, I. T. See Novokshenov, V. Yu., (**84j:34089**)
- Konyaev, Yu. A. Solvability of nonstandard problems for partial differential equations. (Russian) (**84g:35069**)
- Kröner, Dietmar Asymptotic expansions of the pressure and the free boundary for flows through porous media. (**84h:35170**)
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- Vasil'eva, A. B. See Butuzov, V. F., (**84c:35015**)
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- Weinacht, Richard J. A singular perturbation problem for the Lavrent'ev-Bitsadze equation. (**84g:35016**)
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- Barański, Feliks (with Musialek, Jan) On the Green functions for the heat equation over the m -dimensional cuboid. **84f:35024**
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- Dimovski, Ivan Kh. Duhamel-type representations of the solutions of nonlocal boundary value problems. **84m:35023**
- Dzhani, G. V. ★Решение некоторых задач для одного вырождающегося эллиптического уравнения и их приложения к призматическим оболочкам. (Russian) [Solution of some problems for a degenerate elliptic equation and their applications to prismatic shells] **84g:35032**
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- Evangelidis, E. A. Toroidal solutions of the Gegenbauer equation. **84c:35034**
- Galaktionov, V. A. Approximate self-similar solutions of the heat equation. (Russian) **84c:35024**
- Grisvard, Pierre Diagonalisation d'opérateurs non-autoadjoints et séparation des variables. [Diagonalization of nonselfadjoint operators and separation of variables] (See **84i:35003**)
- Heynig, Frank Eindeutigkeitssatz für ein Anfangswertproblem für Operatordifferentialgleichungen. [Uniqueness theorem for an initial value problem for operator differential equations] **84c:35025**
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- Ivanov, L. A. (with Kipriyanov, I. A.) Hadamard's method for equations that split into factors. (Russian) **84m:35024**
- Khoma, G. P. Truncation of countable systems. (Russian) **84c:35028**
- Kipriyanov, I. A. See Ivanov, L. A., **84m:35024**
- Kipriyanova, N. I. On the question of expandability of functions with singularities. (Russian) (See **84m:35003**)
- Kleinman, R. E. Constructive methods for boundary value problems depending on a parameter. **84c:35029**
- Kovalev, V. A. A new method of reconstruction of the solution of a boundary value problem for an equation of hyperbolic type. (Russian) **84c:35033**
- Kuchment, P. A. Representations of solutions of periodic partial differential equations. (Russian) **84j:35028**
- Kurylev, Ya. V. A nonlinear analogue of the WKB method and the method of an averaged Lagrangian. (Russian. English summary) **84c:35030**
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- Lada, A. A method for the asymptotic solution of pseudodifferential equations in the analysis of a stochastic process of birth and death type. (Russian) **84m:35025**
- Lebovitz, Norman R. Perturbation expansions on perturbed domains. **84c:35028**
- Lê Hùng Sơn Fortsetzungssatz für räumliche holomorphe Funktionen. [Continuation theorem for three-dimensional holomorphic functions] **84h:35024**
- Ley Koo, E. (with Wang, Ren Chuan; Sun, Zong Yang; Ren, Shang Fen) On the expansions of a paraboloidal wave in cylindrical and spherical waves. (Chinese summary) **84h:35028**
- Makovetskii, V. I. Fundamental solution of the wave equation with velocity linearly dependent on one argument. (Russian) **84c:35035**
- Meleshko, S. V. A class of solutions of systems of quasilinear differential equations with many independent variables. (Russian) **84j:35029**
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- Pakhareva, N. A. (with Aleksandrovich, I. N.) Representation of $p_1(x)p_2(y)$ -wave functions by a linear combination of wave functions and their derivatives. (Russian. English summary) **84m:35026**
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 (with Hachaj, Jadwiga) On the nonlinear problem for the Helmholtz equation and for the half plane. (Russian and Polish summaries) (84j:35047)
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 Grigor'eva, N. S. See Babich, V. M., (84j:42035)
 Gronau, Detlef. Meromorphe Lösungen linearer partieller Differentialgleichungen—ein Überblick. [Meromorphic solutions of linear partial differential equations—a survey] (84i:35006)
 Grundy, R. E. The small-time evolution of a nonlinear diffusion equation. (84d:35072)
 Guliev, V. A. A Cauchy problem for a second-order parabolic system. (Russian) (84j:35081)
 Hachaj, Jadwiga. See Barański, Feliks, (84j:35047)
 Hill, James M. See Lee, Alexander I., (84j:76047)
 Idone, Giovanna. The Cauchy-Neumann problem for singular parabolic equations. (Italian. English summary) (84e:35073)
 Jones, A. S. Letter to the editor: "The extended Graetz problem with Dirichlet wall boundary conditions" [Appl. Sci. Res. 36 (1980), no. 1, 13–34; MR 81b:76053] and "The extended Graetz problem with prescribed wall flux" [AIChE J. 26 (1980), no. 5, 779–787; MR 82b:80010] both by E. Papoutsakis, D. Ramkrishna and H. C. Lim. (84b:80006a)
 Comments on the extended Graetz problem with Dirichlet boundary conditions. (84b:80006b)
 Jovanovic, Bosko S. Application of Richardson's extrapolation in the numerical solution of the equation $\partial^2 u / \partial t^2 = \partial^2 u / \partial x^2 + f(x, t)$. (Serbo-Croatian. French summary) (84m:65100)
 Kalnins, E. G. (with Miller, Willard, Jr.) Conformal Killing tensors and variable separation for Hamilton-Jacobi equations. (84f:53016)
 Kantor, S. A. Splitting of strongly elliptic operators. (Russian) (84h:47053)
 Kaptur, Janusz. On certain boundary value problems for partial differential equations. (Russian and Polish summaries) (84g:35037)
 Kečič, Jovan D. On some classes of linear equations. IV. (84j:39012)
 (with Stanković, Miomir S.) On some classes of linear equations. III. (84j:39011)
 Kersten, H. Ein Approximationssatz zum Neumann Problem der Prä-Maxwell Gleichungen. [An approximation theorem for the Neumann problem for the pre-Maxwell equations] (84b:35013)
 Khatishvili, G. M. ★Задачи Альманси-Мичелла для однородных и составных тел. Часть I. (Russian) [The Almansi-Michell problems for homogeneous and composite bodies. Part I] (84k:73001)
 Khrushov, E. Ya. Convergence of solutions of the second boundary value problem in weakly connected domains. (Russian) (84e:35043)
 Kondraciuk, Narcyz. See Barański, Feliks, (84j:35048)
 Krasnushkin, P. E. (with Moiseev, E. I.) The excitation of forced oscillations in a stratified radio-waveguide. (Russian) (84g:78015)
 Kreiss, Heinz-Otto. See Browning, G., (84g:35014)
 Kreyszig, E. See Azzam, A., (84i:35033)
 Kubasewski, Władysław. On the Green function for the biharmonic equation for quarter-plane and boundary conditions of the third kind. (Russian and Polish summaries) (84j:35065)
 See also Barański, Feliks, (84j:35096)
 Kuptsov, L. P. A class of parabolic means. (Russian) (84b:35071)
 Lacey, A. A. (with Ockendon, J. R.; Tayler, Alan B.) "Waiting-time" solutions of a nonlinear diffusion equation. (84f:80008)
 Lee, Alexander I. (with Hill, James M.) On the general linear coupled system for diffusion in media with two diffusivities. (84j:76047)
 Lenyuk, M. P. Investigation of fundamental boundary value problems for a dissipative Bessel wave equation. (Russian) (84f:35083)
 Lerner, M. E. Representation of the derivatives of the Riemann function in terms of the Riemann function. (Russian) (84a:35145)
 (Lim, Henry C.) See Jones, A. S., (84b:80006a)
 Lintner, Małgorzata. See Barański, Feliks, (84j:35049)
 Martić, Branislav. Contribution to nonanalytic functions. (Serbo-Croatian. English summary) (84a:30089)
 McCoy, Peter A. Best L^p -approximation of generalized biaxymmetric potentials. (84a:30071)
 Recapturing solutions of an elliptic partial differential equation. (84b:35038)
 Converse initial value problems for a class of heat equations. (84e:35068)
 Mel'nik, V. V. Solutions of nonflat equations for the axisymmetric loading of circular flat membranes. (Russian) (84m:73055)
 Migoń, Jerzy. On the Fourier problem for the half-time plane. (Russian and Polish summaries) (84j:35084)
 Milewski, Jan. On the limit problem for the nonlinear equation of the third order. (Russian and Polish summaries) (84j:35040)
 The limit problem for certain class of nonlinear m -parabolic equations. (Russian and Polish summaries) (84j:35097)
 Miller, Willard, Jr. See Kalnins, E. G., (84f:53016)
 Moiseev, E. I. See Krasnushkin, P. E., (84g:78015)
 Moodie, T. Bryant. See Barclay, D. W.; et al., (84f:73023)
 Morsy, M. W. (with Aly, Samia S.; Shaker, M. O.) Adjointness of partial differential operator in curvilinear coordinates. (84h:53034)
 Ockendon, J. R. See Lacey, A. A.; et al., (84f:80008)
 Ogata, Takashi. Operational calculus of two variables. (84h:44012)
 Ogrodnik, Władysław. On the Green function for the nonhomogeneous biharmonic equation and for the circular sectors. (Russian and Polish summaries) (84j:35056)
 Orlov, A. I. The construction of a force function from a given family of trajectories. (Russian) (84k:70022)
 (Papoutsakis, Eleftherios) See Jones, A. S., (84b:80006a)
 Pate, Thomas H. A unifying context for the classical Cauchy initial value problem and the type of problem solvable using an iteration procedure suggested by Neuberg. (84j:35009)

- Puzio, Zdzisław** Premier problème de Fourier pour un système d'équations quasi-linéaires du type parabolique. [Fourier's first problem for a system of parabolic quasilinear equations] (84i:35084)
- Pyrchla, Zbigniew** The bicaloric problem for the strip. (Russian and Polish summaries) (84j:35088)
- (Ramkrishna, Doraiswami)** See Jones, A. S., (84b:80006a)
- Sabry, Mohamed Nabil** Sur une méthode intégrale appliquée à la résolution de problèmes de mécanique des fluides. (English summary) [On an integral method applied to the resolution of some problems of fluid mechanics] (84c:76064)
- Saigo, Megumi** A certain boundary value problem for the Euler-Darboux equation. (84a:35233)
- A certain boundary value problem for the Euler-Darboux equation. II. (84a:35234)
- A certain boundary value problem for the Euler-Darboux equation. III. (84a:35235)
- Shaker, M. O.** See Morsy, M. W.; et al., (84h:53034)
- Slawik, Lech** See Barański, Feliks, (84j:35050)
- Sloan, Alan D.** See Berger, Marc A., (84g:35170)
- Stanković, Miodir S.** See Kečlić, Jovan D., (84j:39011)
- Sysoeva, T. N.** See Vasil'eva, A. B., (84j:35011)
- Szczepankiewicz, Anna** See Barański, Feliks, (84j:35051) and (84j:35052)
- Tait, R. J.** See Barclay, D. W.; et al., (84f:73023)
- Taylor, Alan B.** See Lacey, A. A.; et al., (84f:80008)
- Tutschke, Wolfgang** A general method for approximate solving of mixed problems in the theory of partial differential equations. (84h:35005)
- Vasil'eva, A. B.** (with Sysoeva, T. N.) Application of the method of boundary functions to a first-order singularly perturbed partial differential equation. (Russian) (84j:35011)
- Vedenyapin, V. V.** Anisotropic solutions of the Boltzmann equation. Bilinear operators that are invariant with respect to groups of rotations and evolutionary equations with them. (Russian. English summary) (84c:82019)
- Volkov, A. P.** An effective method for solving the Dirichlet problem for the Laplace equation. (Russian) (84c:35037)
- Wachnicka, Krystyna** On the Green function for certain sixth order problems. (Russian and Polish summaries) (84j:35066)
- Warchulski, Kazimierz** On the Fourier problem for the normal polyparabolic equation. (Russian and Polish summaries) (84j:35101)
- Xiong, Xi Jin** Hypercomplex functionals. I. (Chinese) (84a:30088a)
- Hypercomplex functionals. II. Some properties of hypercomplex functionals and their applications to partial differential equations. (Chinese) (84a:30088b)
- Yin, Wei Ping** Some results on the nonsymmetric Siegel domains and the explicit solutions of some partial differential equations. (84c:32041)
- Zdankiewicz, Zbigniew** See Barański, Feliks, (84j:35080)
- (Zel'dovich, Ya. B.)** See Barenblatt, G. I., (84h:76026)

35Dxx Generalized solutions

35D05 Existence of generalized solutions

- Dziurda, Jolanta** A generalized solution of Oseen's equations. 84f:35027
- secondary classifications:
- Bem, Zbigniew** Existence of a generalized solution in thermoelasticity with two relaxation times. I. (84g:73068)
- Fattorusso, Luisa** Weak solutions of the Cauchy-Dirichlet problem for parabolic equations in unbounded domains. (Italian. English summary) (84c:35072)
- Landes, Rüdiger** (with Mustonen, Vesa) Pseudomonotone mappings in Sobolev-Orlicz spaces and nonlinear boundary value problems on unbounded domains. (84f:35057)
- Mustonen, Vesa** See Landes, Rüdiger, (84f:35057)
- Prouse, Giovanni** On an inequality related to the motion, in any dimension, of viscous, incompressible fluids. (Italian summary) (84b:35103)
- Prus, Bolesław** On a minimization of functionals in Banach spaces. (Russian and Polish summaries) (84g:49011)
- Skubachevskii, A. L.** Some nonlocal elliptic boundary value problems. (Russian) (84c:35038)

35D10 Regularity of generalized solutions

- di Benedetto, Emmanuele** Continuity of weak solutions to certain singular parabolic equations. (See 84c:00009)
- Gossez, Jean-Pierre** Weak and strong derivatives in Orlicz spaces. 84a:35047
- John, Oldrich** (with Nečas, Jindřich; Stará, Jana) On the regularity for 2nd order nonlinear elliptic systems. (See 84i:00016)
- Nečas, Jindřich** See John, Oldrich; et al., (See 84i:00016)
- Semenov, Yu. A.** Smoothness of generalized solutions of the equation $(\lambda - \sum_{i,j} a_{ij} \nabla_i \nabla_j)u = f$ with continuous coefficients. (Russian) 84d:35029
- Stará, Jana** See John, Oldrich; et al., (See 84i:00016)

secondary classifications:

- Alikakos, Nicholas D.** (with Evans, Lawrence C.) Continuity of the gradient for weak solutions of a degenerate parabolic equation. (84j:35098)
- Arkhipova, A. A.** Smoothness of the solution of a system of variational inequalities. (Russian. English summary) (84c:35051)
- Biroli, Marco** Hölder regularity for parabolic obstacle problem. (Italian summary) (84c:35066)
- Boev, T. B.** Propagation of singularities for a class of operators with involutive characteristics. (84c:35159)
- Buonocore, Pasquale** Regularity in the half space for solutions of quasielliptic systems. (Italian. English summary) (84d:35049)

- Campanato, Sergio** Partial Hölder regularity of the solutions of a class of second-order nonlinear elliptic systems. (Italian) (84c:35081)
- Hölder continuity of the solutions of some nonlinear elliptic systems. (84g:35049)
- Evans, Lawrence C.** See Alikakos, Nicholas D., (84j:35098)
- Fabes, Eugene B.** (with Kenig, Carlos E.; Serapioni, Raul P.) The local regularity of solutions of degenerate elliptic equations. (84i:35070)
- Frehse, Jens** (with Mosco, Umberto) Sur la continuité ponctuelle des solutions locales faibles du problème d'obstacle. (English summary) [Pointwise continuity of local weak solutions of the obstacle problem] (84b:49011)
- Goldschmidt, Bernd** Regularity properties of generalized analytic vectors in \mathbb{R}^n . (84a:35071)
- Ifimie, V.** Une nouvelle notion d'analyticité partielle et applications. [A new notion of partial analyticity, and applications] (84j:35041)
- Ivanov, Aleksandr Vasil'evich** On the regularity of generalized solutions of the first boundary value problem for second-order quasilinear degenerate elliptic equations. (Russian) (84a:35101a)
- Iwaniec, Tadeusz** Regularity theorems for solutions of partial differential equations for quasiconformal mappings in several dimensions. (84d:30032)
- Jensen, Robert** Regularity for elastoplastic type variational inequalities. (84c:49011)
- Kenig, Carlos E.** See Fabes, Eugene B.; et al., (84i:35070)
- Kondrat'ev, V. A.** (with Oleinik, O. A.) On the behavior of generalized solutions of the Dirichlet problem for high-order elliptic equations in the neighborhood of a boundary. (Russian) (84d:35044)
- Lions, Pierre-Louis** (with Nečas, Jindřich; Netuka, Ivan) A Liouville theorem for nonlinear elliptic systems with isotropic nonlinearities. (84g:35053)
- Magnanini, Rolando** The Lipschitz property of the solutions of elliptic equations with radial coefficients. (Italian. English summary) (84h:35041)
- Miersemann, Erich** Zur Regularität verallgemeinerter Lösungen von quasilinearen elliptischen Differentialgleichungen zweiter Ordnung in Gebieten mit Ecken. (English and Russian summaries) [On the regularity of generalized solutions of quasilinear elliptic differential equations of second order in domains with corners] (84a:35041)
- Mosco, Umberto** See Frehse, Jens, (84b:49011)
- Nečas, Jindřich** See Lions, Pierre-Louis; et al., (84g:35053)
- Netuka, Ivan** See Lions, Pierre-Louis; et al., (84g:35053)
- Oleinik, O. A.** See Kondrat'ev, V. A., (84d:35044)
- Sändig, Anna-Margarete** Klassische und schwache Lösungen des Dirichletproblems für lineare elliptische Gleichungen höherer Ordnung in Gebieten mit konischen Ecken. [Classical and weak solutions of the Dirichlet problem for linear elliptic equations of higher order in domains with conic corners] (84c:35055)
- Serapioni, Raul P.** See Fabes, Eugene B.; et al., (84i:35070)
- Tolsdorf, Peter** A new proof of a regularity theorem. (84b:35048)
- Urdeletova, A. B.** Regularity of solutions of a class of nonuniformly elliptic quasilinear equations. (Russian) (84a:35088)
- Vakhrushev, V. A.** Boundary value problems for equations of odd order. (Russian) (84a:35057)
- Werner, Peter** Regularity properties of the Laplace operator with respect to electric and magnetic boundary conditions. (84g:35041)

35D99 None of the above, but in this section

secondary classifications:

- Rozanov, Yu. A.** A generalized Dirichlet problem. (Russian) (84c:46040)
- Slemrod, M.** Admissibility criteria for propagating phase boundaries in a van der Waals fluid. (84a:76030)
- Tomescu, Anca** (with Tomescu, F. M. G.) Uniqueness of the weak solution of general mixed problems for the parabolic equation. (84h:35076)
- Tomescu, F. M. G.** See Tomescu, Anca, (84h:35076)

35Exx Equations and systems with constant coefficients [See also 35N05.]

35E05 Fundamental solutions

- Cattabriga, Lamberto** Existence of a fundamental solution with singular support contained in a half space and surjectivity of differential operators with constant coefficients. (Italian. English summary) 84b:35033
- Kulikov, A. A.** On the fundamental solutions and hypoellipticity of some singular differential operators. (Russian) 84c:35019

secondary classifications:

- Fedyuk, V. F.** A system of differential equations of hyperbolic-parabolic type. (Russian. Tajiki summary) (84h:35112)

35E10 Convexity properties

35E15 Initial value problems

- Shlekis, P. P.** The Cauchy problem in L_p spaces. (Russian) 84c:35020
- The well-posedness of the Cauchy problem in the spaces L_p^α and $B_{p,p}^\alpha$. (Russian) 84j:35030
- Tovmasyan, N. E.** The Cauchy problem for differential equations with constant coefficients in a half space in a class of generalized functions. (Russian) 84a:35048

35E20 General theory

- Cattabriga, Lamberto** Solutions in Gevrey spaces of partial differential equations with constant coefficients. 84b:35030
- Dzhallilov, K. A.** (with Guseinov, R. V.) Correct solvability of a system of differential equations. (Russian. English and Azerbaijani summaries) 84b:35034

- Giovannelli, Nicolò First-order total differential linear systems with constant coefficients. (Italian) **84j:35031**
- Guseinov, R. V. See Dzhalilov, K. A., **84c:35034**
- Langenbruch, Michael Differentiability and growth of solutions of partial differential equations. **84g:35033**
- Liess, Otto Necessary and sufficient conditions for propagation of singularities for systems of linear partial differential operators with constant coefficients. **84h:35031**
- Mari, D. Existence of solutions in anisotropic Gevrey spaces for differential equations with constant coefficients. (Italian. English summary) **84j:35032**
- Rubel, Lee A. The motions of a partial differential equation. **84j:35033**
- Tsuji, Mikio Localisation et front d'onde analytique. [Localization and analytic wave front] **84i:35034**

secondary classifications:

- Burskii, V. P. The hypoellipticity of a differential operator with constant coefficients in the space of periodic functions on the plane. (Russian) **(84a:35058)**
- Dubinskii, Yu. A. Cauchy problems for partial differential equations with complex variables. (Russian) **(84c:35005)**
- Gel'man, I. V. (with Maz'ya, V. G.) ★Abschätzungen für Differentialoperatoren im Halbraum. (German) [Estimates for differential operators in the half space] **(84g:35027)**
- (Herbst, Ehrhard) See Gel'man, I. V.; et al., **(84g:35027)**
- Maz'ya, V. G. See Gel'man, I. V., **(84g:35027)**
- Nacinovich, Mauro Complex analysis and complexes of differential operators. **(84h:58139)**
- (Plischke, Werner) See Gel'man, I. V.; et al., **(84g:35027)**
- (Wildenhain, Günther) See Gel'man, I. V.; et al., **(84g:35027)**

35E99 None of the above, but in this section

- Iĭ'kiv, V. S. A nonlocal boundary value problem for a partial differential equation with constant coefficients. (Russian. English summary) **84c:35021**

secondary classifications:

- Anikonov, Yu. E. Solutions of a class of inverse problems. (Russian) **(84h:35161)**
- Chaus, N. N. Triviality classes of solutions of a system of differential equations. (Russian) **(84a:35051)**
- Ehrenpreis, Leon (with Kawai, Takahiro) Poisson's summation formula and Hamburger's theorem. **(84h:46049)**
- Kawai, Takahiro See Ehrenpreis, Leon, **(84h:46049)**
- Madzuerova, Andreana S. A study of some homogeneous algebras of functions on a torus. (Russian) **(84g:46074)**
- Mamyan, A. Kh. General boundary value problems in a layer. (Russian) **(84g:35035)**
- Paquet, Luc Problèmes mixtes pour le système de Maxwell. (English summary) [Mixed problems for the Maxwell system] **(84c:58075)**
- Patissier, G. Differential deformations with constant coefficients. (See **84d:53003**)
- Parlov, A. L. Generalized functions concentrated on a set of measure zero. (Russian) **(84c:46039)**
- Shtabalyuk, P. I. Almost periodic solutions of a linear system of differential equations with constant coefficients. (Russian) **(84m:35012)**

35Fxx General first-order equations and systems

secondary classifications:

- Demidov, S. S. On the history of the theory of first-order partial differential equations. C. G. J. Jacobi's "first method". (Russian) **(84i:01059)**

35F05 Linear equations and systems, general

- Drozhzhinov, Yu. N. Linear passive systems of partial differential equations. (Russian) **84c:35035**
- Garifullin, R. M. Exact solution of a symmetric and a skew-symmetric system. (Russian) **84c:35028**
- I'in, E. M. Solvability in the class H^1 of first-order symmetric systems in domains with conic points. (Russian) **84f:35029**
- Pallaschke, Diethard On a system of first order linear partial differential equations which appears in the economic theory of utility maximization. **84j:35034**
- Pirov, R. Some linear systems of three first-order partial differential equations with two unknown functions. (Russian. Tajiki summary) **84j:35035**
- Some linear systems of three first-order partial differential equations with two unknown functions on the plane. (Russian. Tajiki summary) **84m:35027**
- Rudykh, G. A. Investigation of the generalized Liouville equation. (Russian. English summary) **84i:35035**
- de Simon, Luciano Inhomogeneous first order linear partial differential equations with coefficients and right hand side discontinuous. (Italian summary) **84a:35049**
- secondary classifications:

- Baouendi, M. S. (with Trèves, François) A microlocal version of Bochner's tube theorem. **(84b:35025)**
- Bardos, Claude W. (with Rauch, Jeffrey) Maximal positive boundary value problems as limits of singular perturbation problems. **(84j:35012)**
- Chekmariev, T. V. Formulas for solution of the Goursat problem for a linear system of partial differential equations. (Russian) **(84a:35040)**
- De Sanctis, Angela (with Sorani, Giuliano) Cohomology of a vector field that is never zero. (Italian. English summary) **(84h:58185)**
- Giovannelli, Nicolò First-order total differential linear systems with constant coefficients. (Italian) **(84j:35031)**

- Harke, Otto Untersuchungen zum Picardschen Satz für verallgemeinerte analytische Funktionen. [Investigations on Picard's theorem for generalized analytic functions] **(84c:30054)**
- Imanaliyev, M. I. (with Tabaldyev, B. R.) On the existence and uniqueness of the solution of a one-dimensional inverse problem for a first-order partial differential equation. (Russian) **(84a:35288)**
- Kamont, Zdzisław On the Cauchy problem for nonlinear systems of partial differential-functional equations of the first order. **(84f:35145)**
- Kim, Jongsik (with Kim, Sung Ock) Note on Mizohata type operators. **(84c:58077)**
- Kim, Sung Ock See Kim, Jongsik, **(84c:58077)**
- Mikhailov, L. G. A method of analytic continuation for certain partial differential equations with several independent variables. (Russian. Tajiki summary) **(84m:35006)**
- Rauch, Jeffrey See Bardos, Claude W., **(84j:35012)**
- Sorani, Giuliano See De Sanctis, Angela, **(84h:58185)**
- Tabaldyev, B. R. See Imanaliyev, M. I., **(84a:35288)**
- Trèves, François See Baouendi, M. S., **(84b:35025)**

35F10 Initial value problems for linear equations and systems

- Furioli Martinoli, Antonella Theorems of existence in the large of solutions of Cauchy problems for the linear system $\partial z_i / \partial y = \sum_{j=1}^N \{ a_{ij}(y) \partial z_j / \partial x + b_{ij}(y) z_j \} + c_i(x, y)$ ($i=1, 2, \dots, N$). (Italian. English summary) **84j:35036**

35F15 Boundary value problems for linear equations and systems

- Dzhumabaev, D. S. See Zhaitykov, O. A., **84m:35028**
- Shi, Jia Hong The boundary value problems for a kind of symmetric positive system in angular regions. (Chinese) **84j:35037**
- Zhaitykov, O. A. (with Dzhumabaev, D. S.) A problem for a first-order partial differential equation. (Russian. Kazakh summary) **84m:35028**

secondary classifications:

- Kurbanov, M. The Riemann-Hilbert problem for a holomorphic vector and its generalizations. (Russian) **(84c:35093)**
- Saranen, Jukka On an inequality of Friedrichs. **(84d:35022)**

35F20 Nonlinear equations and systems, general

- Degiovanni, Marco (with Marino, Antonio; Spagnolo, Sergio) Some first-order nonlinear differential systems on the torus. (Italian. English summary) **84c:35022**
- Di Blasio, Gabriella (with Iannelli, Mimmo; Sinestrari, Eugenio) A first order partial differential equation with an integral boundary condition. (Italian summary) **84i:35036**
- Dorroh, J. R. Nonlinear symmetric first-order systems. **84i:35037**
- Iannelli, Mimmo See Di Blasio, Gabriella; et al., **84i:35036**
- Kaplan, Stanley On a theorem of Liapounoff on holomorphic solutions of singular first order partial differential equations. **84a:35036**
- Lions, Pierre-Louis On Hamilton-Jacobi equations. **84c:35023**
- Marino, Antonio See Degiovanni, Marco; et al., **84c:35022**
- Qin, Tie Hu On the existence of solutions for first-order quasilinear symmetrizable systems of partial differential equations. (Chinese. English summary) **84a:35050**
- Sinestrari, Eugenio See Di Blasio, Gabriella; et al., **84i:35036**
- Spagnolo, Sergio See Degiovanni, Marco; et al., **84c:35022**

secondary classifications:

- Bilchev, S. I. Generalized stream functions for the asymmetric case of systems of two first-order partial differential equations. (Russian) (See **84c:34002**)
- Browning, G. (with Kreiss, Heinz-Otto) Problems with different time scales for nonlinear partial differential equations. **(84g:35014)**
- Dacorogna, Bernard ★Weak continuity and weak lower semicontinuity of nonlinear functionals. **(84f:49020)**
- Diaz Diaz, Jesús Ildefonso (with Véron, Laurent) Existence theory and qualitative properties of the solutions of some first order quasilinear variational inequalities. **(84h:35099)**
- Gravel, Pierre Discontinuous solutions for first-order systems through a limiting process. **(84h:83038)**
- Kreiss, Heinz-Otto See Browning, G., **(84g:35014)**
- Melis, A. (with Piras, B.) On a generalization of Szebehely's problem. (Italian summary) **(84i:70016)**
- Piras, B. See Melis, A., **(84i:70016)**
- Shinbrot, Marvin The Carleman model. **(84j:82066)**
- Tsuji, Mikio Formation of singularities for Hamilton-Jacobi equation. I. **(84h:35098)**
- Véron, Laurent See Diaz Diaz, Jesús Ildefonso, **(84h:35099)**
- Zhang, Gong Qing Differential equations with discontinuous nonlinearities. (See **84k:00009**)

35F25 Initial value problems for nonlinear equations and systems

- Cinquini Cibrario, Maria A class of systems of partial differential equations in many independent variables. (Italian. English summary) **84g:35034**
- Kobayasi, Kazuo (with Ôharu, S.) On nonlinear evolution operators associated with certain nonlinear equations of evolution. **84m:35029**
- Li, Da Qian (with Shi, Jia Hong) Globally smooth solutions in the whole space of first-order quasilinear equations. (Chinese. English summary) **84c:35036**
- Ôharu, S. See Kobayasi, Kazuo, **84m:35029**
- Shi, Jia Hong See Li, Da Qian, **84c:35036**

35F30 Boundary value problems for nonlinear equations and systems

- Belov, Yu. A. Global solution of a first-order partial differential equation. I. (Russian) **84m:35030**
- Kucher, N. A. The Riemann-Hilbert problem for nonlinear systems of differential equations on the plane. (Russian) **84c:35037**
- Lu, Xi Guan The semigroup approach to the boundary value problem for quasilinear equations of first order. (Chinese. English summary) **84c:35024**

35F99 None of the above, but in this section

secondary classifications:

- Feng, De Xing See Song, Jian; et al., (84m:92032)
- Hu, Shun Ju See Song, Jian; et al., (84m:92032)
- Kaldani, N. V. Some representations of kernels of the Carleman-Vekua equation. (Russian. English and Georgian summaries) **(84c:30067)**
- Lasota, Andrzej Stable, chaotic and optimal solutions of first order partial differential equations related with the cell kinetics. (See **84i:00016**)
- Lions, Pierre-Louis ★ Generalized solutions of Hamilton-Jacobi equations. **(84a:49038)**
- Liu, Jia Quan See Song, Jian; et al., (84m:92032)
- Rüprich, Wolfgang Die Lösung des Rand-Sprungwertproblems für im allgemeinen nichtlineare Differentialgleichungssysteme in komplexer Normalform unter Verwendung des Schauderschen Fixpunktsatzes. [The solution of the boundary-jump value problem for generally nonlinear differential equation systems in complex normal form, using Schauder's fixed-point theorem] **(84a:35078)**
- Song, Jian (with Yu, Jing Yuan; Wang, Yan Zu; Hu, Shun Ju; Zhao, Zhong Xin; Liu, Jia Quan; Feng, De Xing; Zhu, Guang Tian) Spectral properties of population operator and asymptotic behaviour of population semigroup. **(84m:92032)**
- Strampp, W. Partially invariant solutions of systems of differential equations in two independent variables. **(84c:35012)**
- Wang, Yan Zu See Song, Jian; et al., (84m:92032)
- Yu, Jing Yuan See Song, Jian; et al., (84m:92032)
- Zhao, Zhong Xin See Song, Jian; et al., (84m:92032)
- Zhu, Guang Tian See Song, Jian; et al., (84m:92032)

35Gxx General higher-order equations and systems

35G05 Linear equations and systems, general

- Chaus, M. M. Triviality classes of solutions of a system of differential equations. (Russian) **84a:35051**
- Hainzl, J. On commuting linear partial differential operators. **84a:35052**

secondary classifications:

- Meshkov, V. Z. Exponential decrease of solutions of a class of partial differential equations. (Russian) **(84d:35020)**
- Wallner, Herbert Associated differential equations and their Bergman kernels. **(84h:35018)**

35G10 Initial value problems for linear equations and systems

- Berg, Lothar Ein Grenzfall beim Goursatschen Anfangswertproblem. [A borderline in Goursat's initial value problem] **84a:35053**
- Zaitseva, O. V. Conditions for well-posedness of the Cauchy problem for a model equation. (Russian) **84a:35054**

35G15 Boundary value problems for linear equations and systems

- Akhiev, S. S. θ -fundamental solutions of some linear boundary value problems for partial differential equations. (Russian) **84i:35038**
- Bagirov, G. A. Application of the method of residues to the solution of mixed problems for nonselfadjoint boundary conditions. (Russian. Russian and Azerbaijani summaries) **84d:35038**
- Lyantse, V. È. (with Storozh, O. G.) A nonlocal boundary condition. (Russian) **84j:35038**
- Mamyan, A. Kh. General boundary value problems in a layer. (Russian) **84g:35035**
- Shkhamukov, M. Kh. Some boundary value problems for a third-order equation and extremal properties of its solutions. (Russian) **84d:35030**
- Storozh, O. G. See Lyantse, V. È., **84j:35038**
- Yakubov, S. Ya. A nonlocal boundary value problem for a class of equations that are well-posed in the sense of Petrovskii. (Russian) **84a:35055**
- Yanov, S. I. Formulation of mixed problems for a class of systems not of the Cauchy-Kovalevskaya type. (Russian) **84j:35039**

secondary classifications:

- Kislev, N. V. A projection theorem and its application to inhomogeneous boundary value problems. (Russian) **(84d:47013)**
- Shevchenko, V. I. On the coincidence of the minimal and the maximal operator for differential expressions with a singularity in the leading coefficients. (Russian) **(84m:47063)**
- Shkhamukov, M. Kh. Some boundary value problems for a third-order equation and extremal properties of its solutions. (Russian) **(84g:35133)**

35G20 Nonlinear equations and systems, general

- Kakhramanov, A. Sh. (with Mutalibov, A. F.) A boundary value problem for an operator-differential equation in the quarter plane. (Russian) **84c:35025**
- Mutalibov, A. F. See Kakhramanov, A. Sh., **84c:35025**

secondary classifications:

- Abellanas, L. (with Galindo, A.) Evolution equations with high order conservation laws. **(84d:35128)**
- Benci, Vieri (with Fortunato, Donato) The dual method in critical point theory. Multiplicity results for indefinite functionals. (Italian summary) **(84g:58025)**
- Bony, Jean-Michel Calcul symbolique et propagation des singularités pour les équations aux dérivées partielles non linéaires. [Symbolic calculus and propagation of singularities for nonlinear partial differential equations] **(84h:35177)**
- Cagnac, Francis Problème de Cauchy sur un conoïde caractéristique pour des équations quasi-linéaires. (English summary) [The Cauchy problem on a characteristic conoid for quasilinear equations] **(84a:35185)**
- Dacorogna, Bernard ★ Weak continuity and weak lower semicontinuity of nonlinear functionals. **(84f:49020)**
- Fortunato, Donato See Benci, Vieri, **(84g:58025)**
- Fushchich, V. I. (with Tychinin, V. A.) Linearization of some nonlinear equations by means of nonlocal transformations. (Russian) **(84f:35006)**
- Galindo, A. See Abellanas, L., **(84d:35128)**
- Stork, Werner On a theorem by H. Shaw and P. J. McKenna concerning solution sets of some nonlinear boundary value problems. **(84d:47089)**
- Tychinin, V. A. See Fushchich, V. I., **(84f:35006)**
- Zhang, Gong Qing Differential equations with discontinuous nonlinearities. (See **84i:00009**)

35G25 Initial value problems for nonlinear equations and systems

- Shatah, Jalal Global existence of small solutions to nonlinear evolution equations. **84g:35036**

35G30 Boundary value problems for nonlinear equations and systems

- Abdinazarov, S. See Dzhraraev, T. D., **84h:35032**
- Chan Dyk Van Solvability of boundary value problems for infinite-order nonlinear degenerate differential equations. (Russian) **84i:35039**
- Dzhraraev, T. D. (with Abdinazarov, S.) Boundary value problems for third-order equations with multiple characteristics in finite and infinite domains. (Russian) **84h:35032**
- Fabrie, Pierre Existence, unicité et comportement asymptotique de la solution d'un problème de convection en milieu poreux. (English summary) [Existence, uniqueness and asymptotic behavior of the solution of a convection problem in porous media] **84d:35031**
- Godin, Paul Le problème de la dérivée oblique non linéaire. [The nonlinear oblique derivative problem] (See **84i:35003**)
- Kaptur, Janusz On certain boundary value problems for partial differential equations. (Russian and Polish summaries) **84g:35037**
- Kasenov, Sh. K. A mixed problem for a class of third-order nonlinear equations. (Russian) (See **84m:35003**)
- Khalilov, G. M. Investigation of a mixed problem for a certain class of third-order partial differential equations with discontinuous coefficients. (Russian) **84a:35056**
- Kozhanov, A. I. A mixed problem for some classes of third-order nonlinear equations. (Russian) **84i:35040**
- Mamedov, Yu. A. (with Sattorov, A. Kh.) Some spaces of Banach type and their application to the solution of boundary value problems. (Russian. English and Azerbaijani summaries) **84i:35039**
- Milewski, Jan On the limit problem for the nonlinear equation of the third order. (Russian and Polish summaries) **84j:35040**
- Sattorov, A. Kh. See Mamedov, Yu. A., **84i:35039**
- Vakhrushev, V. A. Boundary value problems for equations of odd order. (Russian) **84a:35057**

secondary classifications:

- Aubin, Thierry Équations de Monge-Ampère réelles. [Real Monge-Ampère equations] **(84a:58060)**
- Chan Dyk Van Traces of functions from the infinite-order Sobolev-Orlicz classes and nonhomogeneous boundary value problems for equations with arbitrary nonlinearities. (Russian) **(84a:46070)**
- Kakhramanov, A. Sh. (with Mutalibov, A. F.) A boundary value problem for an operator-differential equation in the quarter plane. (Russian) **(84c:35025)**
- Kodnář, Rudolf Qualitative properties of a type of boundary value problems. IV. (Russian. English and Slovak summaries) **(84d:35043)**
- Mutalibov, A. F. See Kakhramanov, A. Sh., **(84c:35025)**

35G99 None of the above, but in this section

secondary classifications:

- Balashova, G. S. Imbedding theorems of some spaces of infinitely differentiable functions and nonlinear equations with subordinate terms. (Russian) **(84i:46037)**
- Kazaryan, G. G. Variational problem for a nonregular equation and the uniqueness of the classical solution. (Russian) **(84g:49018)**
- Lempert, László Solving the degenerate complex Monge-Ampère equation with one concentrated singularity. **(84c:32024)**
- Storchevaya, G. D. A mapping of Appel-like polynomials by means of infinite-order differential operators with constant coefficients. (Russian) **(84h:32006)**

35H05 Hypoelliptic equations and systems [See also 58Gxx.]

- Akamatsu, Toyohiro On necessary condition (P) of F. Trèves for hypoellipticity of linear partial differential operator of principal type. **84d:35032**

- Aramaki, Junichi** Hypocoercivity for a class of pseudodifferential operators. **84h:35033**
- Baouendi, M. S.** (with Trèves, François) A microlocal version of Bochner's tube theorem. **84h:35025**
- Burskii, V. P.** The hypocoercivity of a differential operator with constant coefficients in the space of periodic functions on the plane. (Russian) **84a:35058**
- Cioffi, Antonietta** Existence and uniqueness for the Dirichlet problem with respect to a class of hypocoercive operators. (Italian. English summary) **84m:35031**
- Elschner, Johannes** (with Lorenz, Michael) An unsolvable hypocoercive differential operator degenerating at one point. **84h:35034**
On the index of hypocoercive one-dimensional pseudodifferential operators. **84g:35038**
- Heffer, Bernard** Conditions nécessaires d'hypoanalyticité pour des opérateurs invariants à gauche homogènes sur un groupe nilpotent gradué. [Necessary conditions of hypoanalyticity for homogeneous left-invariant operators on a graded nilpotent group] **84c:35026**
- Iftime, V.** Une nouvelle notion d'analyticité partielle et applications. [A new notion of partial analyticity, and applications] **84j:35041**
- Iordanov, Iordan V.** Hypocoercivity of quasilinear elliptic operators. **84j:35042**
- Karapetyan, G. A.** Existence and behavior of solutions of a class of hypocoercive equations in unbounded domains. (Russian. Armenian summary) **84c:35037**
- Kohn, J. J.** Lectures on degenerate elliptic problems. **84a:35059**
- Lorenz, Michael** See **Elschner, Johannes**, **84h:35034**
- Markaryan, V. N.** Functional dimension of spaces of solutions of some classes of hypocoercive equations. (Russian. English and Armenian summaries) **84d:35033**
- Métivier, G.** Non hypocoercivité analytique pour des opérateurs à caractéristiques doubles. [Analytic nonhypocoercivity for operators with double characteristics] **84c:35027**
- Morimoto, Yoshinori** On hypocoercive operators with multiple characteristics of odd order. **84c:35041**
- Mukhlisov, F. G.** Existence and uniqueness of the solution of some partial differential equations with a Bessel differential operator. (Russian) **84c:35038**
- Nourigat, J.** Hypocoercivité maximale pour le système de Cauchy-Riemann induit. [Maximal hypocoercivity for the induced Cauchy-Riemann system] **84c:35028**
- Popivanov, P. R.** Hypocoercivity of differential operators in a class of generalized periodic functions. (Russian) **84c:35029**
- Popov, Georgi St.** Microlocal properties of a class of pseudodifferential operators with multiple characteristics. II. **84c:35060**
- Shafii-Mousavi, Mortaza** Functional dimension and hypocoercivity of differential operators. **84c:35030**
- Shishmarev, I. A.** The Cauchy problem and T -products for hypocoercive systems. (Russian) **84j:35043**
- Stein, Erwin** An example on the Heisenberg group related to the Lewy operator. **84c:35031**
- Sternin, B. Yu.** Differential equations of subprincipal type. (Russian) **84g:35039**
- Trèves, François** See **Baouendi, M. S.**, **84b:35025**
- Zanghirati, Luisa** Iterates of a class of hypocoercive operators and generalized Gevrey classes. (Italian. English summary) **84j:35044**
- secondary classifications:
- Baouendi, M. S.** (with Trèves, François) A local constancy principle for the solutions of certain overdetermined systems of first-order linear partial differential equations. (84f:35105)
- Cardoso, Fernando** Remarks on the local theory of linear partial differential operators. (Portuguese) (84i:35001)
- Egorov, Yu. V.** Equations of principal type. Sufficient conditions for local solvability. (Russian) (84j:35006)
Propagation of singularities for solutions of an equation of principal type. (Russian) (84k:35149)
- Giarrusso, Ester** Quasielliptic problems depending on a parameter in L^p . (Italian. English summary) (84i:35054)
- Głowacki, Paweł** A calculus of symbols and convolution semigroups on the Heisenberg group. (84f:22018)
- Godin, Paul** Hypocoercive and Gevrey hypocoercive invariant differential operators on certain symmetric spaces. (84c:58131)
Le problème de la dérivée oblique non linéaire. [The nonlinear oblique derivative problem] (See **84i:35003**)
- Grigis, A.** Propagation des singularités le long de courbes microcaractéristiques pour des opérateurs pseudodifférentiels à caractéristiques doubles. I. [Propagation of singularities along microcharacteristic curves for pseudodifferential operators with double characteristics. I] (84c:35003)
Propagation des singularités sur des groupes de Lie nilpotents de rang 2. II. [Propagation of singularities on nilpotent Lie groups of rank 2. II] (84c:35004)
- Kohn, J. J.** Subelliptic estimates. (84c:32028)
- Kolesnikova, E. A.** Subelliptic estimates for a problem with an oblique derivative. (Russian) (84c:35044)
- Kuchment, P. A.** Floquet theory for partial differential equations. (Russian) (84b:35018)
- Kulikov, A. A.** On the fundamental solutions and hypocoercivity of some singular differential operators. (Russian) (84c:35019)
- Langenbruch, Michael** Differentiability and growth of solutions of partial differential equations. (84g:35033)
- Meshkov, V. Z.** Exponential decrease of solutions of a class of partial differential equations. (Russian) (84d:35020)
- Shanahan, N. A.** Existence of nonsmooth solutions. (84i:35150)
- Trèves, François** See **Baouendi, M. S.**, (84f:35105)
- 35Jxx Elliptic equations and systems** [See also **58G05**, **58G10**.]
- Dai, Zhong Wei** Oblique derivative boundary value problems for complex elliptic equations in multiply connected domains. **84d:35034**
- Pekkonen, Erkki** The generalized Dirichlet problem. (Finnish. English summary) **84f:35030**
secondary classifications:
- Januškauskas, Algimantas** Some problems of the analytic theory of partial differential equations. (Russian) (84c:35007)
- O'Connor, Brian M.** Elliptic systems of partial differential equations and the finite element method. (84h:65110)
- 35J05 Laplace equation, reduced wave equation (Helmholtz), Poisson equation**
- Ahner, John F.** On constructing the solution to the exterior Dirichlet problem for the Helmholtz equation. **84b:35026**
- Barański, Feliks** The Green function for the Poisson equation and for the third boundary value problem in the spatial octant. (Russian and Polish summaries) **84j:35045**
(with Górowski, Jan) The boundary value problem for the homogeneous Helmholtz equation and for the quart-plane. (Russian and Polish summaries) **84j:35046**
(with Hachaj, Jadwiga) On the nonlinear problem for the Helmholtz equation and for the half plane. (Russian and Polish summaries) **84j:35047**
(with Kondraciuk, Narcyz) The boundary value problem for the nonhomogeneous Helmholtz equation and for quarter-plane. (Russian and Polish summaries) **84j:35048**
(with Lintner, Malgorzata) The Green function and the solution of the Poisson equation for the octant of the space and the mix boundary conditions. (Russian and Polish summaries) **84j:35049**
(with Ślawik, Lech) A note on the third boundary value problem for the Helmholtz equation. (Russian and Polish summaries) **84j:35050**
(with Szczepankiewicz, Anna) On the Green function for the Poisson equation, angular domain and for the boundary conditions of the third kind. (Russian and Polish summaries) **84j:35051**
(with Szczepankiewicz, Anna) On the boundary problem for the Poisson equation in the angular domain with mixed boundary conditions. (Russian and Polish summaries) **84j:35052**
- Bojarski, Norbert N.** Inverse scattering inverse source theory. **84i:35042**
- Brahimi, Mohamed** Analyticité et problèmes aux limites obliques dans un polygone. [Analyticity and oblique boundary value problems in a polygon] **84d:35035**
- Cioranescu, Doina** (with Murat, François) Un terme étrange venu d'ailleurs. (English summary) [A strange term brought from somewhere else] **84c:35039a**
(with Murat, François) Un terme étrange venu d'ailleurs. II. (English summary) [A strange term brought from somewhere else. II] **84c:35039b**
- Colton, David** Far field patterns for the impedance boundary value problem in acoustic scattering. **84j:35053**
- Corones, J. P.** (with Krueger, R. J.) Higher-order parabolic approximations to time-independent wave equations. **84j:35054**
- David, M.** On a Dirichlet-Neumann-third mixed boundary value problem for the Helmholtz equation. **84i:35043**
- Donig, J.** The domain dependence of dominant Fredholm eigenvalues for the Helmholtz operator. **84i:35044**
- Durand, M.** Layer potentials and boundary value problems for the Helmholtz equation in the complement of a thin obstacle. **84c:35040**
- Górowski, Jan** On the Green function for the circle and its sectors and for the third kind of boundary conditions. (Russian and Polish summaries) **84j:35055**
See also **Barański, Feliks**, **84j:35046**
- Grisvard, Pierre** Singularités des problèmes aux limites dans des polyèdres. [Singularities of boundary value problems in polyhedra] **84a:35061**
- Hachaj, Jadwiga** See **Barański, Feliks**, **84j:35047**
- Halter, Eberhard** On a mixed electric boundary value problem for the vectorial Poisson equation. **84k:35041**
- Karabasz, T. B.** A nonlocal boundary value problem for the Laplace equation. (Russian) **84b:35027**
- Kleinman, R. E.** (with Roach, Gary F.) On modified Green functions in exterior problems for the Helmholtz equation. **84c:35032**
- Kondraciuk, Narcyz** See **Barański, Feliks**, **84j:35048**
- Krueger, R. J.** See **Corones, J. P.**, **84j:35054**
- Lintner, Malgorzata** See **Barański, Feliks**, **84j:35049**
- Mal'tseva, E. V.** Application of singular integral equations to certain problems of mathematical physics. (Russian) **84d:35036**
- Mäulen, J.** Lösungen der Poissongleichung und harmonische Vektorfelder in unbeschränkten Gebieten. (English summary) [Solutions of the Poisson equation and harmonic vector fields in unbounded domains] **84b:35035**
- Maz'ya, V. G.** (with Nazarov, S. A.; Plamenevskii, B. A.) Asymptotic behavior of the solution of the Dirichlet problem in a domain with a thin bridge. (Russian) **84i:35045**
- Miller, R. F.** The analytic continuation of solutions of the generalized axially symmetric Helmholtz equation. **84f:35031**
- Murat, François** See **Cioranescu, Doina**, **84c:35039a** and **84c:35039b**
- Nazarov, S. A.** See **Maz'ya, V. G.**; et al., **84i:35045**
- Nesterov, S. V.** (with Plis, V. I.) Diffraction of Kelvin waves in a channel with a semi-infinite wall. (Russian) **84c:35046**
- Ogrodnik, Wladyslaw** On the Green function for the nonhomogeneous biharmonic equation and for the circular sectors. (Russian and Polish summaries) **84j:35056**
- Plamenevskii, B. A.** See **Maz'ya, V. G.**; et al., **84i:35045**
- Plis, A. I.** (with Plis, V. I.) Propagation of Kelvin waves from a channel into a semibounded basin. (Russian) **84i:35047**
- Plis, V. I.** See **Nesterov, S. V.**, **84c:35046** and **Plis, A. I.**, **84i:35047**
- Poedinchuk, A. E.** The exact spectrum of a class of open cylindrical structures. (Russian. English summary) **84m:35032**
- Razumovskii, N. A.** The Green function of a slightly heterogeneous waveguide. (Russian. English summary) **84c:35042**

- Roach, Gary F. See Kleinman, R. E., 84c:35032
- Sacksteder, Richard On the Helmholtz equation. 84c:35040
- Sattarov, A. S. Radiation conditions for a differential equation of Helmholtz type with two singular lines. (Russian. Tajiki summary) 84c:35043
- Ślawik, Lech See Barański, Feliks, 84j:35050
- Stepanov, V. N. Some geometric questions in the inverse scattering problem. (Russian) (See 84m:35003)
- Stone, W. Ross A review of the exact inverse scattering theory. 84g:35040
- Sukhinin, S. V. The discreteness of eigenfrequencies of open acoustic resonators. (Russian) 84b:35028
- Szczepankiewicz, Anna See Barański, Feliks, 84j:35051 and 84j:35052
- Tomescu, Anca See Tomescu, F. M. G., 84c:35036
- Tomescu, F. M. G. (with Tomescu, Anca) On the variational solution of the Poisson equation in nonhomogeneous media. 84b:35036
- Twersky, Victor Scattering and nonscattering obstacles. 84i:35048
- Volkov, A. P. An effective method for solving the Dirichlet problem for the Laplace equation. (Russian) 84c:35037
- Werner, Peter Regularity properties of the Laplace operator with respect to electric and magnetic boundary conditions. 84g:35041
- Yakubov, S. Ya. A boundary value problem for the Laplace equation with nonclassical spectral asymptotics. (Russian) 84c:35033

secondary classifications:

- Abrahams, I. D. Scattering of sound by an elastic plate with flow. (84j:76039)
- Bakalets', V. A. (with Lyudkevich, I. V.) The method of indeterminate coefficients for solution of the Dirichlet problem for the Poisson equation. (Ukrainian. Russian summary) (84f:35020)
- Barashkov, A. S. Inverse problem for the Helmholtz equation in a strip. (Russian) (84i:35138)
- Bazarbekov, A. B. Smooth extensions of the Laplace operator in a domain with corner points. (Russian) (84j:35128)
- Bendali, Abderrahmane (with Halpern, Laurence) Approximation par troncature de domaine de la solution du problème aux limites extérieur pour le système de Maxwell en régime sinusoïdal. (English summary) [Approximation of the solution of the exterior boundary problem for the Maxwell system in sinusoidal form using truncation of domain] (84c:78006)
- Bera, R. K. See Patra, Baidyanath, (84g:73049)
- Bocharov, O. B. An inverse problem for the Poisson equation. (Russian) (84c:35286)
- Brahimi, Mohamed (with Dauge, Monique) Analyticité et problèmes aux limites dans un polygone. (English summary) [Analyticity and boundary value problems in a polygon] (84c:35037)
- Cho, S. K. On complex poles in scattering theory. (84j:35134)
- Collins, C. B. Null field solutions of the wave equation and certain generalizations. (84b:35090)
- Dauge, Monique See Brahimi, Mohamed, (84c:35037)
- Eftimiu, C. Direct and inverse scattering by a sphere of variable index of refraction. (84d:78009)
- Emets, V. F. See Poddubnyak, A. P., (84c:31005)
- Eroshenko, E. P. The spectrum of the Bitsadze-Samarskii problem. (Russian) (84b:35032)
- Filippov, V. B. See Zaynev, A. B., (84c:35025)
- Gallavotti, Giovanni The Dirichlet problem and the Perron-Frobenius theorem. (Italian summary) (84f:35021)
- Gavris, I. B. See Ivanov, E. A., (84c:78012)
- Giroire, Jean Integral equation methods for the Helmholtz equation. (84m:45029)
- Glushtov, A. I. An asymptotic representation of the Green function of a problem of diffraction by two circular cylinders. (Russian) (84b:35021)
- Gorbaichuk, V. I. (with Lukiyanchuk, M. V.) Boundary properties of solutions of the equation $\Delta u - c^2 u = 0$ in the half plane. (Russian) (84c:31001)
- Gottlieb, H. P. W. Hearing the shape of an annular drum. (84c:35112)
- Halpern, Laurence See Bendali, Abderrahmane, (84c:78006)
- Hansen, Erik B. An integral equation method for the mixed boundary value problem for Laplace's equation. (84j:65065)
- Hariharan, S. I. Inverse scattering for an exterior Dirichlet problem. (84c:78017)
- Heins, A. E. The Sommerfeld half-plane problem revisited. I. The solution of a pair of coupled Wiener-Hopf integral equations. (84i:45007)
- Ivanov, E. A. (with Gavris, I. B.) Solution of a boundary value problem for the diffraction of waves of dipole sources by a sphere with load inclusion. (Russian) (84c:78012)
- Jain, D. L. (with Kanwal, R. P.) Solutions of potential problems in composite media by integral equation techniques. III. Three-dimensional problems. (84d:31004)
- Kalnins, E. G. (with Miller, Willard, Jr.) The general theory of R -separation for Helmholtz equations. (84i:33020)
- Kanwal, R. P. See Jain, D. L., (84d:31004)
- Kleinman, R. E. (with Roach, Gary F.) Operators of minimal norm via modified Green's functions. (84m:35021)
- Klibanov, M. V. A two-dimensional inverse problem for an elliptic equation. (Russian) (84m:35125)
- Kobilor, U. E. A problem for the Laplace equation. (Russian) (84c:31003)
- Lukiyanchuk, M. V. See Gorbaichuk, V. I., (84c:31001)
- Lyudkevich, I. V. See Bakalets', V. A., (84f:35020)
- Maz'ya, V. G. See Zargaryan, S. S., (84g:31003)
- Miller, Willard, Jr. See Kalnins, E. G., (84i:53020)
- Molotov, I. A. (with Starkov, A. S.) Local resonance interaction of normal waves in connected waveguides. (Russian) (84c:76062)
- Patra, Baidyanath (with Bera, R. K.) Note on a mixed boundary value problem in a composite wedge. (84g:73049)
- Poddubnyak, A. P. (with Emets, V. F.) The Cauchy problem for the Laplace equation in an infinite $n+1$ -dimensional layer. (Russian) (84c:31005)

- Popov, I. Yu. On the serial structure of resonances for scattering by potentials of zero radius. (Russian) (84c:81069)
- Roach, Gary F. See Kleinman, R. E., (84m:35021)
- Sidharth, B. G. Bounds for phase-shifts and deductions in potential scattering. (84d:81048)
- Skripnikov, V. V. The number of quasimodes of whispering gallery type. (Russian. English summary) (84j:76043)
- Sleeman, B. D. The inverse problem of acoustic scattering. (84c:76063)
- Sokolovskii, V. B. Asymptotic behavior of solutions of the Dirichlet and Poisson problems in a ball of the space \mathbb{R}^n as $n \rightarrow \infty$. (Russian) (84j:35019)
- Starkov, A. S. See Molotov, I. A., (84c:76062)
- Sukhinin, S. V. Some questions of the theory of eigenoscillations of a gas near a plane periodic lattice. (Russian) (84g:73043)
- Tabov, I. B. The Dirichlet problem for the homogeneous Laplace equation on manifolds with singularities. (Russian) (84m:58152)
- Zargaryan, S. S. (with Maz'ya, V. G.) Singularities of solutions of a system of equations of potential theory for Zarembo's problem. (Russian. English summary) (84g:31003)
- Zaynev, A. B. (with Filippov, V. B.) Rigorous justification of asymptotic solutions of "creep wave" type. (Russian. English summary) (84c:35025)
- Znojil, M. On exact solutions of the Schrödinger equation. (84c:81028)
- Potential $r^2 + \lambda r^2/(1+gr^2)$ and the analytic continued fractions. (84c:81029)

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- Aizenman, Michael (with Simon, Barry) Brownian motion and Harnack inequality for Schrödinger operators. 84a:35062
- Ben-Artzi, Matania A limiting absorption principle for Schrödinger operators with spherically symmetric exploding potentials. 84d:35037
- Cazenave, Thierry A remark on Schrödinger's equation with a short range potential. 84d:35038
- Figotin, A. L. Essential selfadjointness and ergodic properties of the Schrödinger operator with random potential. (Russian. English summary) 84c:35044
- Froese, Richard (with Herbst, Ira W.; Hoffmann-Ostenhof, Maria; Hoffmann-Ostenhof, Thomas) L^2 -exponential lower bounds to solutions of the Schrödinger equation. 84c:35034
- Herbst, Ira W. See Froese, Richard; et al., 84c:35034
- Hoffmann-Ostenhof, Maria See Froese, Richard; et al., 84c:35034
- Hoffmann-Ostenhof, Thomas See Froese, Richard; et al., 84c:35034
- Kalf, Hubert Une remarque au sujet de prolongement unique des solutions de l'équation de Schrödinger. (English summary) [A unique continuation theorem for solutions of the Schrödinger equation] 84f:35032
- McCoy, Peter A. Recapturing solutions of an elliptic partial differential equation. 84c:35038
- Sakurai, Tsutomu Quasihomogeneous wave front set and fundamental solutions for the Schrödinger operator. 84c:35039
- Simon, Barry See Aizenman, Michael, 84a:35062

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- Cheremshansev, S. E. On averaging the solution of the Schrödinger equation with a time-dependent stochastic potential. (Russian) (84b:35125)
- Chueshov, I. D. On the existence of domains of definition of the Schrödinger operator with a highly singular potential of paired interactions. (Russian) (84c:35079)
- Delos, J. B. See Swimm, R. T., (84g:81023)
- Dong, Guang Chang (with Li, Shu Jie) The initial value problem for nonlinear Schrödinger equations. (Chinese. English summary) (84c:35131)
- Eastham, Michael S. P. (with Kalf, Hubert) ★Schrödinger-type operators with continuous spectra. (84i:35107)
- Edmunds, David E. (with Evans, William D.; Fleckinger-Pellé, Jacqueline) Spectre d'opérateurs de Schrödinger à potentiel complexe et répartition de leurs valeurs singulières. (English summary) [Spectrum of Schrödinger operators with complex potential and distribution of their singular values] (84c:35109)
- Evans, William D. See Edmunds, David E.; et al., (84c:35109)
- Fleckinger-Pellé, Jacqueline See Edmunds, David E.; et al., (84c:35109)
- Gutkin, Eugene Integrable systems with delta-potential. (84a:58085)
- Heffer, Bernard (with Sjöstrand, Johannes) Puits multiples pour l'équation de Schrödinger. [Multiple wells for the Schrödinger equation] (See 84i:35003)
- Inglis, Ian R. An extension of the Mihlin-Hörmander theorem with applications to initial value problems. (84i:42021)
- Iwatsuka, Akira Spectral representation for Schrödinger operators with magnetic vector potentials. (84i:81019)
- Kalf, Hubert (with Krishna Kumar, V.) On the absence of positive eigenvalues of Schrödinger operators with long range potentials. (84d:35116)
- See also Eastham, Michael S. P., (84i:35107)
- Krishna Kumar, V. See Kalf, Hubert, (84d:35116)
- Lascar, Bernard (with Sjöstrand, Johannes) Équation de Schrödinger et propagation des singularités. II. [Schrödinger equation and propagation of singularities. II] (See 84c:35003)
- Leray, Jean Application à l'équation de Schrödinger atomique d'une extension du théorème de Fuchs. [Application of the atomic Schrödinger equation to an extension of the Fuchs theorem] (84j:81138)
- Li, Shu Jie See Dong, Guang Chang, (84c:35131)
- Nicorovici-Forumbaru, N. The symmetry group of the free Schrödinger equation. (Romanian. English summary) (84g:35007)

- Popov, Georgi St. Asymptotic behaviour of the scattering phase for the Schrödinger operator. (84b:35130)
 (with Shubin, M. A.) Complete asymptotic expansion of a spectral function for second-order elliptic operators in \mathbb{R}^n . (Russian) (84f:35111)
 Saitō, Yoshimi Extended limiting absorption method and analyticity of the S -matrix. (84m:35095)
 Samarov, K. L. Solution of the Cauchy problem for the Schrödinger equation of a relativistically free particle. (Russian) (84c:81027)
 Shubin, M. A. See Popov, Georgi St., (84f:35111)
 Simader, Christian G. Selbstadjungiertheitsprobleme und spektraltheoretische Fragen für Schrödinger-Operatoren. [Problems of selfadjointness and spectral-theoretic problems for Schrödinger operators] (See 84a:00012)
 Sjöstrand, Johannes See Lascar, Bernard, (See 84c:35003) and Helffer, Bernard, (See 84c:35003)
 Sloan, Alan D. The strong convergence of Schrödinger propagators. (84c:47045)
 Swanson, Charles A. Criteria for oscillatory sublinear Schrödinger equations. (84c:35008)
 Swimm, R. T. (with Delos, J. B.) Erratum: "Semiclassical calculations of vibrational energy levels for nonseparable systems using the Birkhoff-Gustavson normal form" [J. Chem. Phys. 71 (1979), no. 4, 1706-1717; MR 80m:81039]. (84g:81023)
 Weinstein, Michael I. Nonlinear Schrödinger equations and sharp interpolation estimates. (84c:35140)

35J15 Second-order equations, general

- Acerbi, Emilio Convergence of second order elliptic operators in complete form. (Italian summary) 84j:35057
 Asakura, Fumio A remark on the Hölder continuity of the solution for a certain elliptic equation with irregular coefficients. 84c:35041
 Azzam, A. (with Kreyszig, E.) Regularity properties of solutions of elliptic equations near corners. 84f:35033
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 Chico, Maurizio Generalizations of the maximum principle and majorization of the solutions for elliptic operators of variational type. (Italian. English summary) 84c:35049
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 Norvuzov, A. A. Theorems of Phragmén-Lindelöf type for solutions of second-order linear and quasilinear elliptic equations with discontinuous coefficients. (Russian) 84c:35047
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 Sperner, Emanuel, Jr. Schauder's existence theorem for α -Dini continuous data. 84c:35042
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- Bauer, K. W. On a class of Riemann functions. (84b:35019)
 Birman, M. Sh. (with Solomyak, M. Z.) The asymptotic behavior of the spectrum of variational problems on solutions of elliptic systems. (Russian) (84c:35082)
 Gao, Ru Xi Singular perturbation for second-order elliptic equations with turning points. (Chinese. English summary) (84b:35012)
 Kamin, Shoshana Elliptic singular perturbation problems with turning points. (French summary) (See 84j:35003)
 Kantor, S. A. Splitting of strongly elliptic operators. (Russian) (84b:47053)
 Mameyusupov, M. Sh. An inverse problem for an equation of elliptic type. (Russian) (84c:35149)
 Orochko, Yu. B. On the theory of selfadjoint operators that are generated by second-order strongly singular expressions in divergence form. (Russian) (84j:47085)
 Orunkhanov, M. K. (with Smagulov, Sh.) On the theory of the method of fictitious domains. (Russian) (84c:35091)

- Petrus, S. V. Continuous dependence of poles of the scattering matrix on coefficients of an elliptic operator. (Russian) (84c:35109)
 Semenov, Yu. A. Smoothness of generalized solutions of the equation $(\lambda - \sum_{i,j} \nabla_i a_{ij} \nabla_j)u = f$ with continuous coefficients. (Russian) (84d:35029)
 Skubachevskii, A. L. On the spectrum of some nonlocal elliptic boundary value problems. (Russian) (84c:35080)
 Smagulov, Sh. See Orunkhanov, M. K., (84c:35091)
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 Vogelsang, Volker ★ Über das lokale Verhalten der Lösungen elliptischer Differentialgleichungen zweiter Ordnung. (German) [On the local behavior of solutions of second-order elliptic differential equations] (84g:35030)

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- Jost, Jürgen (with Meier, Michael) Boundary regularity for minima of certain quadratic functionals. 84c:35051
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- Bahri, Abbas Topological results on a certain class of functionals and application. (84c:58017)
 Graham-Eagle, J. G. (with Wake, G. C.) Existence of solutions to a nonlinear boundary value problem by variational means. (84f:35055)
 Granlund, Seppo An L^2 -estimate for the gradient of extremals. (84c:49007)
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 Nitsche, Werner ★ Zu dem Regularitätsproblem zweidimensionaler Variationsprobleme höherer Ordnung. (German) [On the regularity problem of two-dimensional variational problems of higher order] (84b:49007)
 Rabinowitz, Paul H. The mountain pass theorem: theme and variations. (84c:58016)
 Schoen, Richard M. (with Uhlenbeck, Karen K.) A regularity theory for harmonic maps. (84b:58037a)
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- Agabekov, R. I. Analytic theory of partial differential equations. (Russian) 84c:35048
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- Kenig, Carlos E. See Jerison, David S., 84c:35064
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- Kurylev, Ya. V. A point source on the boundary of the domain. (Russian. English summary) 84b:35044
- Lyantse, V. E. (with Maiorga, Kh. B.) On the theory of a one-point boundary value problem for the Laplace operator. I. (Russian) 84d:35041
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- Mamedov, N. M. Boundary value problems with boundary conditions of mixed type for some elliptic systems with a complex parameter. (Russian) 84f:35037
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- Meyer, Yves Intégrales singulières, opérateurs multilinéaires et équations aux dérivées partielles. [Singular integrals, multilinear operators and partial differential equations] (See 84i:35006)
- Mikhailov, Yu. A. Solvability of the Dirichlet problem in the space H^1_{loc} for second-order elliptic equations. (Russian) 84d:35042
- Boundary values in L_p , $p > 1$, of solutions of a second-order linear elliptic equation. (Russian) 84m:35036
- Mishnaevskii, P. A. Investigation of a second-order elliptic operator in domains with an infinite boundary by means of the operator Sturm-Liouville equation. I. (Russian) 84c:35052a
- Investigation of a second-order elliptic operator in domains with an infinite boundary by means of the operator Sturm-Liouville equation. II. (Russian) 84c:35052b
- Modica, Luciano (with Mortola, Stefano; Salsa, Sandro) A nonvariational second order elliptic operator with singular elliptic measure. 84f:35038
- Mortola, Stefano See Modica, Luciano; et al., 84f:35038
- Nazarov, S. A. See Maz'ya, V. G.; et al., 84c:35037
- Oleinik, O. A. See Kondrat'ev, V. A.; et al., 84c:35045
- Oshorov, B. B. Some boundary value problems for a class of systems of second-order partial differential equations. (Russian) 84c:35065
- Pettineo, Maria A rapid treatment of boundary value problems for linear partial differential equations. (Italian. English summary) 84g:35043
- Plamenevskii, B. A. See Maz'ya, V. G.; et al., 84c:35037
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- Siebeking, M. See Hueber, H., 84a:35063
- Skubachevskii, A. L. Boundary value problems with A. V. Bitsadze-A. A. Samarskii boundary conditions. (Russian) (See 84c:34002)
- Some nonlocal elliptic boundary value problems. (Russian) 84c:35038
- Nonlocal elliptic boundary value problems with degeneration. (Russian) 84b:35045
- Trenea, T. V. On a four-dimensional not strongly elliptic system. (Russian) 84c:35039
- Tyulina, A. K. Behavior of the generalized solution of the Neumann problem for a second-order elliptic equation in the neighborhood of a boundary point. (Russian) 84c:35053
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- Wanka, Gert Gleichmäßige Approximation durch Lösungen von Randwertproblemen elliptischer Differentialgleichungen zweiter Ordnung. [Uniform approximation by solutions of boundary value problems of second-order elliptic differential equations] 84j:35060
- Wen, Guo Chun (with Yang, Guang Wu) The Poincaré boundary value problem for linear elliptic equations of second order. (Chinese) 84g:35045
- Yang, Guang Wu See Wen, Guo Chun, 84g:35045
- secondary classifications:
- Abdrakhmanov, M. A. Potentials of conjugation problems in an unbounded domain and their application for the solution of boundary value problems. (Russian) (84c:35054)
- Alkhutov, Yu. A. See Novruzov, A. A., (84j:35018)
- de Bivar-Weinholtz, António Formule de la demi-somme pour des opérateurs du type Schrödinger avec potentiel singulier complexe. (English summary) [A formula for the half sum of Schrödinger-type operators with complex singular potential] (84b:47060)
- Costabel, Martin (with Stephan, Ernst) The normal derivative of the double layer potential on polygons and Galerkin approximation. (84j:31007)
- Gorbachuk, M. L. (with Kutovoi, V. A.) A scattering problem for operators generated by the Laplace equation in the half plane and various boundary conditions. (Russian) (84a:35226)
- Howes, F. A. Perturbed elliptic problems with essential nonlinearities. (84m:35013)
- Jerison, David S. (with Kenig, Carlos E.) The Dirichlet problem in nonsmooth domains. (84j:35076)
- Kapanadze, D. V. Boundary values in L_1 of solutions of elliptic equations. (Russian. English and Georgian summaries) (84c:35057)
- Karabasov, T. B. A nonlocal boundary value problem for the Laplace equation. (Russian) (84b:35027)
- Kenig, Carlos E. See Jerison, David S., (84j:35076)
- Kok, B. (with Penning, F. D.) Continuous dependence of the solutions of elliptic boundary value problems on the coefficients, right hand sides and boundary conditions. (84b:35014)
- Kutovoi, V. A. See Gorbachuk, M. L., (84a:35226)
- Leikova, E. F. Asymptotic behavior of the solution of an elliptic equation with small parameter in a region with a conic point. (Russian) (84j:35013)
- Lewis, Roger T. Singular elliptic operators of second order with purely discrete spectra. (84a:35215)
- Lube, Gert See Tobiska, Lutz, (84c:35033)
- Melikulov, A. S. Method of variation of the boundary in a single-phase quasistationary crystallization problem. (Russian) (84b:35122)
- Minskii, Victor Sommerfeld radiation condition for second-order differential operator in a domain with infinite border. (84b:35126)
- Nguyễn Phùng Cúc On an elliptic boundary value problem not in divergence form. (84c:35115)
- Novruzov, A. A. (with Alkhutov, Yu. A.) On growth at infinity of solutions of second-order elliptic equations. (Russian. English and Azerbaijani summaries) (84j:35018)
- Ozawa, Shin Spectra of domains with small spherical Neumann boundary. (84a:35224)
- Parasyuk, E. M. See Parasyuk, L. S., (84b:35056)
- Parasyuk, L. S. (with Parasyuk, E. M.) Boundary value problems for an elliptic equation with a parameter degenerating on the boundary of the domain. (Ukrainian. Russian summary) (84b:35056)
- Penning, F. D. See Kok, B., (84b:35014)
- Perel'muter, M. A. On scattering theory for second-order elliptic operators. (Russian) (84d:35123)
- Pucci, Carlo Maximizing operators. (Italian) (See 84c:35004)
- Radzhahov, N. R. Integral representations and boundary value problems for an equation of Helmholtz type with several singular surfaces. (Russian) (84c:35023)
- Stephan, Ernst See Costabel, Martin, (84j:31007)
- Taira, Kazuaki Semigroups and boundary value problems. (84e:47057a)
- Semigroups and boundary value problems. II. (84e:47057b)
- Talenti, Giorgio Some upper bounds for solutions of Monge-Ampère equations. (Italian) (See 84c:35004)
- Tobiska, Lutz (with Lube, Gert) Die asymptotische Lösung singular gestörter elliptischer Probleme 2. Ordnung. [The asymptotic solution of second-order singularly perturbed elliptic problems] (84c:35033)
- Vabishchevich, P. N. Solution of a problem with a free boundary for elliptic equations. (Russian) (84d:35151)
- Vasil'eva, A. B. On the theory of periodic solutions of partial differential equations with small parameters. (Russian) (84c:35022)
- Periodic solutions of equations of elliptic type with small parameters. (Russian) (84d:35012)
- Vogelsang, Volker Die Relichsche Abschätzung für die Schwingungsgleichung mit oszillierendem Hauptteil. [The Rellich estimation for the oscillation equation with oscillating principal part] (84d:35113)
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- Fokht, A. S. Weighted imbedding theorems and estimates of solutions of equations of elliptic type. I. (Russian) 84c:35046a
- Weighted imbedding theorems and estimates of solutions of equations of elliptic type. II. (Russian) 84c:35046b
- Goyal, Vinod B. (with Schaefer, Philip W.) Liouville theorems for elliptic systems and nonlinear equations of fourth order. 84f:35039
- Kolsrud, Torbjörn A uniqueness theorem for higher order elliptic partial differential equations. 84f:35040
- Martinenko, Mariya D. (with Martynenko, Mikhailo D.; Shipka, I. G.) The Schwartz method for the biharmonic equation. (Ukrainian. Russian summary) 84f:35041
- Martynenko, Mikhailo D. See Martinenko, Mariya D.; et al., 84f:35041
- Mazilu, P. Potentialdarstellung einer asymptotischen Lösung der Gleichung $\Delta u - \kappa^2 \Delta u = f$. (English and Russian summaries) [Potential representation of an asymptotic solution of the equation $\Delta u - \kappa^2 \Delta u = f$] 84a:35066
- Maz'ya, V. G. (with Plamenevskii, B. A.) On the maximum principle for the biharmonic equation in a domain with conical points. (Russian) 84b:35037
- Plamenevskii, B. A. See Maz'ya, V. G., 84b:35037
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- Stuart, C. A. A variational approach to bifurcation in L^p on an unbounded symmetrical domain. 84c:35047
- secondary classifications:
- Cordes, Heinz O. Global parametres for certain singular elliptic operators. (84c:35160)
- Dobrotvor, I. G. See Gorbachuk, V. I., (84a:35016)
- Fiedler, Frank (with Grigo, Peter) Oszillationskriterien vom Nehari-Typ für eine Klasse elliptischer Differentialoperatoren vierter Ordnung. [Nehari-type oscillation criteria for a class of fourth-order elliptic differential operators] (84g:35010)
- Gorbachuk, V. I. (with Dobrotvor, I. G.) Investigation of the oscillation of solutions of a class of equations with biharmonic operator, using the mean-value theorem. (Russian) (84a:35016)
- Goyal, Vinod B. (with Schaefer, Philip W.) Comparison principles for some fourth order elliptic problems. (See 84b:34002)
- Grigo, Peter See Fiedler, Frank, (84g:35010)
- Nystedt, Lars On polyharmonic continuation by reflection formulas. (84f:31011)
- Sablé-Tougeron, Monique Problème d'évolution parabolique pour une classe d'opérateurs elliptiques et dégénérés. [The problem of parabolic evolution for a class of degenerate elliptic operators] (84g:35076)

Saut, Jean-Claude (with Scheurer, Bruno) Sur l'unicité du problème de Cauchy et le prolongement unique pour des équations elliptiques à coefficients non localement bornés. [On the uniqueness of the Cauchy problem and unique continuation for elliptic equations with not locally bounded coefficients] (84b:35005)

Schaefer, Philip W. See Goyal, Vinod B., (84b:34002)

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Sharipov, T. Kh. On an exact method for the numerical solution of a polyharmonic equation. (Russian) (84b:31006)

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- Puel, J.-P. Remarks about some problems with turning points. (See **84b:00011**)
- Raitums, U. On the G-convergence of almost linear elliptic operators with unbounded lower coefficients. (Russian) **84c:35084**
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- Suleimanov, N. M. Some properties of solutions of nonlinear elliptic equations. (Russian) **84g:35055**
- Swanson, Charles A. Extremal positive solutions of semilinear Schrödinger equations. **84b:35057**
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- Toland, John F. On positive solutions of $-\Delta u = F(x, u)$. **84i:35064**
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- Tyshelek, V. N. Boundedness of m th-order derivatives of solutions of higher-order quasilinear nonuniformly elliptic equations. (Russian) **84a:35087**
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- Vázquez, Juan Luis Monotone perturbations of the Laplacian in $L^1(\mathbb{R}^n)$. **84b:35058**
- Vorob'ev, A. G. (with Miklyukov, V. M.) Some asymptotic properties of subsolutions of equations of minimal surface type. (Russian) **84d:35052**
- Ward, James R., Jr. Existence for a class of semilinear problems at resonance. **84j:35072**
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- Appell, Jürgen On the solvability of nonlinear noncompact problems in function spaces with applications to integral and differential equations. (Italian summary) **84j:47099**
- Bagchi, S. N. An analytic solution of the nonlinear equation $\nabla^2 \lambda(r) = f(\lambda)$ and its application to the ion-atmosphere theory of strong electrolytes. **84i:82027**
- Bahri, Abbas Topological results on a certain class of functionals and application. **84c:58017**
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- Bourgignon, Jean-Pierre Sur une condition d'intégrabilité d'origine géométrique pour une famille d'équations aux dérivées partielles non linéaires sur la sphère. [On an integrability condition of geometric origin for a family of nonlinear partial differential equations on the sphere] **84b:53038**
- Brézis, Haim (with Coron, Jean-Michel) Sur la conjecture de Rellich pour les surfaces à courbure moyenne prescrite. (English summary) [On Rellich's conjecture for surfaces with prescribed mean curvature] **84i:58034**
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- Nominov, A. D. The Dirichlet problem for a multidimensional degenerate elliptic system. (Russian) **84c:35074**
- Nosov, V. A. See Marchenko, V. V., **84a:35104**
- Novruzov, A. A. (with Mamedov, I. T.) Some theorems on the behavior of solutions of degenerate quasilinear elliptic equations. (Russian) **84c:35050**
- Oshorov, B. B. A class of degenerate elliptic systems. (Russian) (See **84m:35003**)
- Parasyuk, E. M. See Parasyuk, L. S., **84b:35056**
- Parasyuk, L. S. (with Parasyuk, E. M.) Boundary value problems for an elliptic equation with a parameter degenerating on the boundary of the domain. (Ukrainian. Russian summary) **84b:35056**
- Podgaev, A. G. Alternating process for a multidimensional degenerate equation. (Russian) **84m:35049**
- Rutkauskas, Stasys On the Dirichlet problem for a system of elliptic equations that degenerate strongly on a line. (Russian. English and Lithuanian summaries) **84d:35059**
- Schröder, Johann Shape-invariant bounds and more general estimates for vector-valued elliptic-parabolic problems. **84c:35063**
- Serapioni, Raul P. See Fabes, Eugene B.; et al., **84i:35070**
- Shishatskii, S. P. Uniqueness and stability in the local Cauchy problem for a degenerate elliptic inequality. (Russian) (See **84m:35003**)
- Smith, P. D. A regularity theorem for a singular elliptic equation. **84c:35064**
- Tian, Mao Ying The mixed boundary value problem for a class of nonlinear degenerate elliptic equations of second order in the plane. (Chinese. English summary) **84c:35067**
- Watanabe, Kinji Sur l'unicité du prolongement des solutions des équations elliptiques dégénérées. [On the uniqueness of the continuation of solutions of degenerate elliptic equations] **84a:35105**

secondary classifications:

- Altin, Abdullah Solutions of type e^m for a class of singular equations. (**84c:35023**)
- Eyubov, R. A. Asymptotic solution of a boundary value problem for a nonlinear differential equation that degenerates to a parabolic equation. (Russian) (**84c:35030**)
- Evans, Lawrence C. A new proof of local $C^{1,\alpha}$ regularity for solutions of certain degenerate elliptic p.d.e. (**84c:35082**)
- Jiang, Li Shang See Wu, Lan Cheng; et al., (**84c:35071**)
- Kohn, J. J. Lectures on degenerate elliptic problems. (**84a:35059**)
- Kurtz, J. C. Nonlinear boundary value problems for elliptic differential operators singular on a hyperplane. (**84i:35067**)
- Liu, Xi Yuan See Wu, Lan Cheng; et al., (**84c:35071**)
- Nakane, Shizuo Uniqueness and nonuniqueness in the Cauchy problem for a class of operators of degenerate type. (**84c:35005**)
- Wu, Lan Cheng (with Liu, Xi Yuan; Yue, Jing Liang; Jiang, Li Shang) On Dirichlet problem of uniformly degenerate quasilinear elliptic equations. (**84c:35071**)
- Yue, Jing Liang See Wu, Lan Cheng; et al., (**84c:35071**)

35J85 Unilateral problems; variational inequalities [See also 35R35, 49A29.]

- Arkhipova, A. A. Smoothness of the solution of a system of variational inequalities. (Russian. English summary) **84c:35051**
- Biancardi, Mirella (with Esposito, Anna; Macchetta, Luisa Anna) A regularity theorem for a unilateral problem. (Italian. English summary) **84c:35065**
- Biroli, Marco Regularity results for some elliptic variational inequalities with bounded measurable coefficients and applications. **84d:35060**
- Domarkas, A. One-sided problems for quasilinear elliptic equations. (Russian. English and Lithuanian summaries) **84d:35061**
- Esposito, Anna See Biancardi, Mirella; et al., **84c:35065**
- Garroni, Maria Giovanna Regularity of a nonlinear variational inequality with obstacle on the boundary. (Italian summary) **84d:35062**
- (with Gossez, Jean-Pierre) Convergence of nonlinear elliptic operators and application to a quasivariational inequality. **84b:35068**
- Gossez, Jean-Pierre See Platone Garroni, Maria Giovanna. **84b:35068**
- Iordanov, Iordan V. Solutions héliodriques d'inéquations variationnelles à contraintes discontinues. I. [Hölder solutions of variational inequalities with discontinuous constraints. I] **84d:35063**
- Macchetta, Luisa Anna See Biancardi, Mirella; et al., **84c:35065**
- Melikulov, A. S. See Radkevich, E. V., **84f:35063**
- Mikelic, A. Regularity of the solution of a mixed problem for an elliptic variational inequality. (Serbo-Croatian) (See **84a:65004**)
- Radkevich, E. V. (with Melikulov, A. S.) The solvability of a two-phase quasistationary problem of crystallization. (Russian) **84f:35063**
- Rozhkovskaya, T. N. Unilateral problems with convex constraints on the gradient. (Russian) **84j:35079**
- Unilateral problems for nonlinear operators with convex constraints on the gradient of the solution. (Russian) **84g:35068**
- Troianello, Giovanni Maria Some unilateral problems of the nonvariational type. **84c:35052**

secondary classifications:

- Bayada, Guy (with Chambat, Michèle) Analysis of a free boundary problem in partial lubrication. (**84f:76031**)
- Biroli, Marco $H^{2,p}$ -regularity for the solution of systems of elliptic variational inequalities. (**84b:49012**)
- Boccardo, Lucio (with Murat, François) Nouveaux résultats de convergence dans des problèmes unilatéraux. (English summary) [New convergence results in unilateral problems] (**84a:49007**)
- (with Giachetti, Daniela) Strongly nonlinear unilateral problems. (**84c:49011**)

- Bock, Igor (with Lovisek, Jan) An optimal control problem for an elliptic variational inequality. (Russian summary) (**84c:49008**)
- Brauer, Claude (with Nilsen, Basil) Homographic approximations of free boundary problems characterized by elliptic variational inequalities. (**84a:49010**)
- Chambat, Michèle See Bayada, Guy, (**84f:76031**)
- Frehse, Jens (with Mosco, Umberto) Sur la continuité ponctuelle des solutions locales faibles du problème d'obstacle. (English summary) [Pointwise continuity of local weak solutions of the obstacle problem] (**84b:49011**)
- Friedman, Avner ★ Variational principles and free-boundary problems. (**84c:35153**)
- Giachetti, Daniela See Boccardo, Lucio, (**84c:49011**)
- Jensen, Robert Regularity for elastoplastic type variational inequalities. (**84c:49011**)
- Kinderlehrer, David The smoothness of the solution of the boundary obstacle problem. (**84j:49011**)
- Lovisek, Jan See Bock, Igor, (**84c:49008**)
- Moet, H. J. K. Asymptotic analysis of the free boundary in singularly perturbed elliptic variational inequalities. (**84f:35012**)
- Mosco, Umberto See Frehse, Jens, (**84b:49011**)
- Murat, François See Boccardo, Lucio, (**84a:49007**)
- Nilsen, Basil See Brauer, Claude, (**84a:49010**)
- Noor, M. Aslam Mildly nonlinear variational inequalities. (**84g:49014**)
- Shen, Yao Tian Weighted Wirtinger inequalities on unbounded domains. (Chinese summary) (**84i:49091**)
- Yamada, Naoki A system of elliptic variational inequalities associated with a stochastic switching game. (**84g:49017**)

35J99 None of the above, but in this section

- Buonocore, Pasquale t -homogeneous quasielliptic systems. (Italian. English summary) **84c:35075**
- Eyubov, R. A. Asymptotic behavior with respect to a small parameter of the solution of a boundary value problem for a second-order nonlinear elliptic equation. (Russian) **84g:35069**
- Kauffman, Robert M. A Weyl theory for a class of elliptic boundary value problems on a half space. **84c:35066**
- Mosonen, V. B. Smoothness of the solution of an elliptic problem with discontinuous coefficients. (Russian) **84c:35076**
- Toland, John F. Singular elliptic eigenvalue problems for equations and systems. **84c:35077**

secondary classifications:

- Anikonov, Yu. E. (with Stepanov, V. N.) Uniqueness and stability of the solution of a problem of geometry in the large. (Russian) (**84c:53055**)
- Aron, Marian On the role of the strong ellipticity condition in nonlinear elasticity. (**84j:73021**)
- Bashirov, A. E. (with Karasik, B. G.) On a problem of optimization for a second-order linear operator-differential equation. (Russian. English and Azerbaijani summaries) (**84c:49007**)
- Belousov, M. V. On the theory of generalized Green operators. (Russian) (**84b:58143**)
- Benfatto, G. (with Gallavotti, Giovanni; Nicolò, Fernando) Elliptic equations and Gaussian processes. (**84f:60056**)
- Benkus, Vidmantas-Kastytis Jurgio Ellipticity of an infinite-dimensional iterated Laplace operator. I. (Russian) (**84d:46068a**)
- Ellipticity of an infinite-dimensional iterated Laplace operator. II. (Russian. English and Lithuanian summaries) (**84d:46068b**)
- Berthier, Anne-Marie (with Georgescu, Vladimir) Sur la propriété de prolongement unique pour l'opérateur de Dirac. (English summary) [Property of unique continuation for a Dirac operator] (**84b:35118**)
- Boyarski, Bogdan (with Iwaniec, Tadeusz) Problems of the analytic theory of quasiconformal mappings. (Polish) (**84d:30031**)
- Brilla, Jozef New functional spaces and linear nonstationary problems of mathematical physics. (See **84i:00016**)
- Cotsiolis, Athanasios Opérateur elliptique sur une variété asymptotiquement euclidienne. (Italian summary) [Elliptic operator on an asymptotically Euclidean manifold] (**84i:58127**)
- Dmitrienko, V. T. (with Zvyagin, V. G.) Homotopy classification of a class of continuous mappings. (Russian) (**84c:35282**)
- Dzhani, G. V. ★ Решение некоторых задач для одного вырождающегося эллиптического уравнения и их приложения к призматическим оболочкам. (Russian) [Solution of some problems for a degenerate elliptic equation and their applications to prismatic shells] (**84g:35032**)
- Dziurda, Jolanta A generalized solution of Oseen's equations. (**84f:35027**)
- Elinov, V. D. (with Komissarov, V. V.) The relation of diffraction problems to focusing of elastic waves. (Russian) (See **84m:35003**)
- Esteban, M. J. (with Lions, Pierre-Louis) A compactness lemma. (**84b:46042**)
- Gall, I. M. Optimal control of systems governed by elliptic operator of infinite order. (**84c:49008**)
- Gallavotti, Giovanni See Benfatto, G.; et al., (**84f:60056**)
- Georgescu, Vladimir See Berthier, Anne-Marie, (**84b:35118**)
- Goldschmidt, Bernd Series expansion and maximum principles for generalized analytic vectors in the space \mathbb{R}^n . (**84d:36087**)
- Golopuz, S. A. Asymptotic expansion of solutions of elliptic boundary value problems in the case when the kernel of the degenerate problem is infinite-dimensional. (Russian) (**84m:35022**)
- Iordanov, Iordan V. Hypocoellipticity of quasilinear elliptic operators. (**84j:35042**)
- Iwaniec, Tadeusz On L^p -integrability in PDEs and quasiregular mappings for large exponents. (**84b:30026**)
- See also Boyarski, Bogdan, (**84d:30031**)
- Karasik, B. G. See Bashirov, A. E., (**84c:49007**)

- Kasimov, F. A. A boundary value problem for the Cauchy-Riemann equation. (Russian) (84c:30080)
- Kato, Tosio Holomorphic families of Dirac operators. (84c:35114)
- Klein, L. I. An operator acting in an infinite-order Sobolev space. (Russian) (84g:46046)
- Komissarov, V. V. See Elinov, V. D., (See 84m:35003)
- Kurbanov, M. The Riemann-Hilbert problem with constant coefficients for a holomorphic vector in a ball. (Russian. Tajiki summary) (84c:30064)
- Levit, B. Ya. Minimax estimation and positive solutions of elliptic equations. (Russian. English summary) (84f:62037)
- Liess, Otto Antilocality of complex powers of elliptic differential operators with analytic coefficients. (84j:58124)
- Lions, Pierre-Louis See Esteban, M. J., (84c:46042)
- Malec, Marian Un analogue du lemme Nagumo-Westphal pour des équations différentielles fonctionnelles du type elliptique. (English and Russian summaries) [An analogue to the Nagumo-Westphal lemma for functional-differential equations of elliptic type] (84d:35141)
- Manse, Paolo A variational problem for convex functions with bounds on the curvatures. (Italian. English summary) (84c:49020)
- Mok, Ngaiming (with Siu, Yum Tong; Yau, Shing Tung) The Poincaré-Lelong equation on complete Kähler manifolds. (84g:32011)
- Nakonechnii, O. G. Approximate minimax estimates for functionals of solutions to elliptic equations. (Russian) (84b:49047)
- Nicolò, Fernando See Benfatto, G.; et al., (84f:60056)
- Pavlov, G. A. Solvability of inverse problems of potential theory. (Russian) (84d:35147)
- Payne, L. E. (with Philippin, G. A.) Isoperimetric inequalities in the torsion and clamped membrane problems for convex plane domains. (84m:73056)
- Philippin, G. A. See Payne, L. E., (84m:73056)
- Reshetnyak, Yu. G. ★ Пространственные отображения с ограниченным искажением. (Russian) [Spatial mappings with bounded distortion] (84d:30033)
- Saranen, Jukka On generalized harmonic fields in domains with anisotropic nonhomogeneous media. (84d:7804a)
- Erratum: "On generalized harmonic fields in domains with anisotropic nonhomogeneous media". (84d:7804b)
- Sarko, E. M. On the analyticity of an almost-periodic function with a bounded Bloch spectrum. (Russian) (84c:47055)
- Schoen, Richard M. (with Simon, Leon) A new proof of the regularity theorem for rectifiable currents which minimize parametric elliptic functionals. (84j:49039)
- Simon, Leon See Schoen, Richard M., (84j:49039)
- Siu, Yum Tong See Mok, Ngaiming; et al., (84g:32011)
- Skripnik, I. V. Interpolation inequalities that are uniform with respect to a family of domains. (Russian) (84a:46078)
- A priori estimates of solutions of the Dirichlet problem that are uniform with respect to a family of domains. (Russian) (84a:46079)
- Stepanov, V. N. See Anikonov, Yu. E., (84c:53055)
- Tomisaki, Matsuyo Dirichlet forms associated with direct product diffusion processes. (84c:60095)
- Ural'tseva, N. N. Estimates of the maximum moduli of gradients for solutions of capillarity problems. (Russian) (84d:53008)
- Yau, Shing Tung See Mok, Ngaiming; et al., (84g:32011)
- Yurinskii, V. V. Averaging of nondivergence random elliptic operators. (Russian) (84d:60097)
- Zyagin, V. G. See Dmitrienko, V. T., (84a:35282)
- 35Kxx Parabolic equations and systems [See also 58G11.]**
- 35K05 Heat equation**
- Amonov, B. K. On the problem of the stability of the solution of the heat equation. (Russian) (See 84c:60044)
- Baranski, Feliks (with Zdzieniewicz, Zbigniew) The limit problem for diffusion equation for the rectangular with boundary conditions of third kind. (Russian and Polish summaries) (84j:35080)
- Baranski, Feliks (with Furmańczyk, Sędzimir) On a posteriori error bounds for the heat flow problem. (Russian summary) (84c:35057)
- Bizhanova, G. I. See Kim, E. I., (84b:35070)
- Bobisud, Larry E. Heat conduction through a thin, poorly conductive layer. (84j:35081)
- Borodin, M. O. On the solvability of a two-phase quasistationary Stefan problem. (Russian. English summary) (84a:35106)
- Solvability of a two-phase nonstationary Stefan problem. (Russian) (84a:35107)
- Caffarelli, Luis A. (with Evans, Lawrence C.) Continuity of the temperature in the two-phase Stefan problem. (84g:35070)
- Cannon, John R. (with van der Hoek, John) The one phase Stefan problem subject to the specification of energy. (84m:35050)
- Capinski, Marek On turbulent statistical solutions of the heat equation. (84c:35067)
- Daniyuk, I. I. A two-phase quasistationary Stefan problem. (Russian. English summary) (84c:35108)
- Day, W. A. A property of the heat equation which extends to the thermoelastic equations. (84d:35064)
- Dont, Miroslav Third boundary value problem for the heat equation. II. (Czech summary) (84a:35109)
- Flows of heat and time moving boundary. (Russian and Czech summaries) (84j:35082)
- Evans, Lawrence C. See Caffarelli, Luis A., (84g:35070)
- Fel'genhauer, U. An existence theorem for a certain quasilinear Stefan problem. (Russian. English summary) (84f:35064)
- Filar, Maria On a limit problem for the diffusion equation and for the plane rectangular wedge. (Russian and Polish summaries) (84j:35083)
- Furmańczyk, Sędzimir See Baranski, Feliks, (84c:35057)
- Grubb, Gerd The heat equation associated with a pseudodifferential boundary problem. (84c:35069)
- Gusakov, V. M. Solvability of a boundary value problem that describes the process of heating a shallow cylinder. (Russian) (84c:35110)
- van der Hoek, John See Cannon, John R., (84m:35050)
- Kamin, Shoshana (with Rosenau, P.) Propagation of thermal waves in inhomogeneous media. (See 84b:00003)
- Kim, E. I. (with Bizhanova, G. I.) Investigation of the second Stefan boundary value problem for small time values. (Russian. Kazakh summary) (84c:35070)
- Knabner, Peter Regularizing the Cauchy problem for the heat equation by sign restrictions. (84m:35051)
- Kuptsov, L. P. Property of the mean for the heat equation. (Russian) (84f:35065)
- A class of parabolic means. (Russian) (84c:35071)
- Mamedov, N. M. Solution of a boundary value problem under boundary conditions of mixed type for a system of equations of heat and mass exchange. (Russian. English and Azerbaijani summaries) (84c:35072)
- McCoy, Peter A. Converse initial value problems for a class of heat equations. (84c:35068)
- Meirmanov, A. M. Approximate models in the two-phase Stefan problem ("concentrated capacity"). (Russian) (84f:35066)
- An example of the nonexistence of a classical solution to the Stefan problem. (Russian) (84g:35071)
- Migon, Jerzy On the Fourier problem for the half-time plane. (Russian and Polish summaries) (84j:35084)
- Mizohata, Sigeru On the wellposed singular boundary value problems for heat operator. (See 84c:35003)
- Muzylev, N. V. Condition for the a priori monotonicity of heat flux on the boundary. (Russian) (84c:35078)
- Quilghini, Demore See Sestini, Giorgio, (84c:35073)
- Rosenau, P. See Kamin, Shoshana, (See 84b:00003)
- Salei, S. V. A Stefan problem in a cylindrical domain with axial symmetry. (Russian) (84j:35085)
- Sestini, Giorgio (with Quilghini, Demore) A one-dimensional two-phase plane problem inverse to the Stefan problem. (Italian. English summary) (84c:35073)
- Sheryshev, V. P. See Sultangazin, U. M., (84c:35053)
- Sleptsova, I. P. A mixed problem for the heat equation in domains with infinite curvilinear boundaries on the plane. (Russian) (84a:35111)
- Speranza, Gaetano Two nonhomogeneous problems for a singular parabolic equation occurring in the theory of probability. (84g:35072)
- Suleimanov, N. M. A refinement of estimates of Wiman-Valiron type for solutions of evolution equations. (Russian) (84c:35058)
- Sultangazin, U. M. (with Sheryshev, V. P.) Solution of a problem of induction heating by the quasilinearization method. (Russian) (84c:35053)
- Temirbulatov, S. I. Heat conduction problem with a boundary condition containing higher-order derivatives. (Russian. Kazakh summary) (84c:35059)
- Zdzieniewicz, Zbigniew See Baranski, Feliks, (84j:35080)
- secondary classifications:
- Abdullaeva, G. Z. Investigation of the classical solution of a nonlinear one-dimensional inverse boundary value problem for second-order parabolic equations. (Russian. English and Azerbaijani summaries) (84c:35145)
- Atamanov, E. R. (with Mamayusupov, M. Sh.) Estimate of the stability and uniqueness of the solution of a general mixed problem for the heat equation in an unbounded domain. (Russian) (84a:35025)
- di Benedetto, E. Regularity properties of the solution of an n -dimensional two-phase Stefan problem. (Italian summary) (84c:35152)
- Bobisud, Larry E. Asymptotics of heat conduction in a bar capped with a thin, poorly conductive skin. (84b:80005)
- Bruno, Teresa (with Montagnaro, G.) A moving boundary value problem in which the front is discontinuous. (Italian. English summary) (84j:35156)
- Bugrov, A. N. (with Korobitsyna, Zh. L.) Asymptotic behavior of solutions of initial-boundary value problems in the method of fictitious domains. (Russian) (84b:76021)
- Callias, Constantine J. The heat equation with singular coefficients. I. Operators of the form $-d^2/dx^2 + s/x^2$ in dimension 1. (84m:58136)
- Capinski, Marek (with Szafirski, Boleslaw) Statistical investigation of the heat equation. (Russian summary) (84c:35102)
- Chadam, J. (with Ortoleva, Peter) The stabilizing effect of surface tension on the development of the free boundary in a planar, one-dimensional, Cauchy-Stefan problem. (84j:35157)
- Denisov, A. M. An inverse problem for the heat equation with a piecewise constant coefficient. (Russian) (84f:35151)
- Uniqueness of the solution of some inverse problems for the heat equation with a piecewise-constant coefficient. (Russian) (84d:35146)
- Denisov, V. N. On the question of the necessary condition for the stabilization of the solution of the Cauchy problem for a heat equation that is uniform on any compactum. (Russian) (84c:35016)
- On a necessary condition for the uniform stabilization of the solution of the Cauchy problem for the heat equation. (Russian) (84c:35017)
- Dorodnitsyn, V. A. (with Knyazeva, I. V.; Svirshchevskii, S. R.) Group properties of the nonlinear heat equation with a source in the two- and three-dimensional cases $T_t = \sum_i (K(T)T_{x_i})_{x_i} + Q(T)$. (Russian. English summary) (84c:58234)
- Dümmel, Siegfried Ein inverses Problem für die Wärmeleitungsgleichung. [An inverse problem for the heat equation] (84c:35106)
- Fasano, Antonio (with Villa, Luis T.) Some remarks on the curvature of the free boundary in a Stefan problem with appearance of a phase. (Italian summary) (84j:35140)
- Fel'genhauer, U. A one-phase nonstationary Stefan problem. (Russian. English summary) (84g:35077)

- Friedman, Avner (with Jiang, Li Shang) Nonlinear optimal control problems in heat conduction. (84m:49013)
- Galaktionov, V. A. Approximate self-similar solutions of the heat equation. (Russian) (84h:35024)
- Glazov, A. V. The lattice method of solving boundary value problems of the theory of heat conduction. (Russian) (84h:65111)
- Gripenberg, Gustaf Optimization of crystal growth with diffusion. (84d:49010)
- Jiang, Li Shang See Friedman, Avner, (84m:49013)
- Knabner, Peter Stability theorems for general free boundary problems of the Stefan type and applications. (84e:35154)
- Knyazeva, I. V. See Dorodnitsyn, V. A.; et al., (84k:58234)
- Kobayashi, Kusuo On the asymptotic properties for simple semilinear heat equations. (84e:35019)
- Kolyano, Yu. M. (with Pushak, Ya. S.) Differential heat equations for multistage thin-walled elements. (Russian) (84e:80004)
- Korobitsyna, Zh. L. See Bugrov, A. N., (84h:76021)
- Lacey, A. A. (with Shillor, M.) The existence and stability of regions with superheating in the classical two-phase one-dimensional Stefan problem with heat sources. (84i:80004)
- Leon'ev, Yu. V. A quasistationary Stefan problem. (Russian) (84k:80007)
- Levine, Harold On a mixed boundary value problem of diffusion type. (84m:80010)
- Lue, Ping Chang The asymptotic expansion for the trace of the heat kernel on a generalized surface of revolution. (84e:58070)
- Mamayusupov, M. Sh. See Atamanov, E. R., (84a:35025)
- Minenko, A. S. Some estimates of the solution of a quasistationary one-phase Stefan problem. (Russian) (84a:35295)
- Montagnaro, G. See Bruno, Teresa, (84j:35156)
- Nguyen, D. T. On a free boundary problem for the heat equation. (84k:35144)
- Niezgódka, Marek (with Pawlow, Irena) A generalized Stefan problem in several space variables. (84g:35166)
- Otubummo, A. Multipliers for unbounded linear operators. (See 84d:47002)
- Ortoleva, Peter See Chadam, J., (84j:35157)
- Ozawa, Shin Hadamard's variation of the Green kernels of heat equations and their traces. I. (84m:58137)
- Paganì, Carlo Domenico Determining a coefficient in a parabolic equation. (84e:35150)
- Pawlow, Irena See Niezgodka, Marek, (84g:35166)
- Pierre, Michel Parabolic capacity and Sobolev spaces. (84j:46060)
- Proka, D. V. On the asymptotic behavior of solutions of boundary value problems for the heat equation. (Russian) (84i:35024)
- Pushak, Ya. S. See Kolyano, Yu. M., (84e:80004)
- Romanovskii, M. R. Uniqueness of the solution of the inverse problem for the coefficients of the linear heat-conduction equation. (84h:35119)
- Saitoh, Saburo The Weierstrass transform and an isometry in the heat equation. (84k:44008)
- Samarskii, A. A. New methods for investigating the asymptotic properties of parabolic equations. (Russian) (84f:35015)
- Shillor, M. See Lacey, A. A., (84i:80004)
- Sprekels, Jürgen On the automatic control of the free boundary in a one-phase Stefan problem. (84e:49004)
- Štěrý, Milan (with Vejvoda, Otto) Time periodic solutions of a one-dimensional two-phase Stefan problem. (84h:35006)
- Suzuki, Takashi On a certain inverse problem for the heat equation on the circle. (84d:35148)
- Svirshchevskii, S. R. See Dorodnitsyn, V. A.; et al., (84k:58234)
- Szafirski, Bolesław See Capiński, Marek, (84c:35102)
- Tamme, E. Solution of an inverse problem of heat conduction by the method of successive approximations. (Russian. English summary) (84e:65103)
- Tao, L. N. The Cauchy-Stefan problem. (84a:80006)
- The Stefan problem with an imperfect thermal contact at the interface. (84i:80008)
- Vejvoda, Otto See Štěrý, Milan, (84h:35006)
- Villa, Luis T. See Fasano, Antonio, (84i:35140)
- Výborný, Rudolf Maximum principles for the heat equation. (84g:35029)

35K10 Second-order equations, general

- Eidel'man, S. D. See Porper, F. O., 84a:35112
- Kamynin, L. I. (with Khimchenko, B. N.) A priori estimates of the solution of a second-order parabolic equation in the neighborhood of the lower cap of the parabolic boundary. (Russian) 84h:35072
- (with Khimchenko, B. N.) The Tikhonov-Petrovskii problem for second-order parabolic equations. (Russian) 84h:35073
- (with Khimchenko, B. N.) The strict extremum principle for a weakly parabolically connected, second-order operator. (Russian) 84h:35074
- Khimchenko, B. N. See Kamynin, L. I., 84h:35072; 84h:35073 and 84h:35074
- Kr'štev, D. I. Some metric properties of solutions of parabolic equation with one space variable. 84i:35074
- Petrushko, I. M. Boundary and initial values of solutions of parabolic equations. (Russian) 84i:35075
- Porper, F. O. (with Eidel'man, S. D.) Properties of weak fundamental solutions of parabolic equations with measurable coefficients. (Russian) 84a:35112
- Saut, Jean-Claude (with Scheurer, Bruno) Remarques sur un théorème de prolongement unique de Mizohata. (English summary) [Remarks on a unique continuation theorem of Mizohata] 84e:35069
- Scheurer, Bruno See Saut, Jean-Claude, 84e:35069
- Watson, N. A. Solutions of parabolic equations with initial values locally in L^p . 84a:35113

secondary classifications:

- Beznoshchenko, N. Ya. Existence of a solution of problems of determining coefficients multiplying the highest derivatives of parabolic equations. (Russian) (84g:35160)

- Hill, James M. See Lee, Alexander I., (84f:35018)
- Kabatsli, N. M. Asymptotic solution of a parabolic problem in the case of a multiple spectrum of the limit operator. (Russian) (84a:35044)
- Kalashnikov, A. S. Conditions for the positivity and boundedness of solutions of the second boundary value problem for parabolic equations. (Russian) (84d:35023)
- Kamynin, L. I. (with Khimchenko, B. N.) An aspect of the development of the theory of the anisotropic strict extremum principle of A. D. Aleksandrov. (Russian) (84h:35015)
- Khimchenko, B. N. See Kamynin, L. I., (84h:35015)
- Kuptsov, L. P. Expansion of certain parabolic means. (Russian) (84c:35056)
- Laver, A. G. On the question of the periodicity of zeroth and first approximations of solutions of certain singularly perturbed parabolic equations. (Ukrainian. Russian summary) (84h:35008)
- Lee, Alexander I. (with Hill, James M.) On maximum principles for diffusion in the presence of three diffusion paths. (84f:35018)
- Stroock, Daniel W. The Malliavin calculus and its application to second order parabolic differential equations. I. (84d:60092a)
- The Malliavin calculus and its application to second order parabolic differential equations. II. (84d:60092b)
- Suzuki, Takashi Uniqueness and nonuniqueness in an inverse problem for the parabolic equation. (84g:35164)

35K15 Second-order equations, initial value problems

- Castro, Abel See Kruzhkov, S. N.; et al., 84b:35060
- Florito, Giovanni A contribution to the solution of the Cauchy-Dirichlet problem. (Italian. English summary) 84d:35065
- Kruzhkov, S. N. (with Castro, Abel; López, Martín) Schauder estimates and existence theorems for the solutions of the Cauchy problem for linear and nonlinear parabolic equations. II. (Spanish) 84b:35060
- López, Martín See Kruzhkov, S. N.; et al., 84b:35060

secondary classifications:

- Akhmetov, R. G. Asymptotic behavior of the solution of a boundary value problem for a diffusion equation in a half plane. (Russian) (84e:35016)
- Buldyrev, S. V. Calculation of the coefficients of a formal expansion of the Green function of a multidimensional parabolic equation and the diagram technique. (Russian. English summary) (84h:35019)

35K20 Second-order equations, boundary value problems

- Abdrakhmanov, M. A. Potentials of conjugation problems in an unbounded domain and their application for the solution of boundary value problems. (Russian) 84c:35054
- Aldamergenov, K. See Orynbasarov, M. O., 84f:35069
- Athanasopoulos, Ioannis Regularity of the solution of an evolution problem with inequalities on the boundary. 84m:35052
- Bove, Antonio (with Franchi, Bruno; Obrecht, Enrico) Boundary value problems with mixed lateral conditions for parabolic operators. 84g:35074
- (with Franchi, Bruno; Obrecht, Enrico) Parabolic problems with mixed time dependent lateral conditions. 84g:35073
- Bubnov, B. A. Boundary value problems for a class of equations that contains a derivative with respect to time. (Russian) 84c:35070
- Chandirov, G. I. (with Rzaev, E. A.) Approximation of solutions of nonregular mixed problems for equations of parabolic type with discontinuous and constant coefficients by solutions of regular problems. (Russian) 84c:35071
- Corduneanu, C. Bounded and almost periodic solutions of certain nonlinear parabolic equations. 84a:35114
- Damlamian, A. (with Li, Da Qian) Comportement limite des solutions de certains problèmes mixtes pour des équations paraboliques. II. [Boundary behavior of solutions of certain mixed problems for parabolic equations. II] 84f:35067b
- (with Li, Da Qian) Comportement limite des solutions de certains problèmes mixtes pour les équations paraboliques. [Boundary behavior of solutions of certain mixed problems for parabolic equations] 84f:35067a
- Dikasov, V. M. Some correlations between solutions of mixed problems for equations of parabolic and hyperbolic type. (Russian) 84f:35068
- Donato, Santi The oblique derivative problem for a class of parabolic equations in three variables with measurable coefficients. (Italian) 84a:35115
- Fattorusso, Luisa Weak solutions of the Cauchy-Dirichlet problem for parabolic equations in unbounded domains. (Italian. English summary) 84c:35072
- Franchi, Bruno See Bove, Antonio; et al., 84g:35073 and 84g:35074
- Giarrusso, Ester Remark on a second-order parabolic equation. (Italian. English summary) 84g:35075
- Gorshkov, A. I. Generalization of I. Z. Shtokalo's method to boundary value problems of parabolic equations. (Russian. English summary) 84c:35055
- Ibragimov, A. I. On some qualitative properties of solutions of second-order equations of parabolic type with continuous coefficients. (Russian) 84h:35061
- Idone, Giovanna The Cauchy-Neumann problem for singular parabolic equations. (Italian. English summary) 84e:35073
- Kalantarov, V. K. Collapse of solutions of parabolic and hyperbolic equations with nonlinear boundary conditions. (Russian. English summary) 84m:35053
- Li, Da Qian See Damlamian, A., 84f:35067a and 84f:35067b
- Lipsey, Zolt A representation of R^+ with an application by Sobolev space operators of parabolic nonsmooth boundary value problems. 84m:35054
- Nguyen Min Chieng A boundary value problem with a discontinuous boundary condition. (Russian) 84c:35075
- Obrecht, Enrico See Bove, Antonio; et al., 84g:35073 and 84g:35074
- Orynbasarov, M. O. (with Aldamergenov, K.) Construction of the fundamental matrix of the solution of a boundary value problem with directional derivative for a system of parabolic equations. (Russian) 84f:35069
- Rzaev, E. A. See Chandirov, G. I., 84c:35071

- Tomescu, Anca (with Tomescu, F. M. G.) Uniqueness of the weak solution of general mixed problems for the parabolic equation. (84b:35076)
 Tomescu, F. M. G. See Tomescu, Anca, (84b:35076)
 Voitskovskii, S. A. The method of fictitious domains for second-order parabolic equations. (Russian) (84b:35076)

secondary classifications:

- Beznozhchenko, N. Ya. Determination of the coefficient q from the solution of the second boundary value problem for the equation $u_t - \Delta u + qu = f$ in a half space (existence "in the large"). (Russian) (84b:35285)
 Butuzov, V. F. (with Nesterov, A. V.) The asymptotics of the solution of an equation of parabolic type with small parameters multiplying the highest derivatives. (Russian) (84b:35020)
 (with Vasil'eva, A. B.) Singularly perturbed differential equations of parabolic type. (84b:35015)
 Camuto, Claudio (with Quarteroni, Alfio) Spectral and pseudospectral methods for parabolic problems with nonperiodic boundary conditions. (84b:35132)
 Dozorov, V. A. (with Kirillov, Yu. P.) Conditions for stability of steady flows in diffusion systems with dynamic feedback. (Russian) (84b:35020)
 Dzhamshiev, D. S. Justification of the piecewise straight lines method for a boundary value problem for a linear parabolic equation. (Russian. Kazakh summary) (84b:65129)
 Fasano, Antonio (with Primicerio, Mario) Classical solutions of general two-phase parabolic free boundary problems in one dimension. (84b:35143)
 Gushchin, A. K. A criterion for uniform stabilization of solutions of the second mixed problem for a parabolic equation. (Russian) (84g:35021a)
 Uniform stabilization of solutions of the second mixed problem for a parabolic equation. (Russian) (84g:35021b)
 Idone, Giovanna (with Vitanza, C.) On the Cauchy-Dirichlet problem for the singular parabolic equation $u_{xx} - (1/x)u_x - u = 0$. (Italian. English summary) (84j:35100)
 Ionescu, I. (with Molnár, József) Sur l'estimation dans la résolution approximative d'un problème parabolique par la méthode des éléments finis. [Estimation in the approximate solution of a parabolic problem by the finite-element method] (84b:65093)
 Kadyrov, R. R. On the asymptotic behavior of solutions of second-order parabolic equations. (Russian) (84c:35014)
 Kirillov, Yu. P. See Dozorov, V. A., (84b:35020)
 Kuter, Nikolai D. On Neumann's problem for a class of equations with nonnegative characteristic forms. (84b:35057)
 Laver, A. G. On the question of the existence of periodic solutions in a class of singularly perturbed parabolic equations. (Russian) (84a:35021)
 Molnár, József See Ionescu, I., (84b:65093)
 Nesterov, A. V. See Butuzov, V. F., (84b:35020)
 Primicerio, Mario See Fasano, Antonio, (84b:35143)
 Quarteroni, Alfio See Camuto, Claudio, (84b:35132)
 Rundell, William An inverse problem for a parabolic partial differential equation. (84m:35123)
 Ugowski, Henryk On the first Fourier problem for random parabolic equations of the second order. (84b:35143)
 On the first Fourier problem for a random linear parabolic equation. (84c:35158)
 Vasil'eva, A. B. See Butuzov, V. F., (84b:35015)
 (Verhulst, Ferdinand) See Butuzov, V. F. et al., (84b:35015)
 Vitanza, C. See Idone, Giovanna, (84j:35100)

35K22 Evolution equations (any order in the spatial derivatives) [See also 58D25.]

- Gordeziani, D. G. An additive model for parabolic equations with mixed derivatives. (Russian) (84b:35077)
 Lefterov, S. S. Some functionals of positive solutions of a class of doubly nonlinear evolution equations. (Russian) (See 84c:34002)
 Pascali, Dan Sur les équations d'évolution fortement non linéaires. [Strongly nonlinear evolution equations] (84d:35066)
 Variational solutions of strongly nonlinear evolution equations. (See 84a:49002)

secondary classifications:

- Altman, Mieczysław Nonlinear evolution equations in Banach spaces. (84b:34092)
 Ames, Karen A. On the comparison of solutions of related properly and improperly posed Cauchy problems for first order operator equations. (84c:34090)
 Bardos, Claude W. Apparition éventuelle de singularités dans des problèmes d'évolution non linéaires (d'après S. Klainerman, B. Glassey, J. Chadam, F. John (et d'autres)). [Possible appearance of singularities in nonlinear evolution problems (according to S. Klainerman, B. Glassey, J. Chadam, F. John (and others))] (84b:35017)
 Bobodzhonov, A. A. (with Lomov, S. A.) Application of the spectral theory of operators for asymptotic integration of singularly perturbed problems. (Russian) (84c:34083)
 (Broadner, Felix E.) See Fattorini, Hector O., (84g:34003)
 Bukhgeim, A. L. The problem of determining the right-hand side of an evolution equation. (Russian) (See 84m:35003)
 (Chadam, J.) See Bardos, Claude W., (84b:35017)
 Chen, Goong (with Grimmer, Ronald) Integral equations as evolution equations. (84j:45062)
 Da Prato, Giuseppe (with Sinestrari, Eugenio) Hölder regularity for nonautonomous abstract parabolic equations. (84j:34063)
 Di Blasio, Gabriella L^p -regularity for solutions of nonautonomous parabolic equations in Hilbert spaces. (Italian summary) (84g:34101)
 Fattorini, Hector O. ★ The Cauchy problem. (84g:34003)
 (Glassey, R.) See Bardos, Claude W., (84b:35017)
 Grimmer, Ronald See Chen, Goong, (84j:45062)

- (John, Fritz) See Bardos, Claude W., (84b:35017)
 (Klainerman, Sergio) See Bardos, Claude W., (84b:35017)
 Lomov, S. A. See Bobodzhonov, A. A., (84c:34083)
 Mora, Xavier Semilinear parabolic problems define semiflows on C^k spaces. (84c:35077)
 Pankov, A. A. Solutions bounded and almost periodic with respect to time of a class of nonlinear evolution equations. (Russian) (84b:34081)
 Rheffoul, M., Reda Sur une équation d'évolution non linéaire du second ordre avec un terme viscoélastique. (English summary) [A nonlinear evolution equation of second order with viscoelastic term] (84c:35079)
 Shvyrev, B. M. The asymptotic method in the theory of periodic solutions for evolution equations of parabolic type. (Russian) (84m:34054)
 Sinestrari, Eugenio See Da Prato, Giuseppe, (84j:34063)
 von Wahl, Wolf Nichtlineare Evolutionsgleichungen. [Nonlinear evolution equations] (84g:34114)
 Zhuang, Da Wei On solving a class of nonlinear evolution equations. (Chinese. English summary) (84a:35276a)
 On solving a class of nonlinear evolution equations. II. (Chinese. English summary) (84a:35276b)

35K25 Higher-order equations, general

- Guseinov, G. M. Asymptotic behavior with respect to a small parameter of the solution of a boundary value problem for a parabolic equation that degenerates to a lower-order parabolic equation. (Russian) (84b:35070)
 Kuptsov, L. P. Expansion of certain parabolic means. (Russian) (84c:35056)
 Olszewski, Paweł Some properties of generalized thermal potentials related to a certain parabolic equation of order 2p. (84b:35078)
 Shcherbina, V. P. See Shishkov, E. A., (84c:35057)
 Shishkov, E. A. (with Shcherbina, V. P.) Coercivity inequalities for pairs of linear parabolic operators. (Russian) (84c:35057)

secondary classifications:

- Baranski, Feliks (with Musialek, Jan) On the Green functions for the heat equation over the m -dimensional cuboid. (84b:35024)
 (with Musialek, Jan) The bicolour problem for time half-plane with boundary conditions of Lauricella type. (84c:35027)
 Faminskii, A. V. See Kruzhkov, S. N., (84m:35019)
 Kruzhkov, S. N. (with Faminskii, A. V.) Continuity properties of solutions of some classes of nonstationary equations. (Russian. English summary) (84m:35019)
 Li, Da Qian Limit behaviors of solutions for some parabolic equations of higher order and their applications to the optimal control. (Chinese summary) (84b:49027)
 Musialek, Jan See Baranski, Feliks, (84c:35027) and (84f:35024)
 Oleinik, O. A. Homogenization of differential operators. (See 84i:00016)
 Ye, Shu Min Instability and uniqueness of the solution of the equation $C_1 u + a_2 \Delta^2 u = a_1^2 u + C_2 u$, and nonexistence of a nontrivial bounded solution. (Chinese. English summary) (84m:35020)

35K30 Higher-order equations, initial value problems

- Sablé-Tougeron, Monique Problème d'évolution parabolique pour une classe d'opérateurs elliptiques et dégénérés. [The problem of parabolic evolution for a class of degenerate elliptic operators] (84g:35076)
 Shmulevich, S. D. The Cauchy problem with an arbitrarily increasing initial function for equations of parabolic type. (Russian) (84m:35055)

secondary classifications:

- Krivenko, E. V. Averaging of singularly perturbed parabolic operators and stabilization of the solution of the Cauchy problem. (Russian) (84c:35010)
 Shlekis, P. P. The Cauchy problem in L_p spaces. (Russian) (84c:35020)
 von Wahl, Wolf The equation $u' + A(t)u = f$ in a Hilbert space and L^p -estimates for parabolic equations. (84b:34065)

35K35 Higher-order equations, boundary value problems

- Baderko, E. A. Potentials for 2p-parabolic equations. (Russian) (84c:35058)
 Baranski, Feliks The polycaloric problem for the half-time-plane. (Russian and Polish summaries) (84j:35086)
 Fel'genhauer, U. A one-phase nonstationary Stefan problem. (Russian. English summary) (84g:35077)
 Grimaldi Piro, A. (with Ragnedda, F.) On a boundary value problem for a 2b-parabolic equation in a strip. (84b:35079)
 Iliev, I. D. Initial-boundary value problems for a class of higher order evolution equations. (84a:35116)
 Ivashchen, S. D. Parabolic boundary value problems without initial conditions. (Russian) (84d:35067)
 Matichuk, M. I. See Pukalskii, I. D., (84f:35072)
 Orynbasarov, M. O. Solution of a boundary value problem of Dirichlet type for a biparabolic equation in a wedge-shaped domain. (Russian) (84f:35071)
 Pukalskii, I. D. (with Matichuk, M. I.) Solution of a parabolic boundary value problem with singularities in the coefficients of the boundary operator. (Russian) (84f:35072)
 Ragnedda, F. See Grimaldi Piro, A., (84b:35079)
 Sadallah, Boubaker-Khaled Étude d'un problème 2m-parabolique dans des domaines plans non rectangulaires. (Italian summary) [Study of a 2m-parabolic problem in nonrectangular plane domains] (84c:35080)
 Streit, Uwe Über schwache Formulierungen von Stefan-Aufgaben. [On weak formulations of Stefan problems] (84g:35078)
 Suvetka, I. V. Solvability of mixed problems for nonstationary equations with vanishing viscosity. (Russian) (84g:35079)
 Tembulatorov, S. I. Mixed problem for higher-order parabolic equations. (Russian) (Title)

Yurchuk, N. I. Mixed problems for parabolic equations of variable order. (Russian) **84f:35073**

Zhitarashu, N. V. Solvability of model parabolic boundary value problems in Sobolev-Slobodetskii spaces of generalized functions. (Russian) **84a:35117**

secondary classifications:

Hill, James M. See Lee, Alexander I., **(84c:76065)**

Kuchment, P. A. On the Floquet theory for parabolic and elliptic boundary value problems in a cylinder. (Russian) **(84i:35028)**

Lee, Alexander I. (with Hill, James M.) On the solution of boundary value problems for fourth order diffusion. **(84c:76065)**

Malecki, Romuald (with Zielińska, Ewa) Contour-integral method applied for solving a certain mixed problem for a parabolic equation of order four. **(84j:35022)**

Pala, M. M. (with Spano, P.) A polynomial method for the solution of equations parabolic in the sense of Petrovskii of order greater than two. (Italian) **(84i:65090)**

Spano, P. See Pala, M. M., **(84i:65090)**

Zielińska, Ewa See Malecki, Romuald, **(84j:35022)**

35K40 Systems, general

Berestycki, Henri (with Nicolaenko, Basil; Scheurer, Bruno) Traveling wave solutions to reaction-diffusion systems modeling combustion. **84j:35087**

Chabrowski, Jan (with Watson, N. A.) Properties of solutions of weakly coupled parabolic systems. **84f:35074**

Representation theorems for parabolic systems. **84f:35075**

Chen, Ji Shu See Zhu, Ben Ren; et al., **84g:35080**

Cosner, Chris Pointwise a priori bounds for strongly coupled semilinear systems of parabolic partial differential equations. **84a:35118**

Ding, Lan Ying See Zhu, Ben Ren; et al., **84g:35080**

John, Friedrich The interior regularity and the Liouville property for the quasilinear parabolic systems. **84d:35068**

Li, Li Peng See Zhang, Xue Yuan, **84f:35076**

Milicer-Gruźewska, Halina Sur la dualité des solutions des systèmes P paraboliques et elliptiques. [On the duality of solutions of P -parabolic and elliptic systems] **84c:35074**

Nicolaenko, Basil See Berestycki, Henri; et al., **84j:35087**

Scheurer, Bruno See Berestycki, Henri; et al., **84j:35087**

Watson, N. A. See Chabrowski, Jan, **84f:35074**

Yang, Hong See Zhu, Ben Ren; et al., **84g:35080**

Zhang, Xue Yuan (with Li, Li Peng) A decision method, using determinants, for the consistency of the Cauchy problem for a system of linear partial differential equations. (Chinese. English summary) **84f:35076**

Zhu, Ben Ren (with Chen, Ji Shu; Yang, Hong; Ding, Lan Ying) The positive solution of a certain nonlinear parabolic system and its computation. I. (Chinese. English summary) **84g:35080**

secondary classifications:

Freidlin, M. I. On wave fronts propagation in multicomponent media. **(84a:35027)**

Redheffer, Raymond M. (with Walter, Wolfgang) On parabolic systems of the Volterra predator-prey type. **(84i:92021)**

Szarski, Jan Comparison theorem for infinite systems of parabolic differential-functional equations and strongly coupled infinite systems of parabolic equations. (Russian summary) **(84f:35008)**

Walter, Wolfgang See Redheffer, Raymond M., **(84i:92021)**

35K45 Systems, initial value problems

Dubois, R.-M. Problème de Cauchy en norme uniforme pour certains systèmes paraboliques dans des ouverts peu réguliers. [The Cauchy problem in the uniform norm for certain parabolic systems in not very regular open sets] **84h:35077**

Fu, Hong Yuan See Zhou, Yu Lin, **84k:35079**

Guliev, V. A. A Cauchy problem for a second-order parabolic system. (Russian) **84g:35081**

Lousberg, Pierre Backward parabolic equations. **84a:35119**

Postolake, M. D. Stabilization in the mean with respect to time for solving the Cauchy problem for parabolic systems of equations. (Russian) **84c:35075**

Verenich, I. I. Fundamental solutions of parabolic systems of higher order with respect to t with singularities in the coefficients. (Russian. English summary) **84a:35120**

Zhou, Yu Lin (with Fu, Hong Yuan) Initial value problems for the semilinear systems of generalized Schrödinger type of higher order. **84k:35079**

secondary classifications:

Coron, Jean-Michel Formules de Trotter pour une équation d'évolution quasilineaire du premier ordre. [Trotter formulas for a first-order quasilinear evolution equation] **(84c:35059)**

Kruzhkov, S. N. (with Peregrudov, A. N.) The Cauchy problem for a system of equations of chemical kinetics: solvability and asymptotic behavior of solutions as $t \rightarrow +\infty$. (Russian) **(84g:35024)**

Peregrudov, A. N. See Kruzhkov, S. N., **(84g:35024)**

Suveika, I. V. Necessary and sufficient conditions for the stabilization of solutions of the Cauchy problem for systems of nonstationary equations of nonclassical type. (Russian) **(84h:35013)**

35K50 Systems, boundary value problems

Ivashchen, S. D. Green's matrices of boundary value problems for systems of a general form that are parabolic in the sense of I. G. Petrovskii. I. (Russian) **84i:35081a**

Green's matrices of boundary value problems for systems of a general form that are parabolic in the sense of I. G. Petrovskii. II. (Russian) **84i:35081b**

On the correct solvability of parabolic boundary value problems in spaces of increasing functions. (Russian) **84i:35082**

Majchrowski, Marian On certain nonlocal problem with mixed boundary condition for a parabolic system of partial differential equations. **84g:35082**

On nonlocal problems for the parabolic system of partial differential equations. **84i:35083**

Mamedov, N. M. A boundary value problem with mixed boundary conditions for a parabolic system. (Russian) **84d:35069**

Puzio, Zdzisław Premier problème de Fourier pour un système d'équations quasi-linéaires du type parabolique. [Fourier's first problem for a system of parabolic quasilinear equations] **84i:35084**

Pyrcia, Zbigniew The bichloric problem for the strip. (Russian and Polish summaries) **84j:35088**

Yunusov, A. See Zhumabekov, L., **84m:35056**

Zhumabekov, L. (with Yunusov, A.) Estimates in $W_2^{2,1}$ of the solution of a boundary value problem for a parabolic system in a quarter plane. (Russian. Kazakh summary) **84m:35056**

secondary classifications:

Mastrangelo, M. Processus de diffusion multigruppo. Frontières fixes et variables.

[Multigroup diffusion processes. Fixed and moving boundaries] **(84e:60113a)**

Résolution des systèmes d'équations de diffusion par les intégrales stochastiques d'Itô. [Solution of systems of diffusion equations by Itô stochastic integrals] **(84e:60113b)**

Štěrý, Milan On quasiperiodic motions in a one-dimensional two-phase Stefan problem. (Czech summary) **(84d:35013)**

Temirbulatov, S. I. An ill-posed mixed problem for a second-order parabolic system. (Russian) **(84h:35117)**

Visintin, Augusto A model for hysteresis of distributed systems. **(84f:35156)**

35K55 Nonlinear equations and systems

Akhunbaev, M. The Cauchy problem for quasilinear degenerate parabolic equations. (Russian) **84a:35121**

Alikakos, Nicholas D. Quantitative maximum principles and strongly coupled gradient-like reaction-diffusion systems. **84g:35083**

Ames, W. F. See Zulehner, W., **84j:35094**

Aronson, Donald (with Caffarelli, Luis A.; Kamin, Shoshana) How an initially stationary interface begins to move in porous medium flow. **84g:35084**

Babin, A. V. (with Vishik, M. I.) Attractors of quasilinear parabolic equations. (Russian) **84h:35078**

Baras, Pierre (with Duchon, Jean; Robert, Raoul) Évolution d'une interface par diffusion de surface. (English summary) [Interface evolution by surface diffusion] **84a:35122**

Belov, Yu. Ya. The first boundary value problem and the Cauchy problem for degenerating parabolic systems and systems of first-order partial differential equations. (Russian) **84g:35085**

Caffarelli, Luis A. See Aronson, Donald; et al., **84g:35084**

Canfora, Albino On a quasilinear parabolic equation with discontinuous coefficients. (Italian) **84h:35079**

Capasso, Vincenzo (with Maddalena, Lucia) Periodic solutions for a reaction-diffusion system modelling the spread of a class of epidemics. **84m:35057**

Chabrowski, Jan (with Vybomý, Rudolf) Maximum principle for nonlinear degenerate equations of the parabolic type. **84d:35070**

Cohen, Donald S. See Kath, William L., **84a:35126**

Conway, E. D. Diffusion and the predator-prey interaction: steady states with flux at the boundaries. **84h:35080**

Coron, Jean-Michel Formules de Trotter pour une équation d'évolution quasilineaire du premier ordre. [Trotter formulas for a first-order quasilinear evolution equation] **84c:35059**

Cortázar, Carmen The application of dissipative operators to nonlinear diffusion equations. **84c:35060**

Crandall, Michael G. (with Pierre, Michel) Regularizing effects for $u_t = \Delta \varphi(u)$. **84h:35081**

Dai, You Xin Properties of the solutions of a class of nonlinear parabolic equations. (Chinese. English summary) **84d:35071**

Duchon, Jean See Baras, Pierre; et al., **84a:35122**

Dzhangveladze, T. A. The first boundary value problem for a nonlinear equation of parabolic type. (Russian) **84c:35076**

See also Gordeziani, D. G.; et al., **84m:35058**

Erig, W. See Strampp, W.; et al., **84c:35063**

Ewer, J. P. G. On the asymptotic properties of a class of nonlinear parabolic equations. **84i:35085**

Fife, Paul C. Sigmoidal systems and layer analysis. **84a:35123**

Frank, Leonid S. (with Wendt, Wolfgang D.) Sur une perturbation singulière parabolique en théorie cinétique des enzymes. (English summary) [On a parabolic singular perturbation in the kinetic theory of enzymes] **84a:35124**

Galaktionov, V. A. Conditions for localization of unbounded solutions of quasilinear parabolic equations. (Russian) **84i:35086**

Gardner, Robert A. (with Smoller, Joel A.) The existence of periodic travelling waves for singularly perturbed predator-prey equations via the Conley index. **84c:35061**

Gariepy, Ronald (with Ziemer, William P.) Thermal capacity and boundary regularity. **84c:35062**

Gärtner, Jürgen Location of wave fronts for the multidimensional KPP equation and Brownian first exit densities. **84h:35080**

Gladkov, A. L. Source-type solutions for some quasilinear parabolic equations. (Russian. English summary) **84h:35062**

Gonczewicz, J. On the initial-boundary value problem for a degenerate parabolic equation of nonstationary filtration type. (See **84c:34002**)

- Gordeziani, D. G. (with Dzhangveladze, T. A.; Korshiya, T. K.) Existence and uniqueness of the solution of a class of nonlinear parabolic problems. (Russian) **84m:35058**
- Greenberg, James M. Stability of equilibrium solutions for the Fisher equation. **84c:35125**
- Gröger, Konrad On the asymptotic behavior of some diffusion-reaction systems. **84c:35087**
Dissipation and asymptotic behavior of some reaction-diffusion systems. (See **84i:00016**)
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- Abbasov, A. A. (with Sapozhnikov, M. E.) Existence of a solution of an optimal problem of Stefan type for a quasilinear equation. (Russian) **(84b:49008)**
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- Kuptsov, L. P. Fundamental solutions of some second-order degenerate parabolic equations. (Russian) **84b:35068**
- Malitskaya, A. P. The first mixed problem in a half space for the Sonin equation. (Russian) **84g:35100**
- Malovichko, V. A. Nonlocal boundary value problems for degenerate parabolic equations. (Russian) **84b:35069**
- Nakao, Mitsuhiro On solutions to the initial-boundary value problem for $(\partial/\partial t)u - \Delta \beta(u) = f$. **84c:35135**
- Novruzov, A. A. See Ibragimov, A. I., **84g:35099**
- Peletier, Lambertus Adrianus See Aronson, Donald; et al., **84j:35099**
- Shi, Tian Qin A class of quasilinear degenerate parabolic equations. (Chinese. English summary) **84c:35084**
- Shopov, N. N. The Gevrey problem for a mixed-parabolic equation with two perpendicular lines of degeneracy. (Bulgarian. French and Russian summaries) **84f:35080**
- Showalter, R. E. Degenerate nonlinear parabolic systems and free-boundary problems. **84b:35070**
- Soltanov, K. N. Solvability of certain parabolic problems with faster-growing-than-power nonlinearities. (Russian) **84a:35136**

- Vázquez, Juan Luis Symétrisation pour $u_t = \Delta \varphi(u)$ et applications. (English summary) [Symmetrization for $u_t = \Delta \varphi(u)$ and applications] **84i:35090a**
- Erratum: "Symmetrization for $u_t = \Delta \varphi(u)$ and applications". (French) **84i:35090b**
- See also Herrero, Miguel A., **84c:35065**
- Vitanza, C. See Idone, Giovanna, **84j:35100**
- Wu, De Quan Uniqueness of weak solutions of quasilinear degenerate parabolic equations. (Chinese) **84c:35085**
- Wu, Zhao Qun (with Zhao, Jun Ning) The first boundary value problem for quasilinear degenerate parabolic equations of second order in several space variables. **84i:35091**
- Zhao, Jun Ning See Wu, Zhao Qun, **84i:35091**
- Zhou, Yu Lin (with Fu, Hong Yuan) Cauchy problems of a class of semilinear degenerate evolution systems. **84a:35137**

secondary classifications:

- di Benedetto, E. Interior and boundary regularity for a class of free boundary problems. (**84c:35142**)
- (with Showalter, R. E.) A free-boundary problem for a degenerate parabolic system. (**84m:35124**)
- Chabrowski, Jan (with Výborný, Rudolf) Maximum principle for nonlinear degenerate equations of the parabolic type. (**84c:35070**)
- Ivanov, Aleksandr Vasil'evich Second-order quasilinear degenerate and nonuniformly elliptic and parabolic equations. (Russian) (**84c:35073**)
- Kalyakin, L. A. Asymptotic expansion of the solution of a degenerate parabolic equation with a small parameter. (Russian) (**84j:35024**)
- Krylov, N. V. (with Rozovskii, B. L.) Characteristics of second-order degenerate parabolic Itô equations. (Russian. English summary) (**84b:35127**)
- Lehnick, S. H. Biorthogonal sequences of solutions of the generalized Feller equation. (**84a:35038**)
- Rozovskii, B. L. See Krylov, N. V., (**84b:35127**)
- Showalter, R. E. See di Benedetto, Emanuele, (**84m:35124**)
- Taylor, Alan B. Differential equations and the real world. (**84c:35112**)
- Visintin, Augusto The Stefan problem for a class of degenerate parabolic equations. (**84c:35148**)
- Výborný, Rudolf See Chabrowski, Jan, (**84d:35070**)

35K70 Ultraparabolic, pseudoparabolic problems

- Atamanov, E. R. Uniqueness and estimation of the stability of the solution of an ill-posed problem for a pseudoparabolic equation. (Russian) **84a:35138**
- An existence theorem for the solution of the Cauchy problem for a pseudoparabolic equation with data on the time axis. (Russian) **84a:35139**
- Stability and uniqueness of the solution of a mixed problem for a pseudoparabolic equation. (Russian) **84c:35086**
- Cosner, Chris (with Rundell, William) Uniqueness classes for pseudoparabolic equations with unbounded coefficients. **84c:35101**
- Iwamiya, Toshiyuki (with Ôharu, S.; Takahashi, Tadayasu) On the semigroup approach to some nonlinear dispersive equations. **84d:35083**
- Lî, Da Qian (with White, L. W.) Total flux (nonlocal) boundary value problems for pseudoparabolic equations. **84g:35102**
- Ôharu, S. See Iwamiya, Toshiyuki; et al., **84d:35083**
- Purmonen, Veikko T. On quasiparabolic problems with normal boundary conditions. **84b:35088**
- Rundell, William See Cosner, Chris, **84c:35101**
- Scornazzani, Vittorio On nonnegative solutions of the Kolmogorov equation. (Italian. English summary) **84c:35087**
- Takahashi, Tadayasu See Iwamiya, Toshiyuki; et al., **84d:35083**
- Vodakhova, V. A. A boundary value problem for a third-order equation with the nonlocal condition of A. M. Nakhushev. (Russian) **84m:35063**
- Warchulski, Kazimierz On the Fourier problem for the normal polyparabolic equation. (Russian and Polish summaries) **84j:35101**
- White, L. W. See Lî, Da Qian, **84g:35102**

secondary classifications:

- Atamanov, E. R. (with Mameyusupov, M. Sh.) An inverse problem for a pseudoparabolic equation. (Russian) (**84c:35146**)
- Bubnov, B. A. Boundary value problems for a class of equations that contains a derivative with respect to time. (Russian) (**84c:35070**)
- Fu, Hong Yuan See Zhou, Yu Lin, (**84m:35011**)
- Lanckau, Eberhard Zur Behandlung pseudoparabolischer Differentialgleichungen mit funktionentheoretischen Methoden. [On the treatment of pseudoparabolic differential equations with function-theoretic methods] (**84j:35021**)
- Mameyusupov, M. Sh. See Atamanov, E. R., (**84c:35146**)
- Orynbasarov, M. O. Solution of a boundary value problem of Dirichlet type for a biparabolic equation in a wedge-shaped domain. (Russian) (**84f:35071**)
- Zhou, Yu Lin (with Fu, Hong Yuan) Periodic solutions (boundary problems) and initial value problems for nonlinear pseudoparabolic systems of higher order. (**84m:35011**)
- 35K85 Unilateral problems; variational inequalities [See also 35R35, 49A29.]
- Biroli, Marco Hölder regularity for parabolic obstacle problem. (Italian summary) **84c:35066**
- Friedman, Avner Asymptotic behavior for the free boundary of parabolic variational inequalities and applications to sequential analysis. **84a:35140**
- Madaune-Tort, Monique Un résultat de perturbations singulières pour des inéquations variationnelles dégénérées. [A result of singular perturbations for degenerate variational inequalities] **84j:35102**
- Pawlow, Irena A variational inequality approach to generalized two-phase Stefan problem in several space variables. **84c:35088**

Rodrigues, José-Francisco Sur le comportement asymptotique de la solution et de la frontière libre d'une inéquation variationnelle parabolique. (English summary) [On the asymptotic behavior of the solution and of the free boundary of a parabolic variational inequality] **84c:35069**

Tarzia, Domingo Alberto Étude de l'inéquation variationnelle proposée par Duvaut pour le problème de Stefan à deux phases. I. (Italian summary) [Study of the variational inequality proposed by Duvaut for the two-phase Stefan problem. I.] **84c:35067**

secondary classifications:

Biroli, Marco Homogenization for parabolic variational and quasivariational inequalities. (See **84c:34002**)

Existence d'une solution hôlderienne pour des inéquations variationnelles paraboliques non linéaires avec obstacle. (English summary) [Existence of a Hölder continuous solution for nonlinear parabolic variational inequalities with obstacle] **84m:49021**

Boccardo, Lucio (with Donati, Flavio) Existence and stability results for solutions of some strongly nonlinear constrained problems. **84a:49008**

Donati, Flavio See Boccardo, Lucio, **84a:49008**

Friedman, Avner ★Variational principles and free-boundary problems. **84c:35153**

Kenmochi, Nobuyuki Free boundary problems of the Stefan-type for nonlinear parabolic equations with obstacles. (Italian summary) **84i:35141**

Troianello, Giovanni Maria On solutions to quasilinear parabolic unilateral problems. (Italian summary) **84c:35080**

Vescan, Robert T. Quasivariational inequalities solved by a nonvoid intersection property. **84i:49018**

35K99 None of the above, but in this section

Bogomolov, S. V. Convergence of the method of summary approximation for a system of Vlasov equations. (Russian) **84c:35141**

Chen, Ren Zhao $H^{1,1}(\Omega_T)$ solution of boundary value problems for population evolution equations. (Chinese. English summary) **84i:35092**

Day, W. A. A decreasing property of solutions of parabolic equations with applications to thermoelasticity. **84c:35089**

Kuptsov, L. P. Property of the mean for the generalized equation of A. N. Kolmogorov. I. (Russian) **84i:35093**

Lions, Pierre-Louis Le problème de Cauchy pour les équations de Hamilton-Jacobi-Bellman. (English summary) [The Cauchy problem for Hamilton-Jacobi-Bellman equations] **84c:35103**

Mazetis, L. S. Representation of solutions of the S. L. Sobolev problem in the form of an expansion in generalized eigenfunctions. (Russian) **84i:35094**

Pak, Mun Sik A jump formula on a general potential for a parabolic partial differential equation. (Korean. English summary) **84c:35104**

Windisch, Günther ★Diffusionsprobleme mit Unstetigkeiten an Phasengrenzen. (German) [Diffusion problems with discontinuities at phase limits] **84m:35064**

secondary classifications:

Ahlip, R. A. See Gopalsamy, K., **84i:45016**

Alibekov, Kh. A. A splitting method for evolution problems. (Russian) **84m:34082**

Belintsev, B. N. (with Livshits, M. A.; Vol'kenshtein, M. V.) Spatial self-organization as a result of short-range positive cooperativity and long-range negative cooperativity. (Russian) **84d:92002**

Berding, C. (with Haken, Hermann) Pattern formation in morphogenesis. Analytical treatment of the Gierer-Meinhardt model on a sphere. **84c:92013**

Bogdanskiĭ, Yu. V. The Cauchy problem for an essentially infinite-dimensional parabolic equation on an infinite-dimensional sphere. (Russian) **84i:35134**

Busenberg, Stavros N. (with Iannelli, Mimmo) A class of nonlinear diffusion problems in age-dependent population dynamics. **84g:92025**

Çakala, S. See Milicer-Gruzewska, Halina, **84i:35023**

Charlesworth, Brian ★Evolution in age-structured populations. **84c:92020**

Chen, Ren Zhao On the inhomogeneous boundary value problems for the partial differential equation of the population evolution process. (Chinese. English summary) **84h:92029**

Cohen, J. E. R. See Murray, J. D., **84i:92079**

Dai, Lo Sheng A stable traveling-wave solution of a model of cellular control processes with positive feedback. **84c:92014**

Deker, U. (with Rytter, Dietrich) Properties of the noise-induced ("spurious") drift. II. Simplifications of Langevin equations. **84h:82039b**

See also Rytter, Dietrich, **84h:82039a**

Dorodnitsyn, V. A. Invariant solutions of the nonlinear heat equation with a source. (Russian) **84m:80007**

Elyubov, R. A. Asymptotic solution of a boundary value problem for a nonlinear differential equation that degenerates to a parabolic equation. (Russian) **84c:35030**

Gajewski, Herbert (with Sparing, H.-D.) On a model of a polycondensation process with thermal degradation. (German and Russian summaries) **84c:82036**

Garroni, Maria Giovanna (with Langlais, Michel R.) Age-dependent population diffusion with external constraint. **84i:92069**

Gierer, Alfred Socioeconomic inequalities: effects of self-enhancement and depletion. (See **84c:92008**)

Ginibre, J. (with Velo, G.) The Cauchy problem for the $Q(N)$, $CP(N-1)$, and $G_c(N,p)$ models. **84i:58027**

Gong, Guang Lu (with Qian, Min Ping) The reversibility of the nonminimal Markov processes induced by a second-order differential operator. (Chinese) **84c:60114**

Gopalsamy, K. (with Ahlip, R. A.) Time delays in n -species competition. I. Global stability in constant environments. **84c:45016**

Haken, Hermann See Berding, C., **84c:92013**

Iannelli, Mimmo See Busenberg, Stavros N., **84g:92025**

Jetschke, G. Different approaches to stochastic parabolic differential equations. **84a:60070**

Kohane, Charles S. On the asymptotic behavior of solutions of parabolic equations. **84c:35017**

Koshvov, A. A. The problem of simultaneous flow of ground and surface waters. (Russian) **84m:76004**

Kim, Ji Yong Analytic investigation, based on operator theory, of the optimal moving control in the Sobolev function space. (Korean. English summary) **84c:49009**

Kopytko, B. I. Inhomogeneous diffusion processes with a generalized drift coefficient. (Russian) **84i:60101**

Pasting together of two inhomogeneous diffusion processes on the line. (Russian) **84m:60096**

Kraśnicka, Barbara On some properties of solutions to a mixed problem for an infinite system of parabolic differential-functional equations in an unbounded domain. **84c:35143**

Langlais, Michel R. On a linear age-dependent population diffusion model. **84c:45019**

See also Garroni, Maria Giovanna, **84i:92069**

Lewis, Jeff E. (with Parenti, Cesare) Abstract singular parabolic equations. **84c:34088**

Li, Yi Shen A class of nonlinear evolution equations and an equivalent class. (Chinese. English summary) **84m:35108**

Livshits, M. A. See Belintsev, B. N.; et al., **84d:92002**

Lousberg, Pierre Un théorème de régularité pour les équations paraboliques rétrogrades. [A regularity theorem for backward parabolic equations] **84d:35153**

Mackenroth, Uwe Weak duality for parabolic boundary control problems. **84c:49026**

Marchuk, G. I. ★Математическое моделирование в проблеме окружающей среды. (Russian) [Mathematical modeling in the problem of the environment] **84c:92059**

Marcus, Moshe Global existence theory for models of population dynamics. **84c:39010**

Milicer-Gruzewska, Halina (with Çakala, S.) Sur l'existence de limite, $t \rightarrow \infty$, de la solution du problème lié au système parabolique. [On the existence of the limit, as $t \rightarrow \infty$, of the solution of a problem associated with the parabolic system] **84i:35023**

Murray, J. D. (with Cohen, J. E. R.) On nonlinear convective dispersal effects in an interacting population model. **84i:92079**

Parenti, Cesare See Lewis, Jeff E., **84c:34088**

Piech, M. Ann Duality of fundamental solutions of parabolic equations in infinite dimensions. **84c:35159**

Qian, Min Ping See Gong, Guang Lu, **84c:60114**

Rytter, Dietrich (with Dekker, U.) Properties of the noise-induced "spurious" drift. I. **84h:82039a**

See also Dekker, U., **84h:82039b**

Schneider, Klaus R. A note on the existence of periodic travelling wave solutions with large periods in generalized reaction-diffusion systems. (German summary) **84h:80013**

Sparing, H.-D. See Gajewski, Herbert, **84c:82036**

Velo, G. See Ginibre, J., **84i:58027**

Vol'kenshtein, M. V. See Belintsev, B. N.; et al., **84d:92002**

35Lxx Hyperbolic equations and systems [See also 58G16.]

Cesari, Lamberto Existence of solutions of hyperbolic problems. **84m:35065**

Gårding, Lars Hyperbolic boundary problems. **84c:35084**

Garnir, H. G. Solution élémentaire des problèmes aux limites hyperboliques. [Elementary solution of hyperbolic boundary value problems] **84m:35066**

Rozhdvestvenskiĭ, B. L. (with Yanenko, N. N.) ★Системы квазилинейных уравнений и их приложения к газовой динамике. (Russian) [Systems of quasilinear equations and their applications to gas dynamics] **84c:35085**

Yanenko, N. N. See Rozhdvestvenskiĭ, B. L., **84c:35085**

secondary classifications:

Bagirov, G. A. Application of the method of residues to the solution of mixed problems for nonselfadjoint boundary conditions. (Russian. Russian and Azerbaijani summaries) **84c:35038**

35L05 Wave equation

Adam, J. A. Asymptotic solutions and spectral theory of linear wave equations. **84i:35103**

Almashev, S. A. A nonlocal boundary value problem and the Goursat problem for a higher-order equation. (Russian) **84c:35081**

Amerio, Luigi Unilateral problems for quasilinear hyperbolic equations in two variables. (Italian) **84i:35095**

Bardos, Claude W. Relation between the trapped rays and the distribution of the eigenfrequencies of the wave equation in the exterior of an obstacle. (See **84i:35004**)

Bukhgeim, A. L. (with Konev, V. T.) Inverse problems of scattering by obstacles. (Russian) (See **84b:65004**)

Collins, C. B. Null field solutions of the wave equation and certain generalizations. **84c:35090**

Colombini, Ferruccio (with Iannelli, Enrico; Spagnolo, Sergio) Optimalité du caractère bien posé dans les classes de Gervy du problème de Cauchy pour une équation faiblement hyperbolique. (English summary) [Best results of well posedness in Gervy classes of the Cauchy problem for a weakly hyperbolic equation] **84c:35090**

Dermenjian, Yves (with Guillot, Jean-Claude) Théorie spectrale de la propagation des ondes acoustiques dans un milieu stratifié perturbé. [Spectral theory of acoustic wave propagation in a perturbed stratified medium] (See **84i:35003**)

Eysin, V. I. Some boundary value problems in infinite domains for the wave equation. (Russian) **84b:35071**

Fayazov, K. S. The nonhyperbolic Cauchy problem for a two-dimensional telegraph equation. (Russian) **84c:35142**

Guillot, Jean-Claude See Dermenjian, Yves, (See **84i:35003**)

Ikawa, Mitsuru On the distribution of the poles of the scattering matrix for two strictly convex obstacles. **84c:35086**

Iannelli, Enrico See Colombini, Ferruccio; et al., **84c:35090**

- Kal'menov, T. Sh. Multidimensional regular boundary value problems for the wave equation. (Russian. Kazakh summary) **84f:35082**
Spectrum of a boundary value problem with shift for the wave equation. (Russian) **84b:35072**
- Konev, V. T. See Bukhgeim, A. L., (See **84b:65004**)
- Lebeau, Gilles. Diffraction d'un paquet d'ondes dans un anti-chenal. (English summary) [Diffraction of a wave packet in an antichannel] **84j:35104**
- Lenyuk, M. P. Investigation of fundamental boundary value problems for a dissipative Bessel wave equation. (Russian) **84f:35083**
- Markova, T. F. The generalized problems Δ_1 and Δ_2 for the wave equation. (Russian) **84a:35143**
- Petkov, Vesselin. La distribution des pôles de la matrice de diffusion. [Distribution of poles of the scattering matrix] (See **84c:35006**)
- Rankin, Samuel M., III. Cosine families, product spaces and initial value problems with nonlocal boundary conditions. **84j:35105**
- Spagnolo, Sergio. See Colombini, Ferruccio; et al., **84c:35090**

secondary classifications:

- Bardos, Claude W. (with Guillot, Jean-Claude; Ralston, James) La relation de Poisson pour l'équation des ondes dans un ouvert non borné. Application à la théorie de la diffusion. [The Poisson relation for the wave equation in an unbounded open set. Application to scattering theory] (**84d:35120**)
- Bazley, Norman W. (with Strack, K.-G.) Selfadjoint sums of operators and the theory of nonlinear wave equations. (**84c:34067**)
- Bojarski, Norbert N. Generalized reaction principles and reciprocity theorems for the wave equations, and the relationship between the time-advanced and time-retarded fields. (**84m:78007**)
- Borrelli, Robert L. Shaking a piece of string to rest. (See **84j:00019**)
- Cabannes, Henri. Mouvements d'une corde vibrante en présence d'un obstacle rectiligne. (English summary) [Motions of a string vibrating in the presence of a straight rectilinear obstacle] (**84d:73044**)
- Campbell, L. Lorne. Existence of solutions of an ill-posed problem for the vibrating string. (**84f:35147**)
- Carroll, Robert Wayne (with Santosa, Fadil) Stability for the one-dimensional inverse problem via the Gelfand-Levitan equation. (**84b:35164**)
- Cooper, Jeffery (with Strauss, Walter A.) Scattering of waves by periodically moving bodies. (**84j:35135**)
- Goldstein, Jerome A. (with Sandefur, James T., Jr.) Equipartition of energy. (**84d:35091**)
- Guillot, Jean-Claude. See Bardos, Claude W.; et al., (**84d:35120**)
- Ikawa, Mitsuru. Decay of solutions of the wave equation in the exterior of two convex obstacles. (**84c:35018**)
- On the poles of the scattering matrix for two strictly convex obstacles. (**84c:35118**)
- Li, Shu Jie. See Zhang, Gong Qing; et al., (**84b:35011**)
- Makovetskiĭ, V. I. Fundamental solution of the wave equation with velocity linearly dependent on one argument. (Russian) (**84c:35035**)
- Miao, Lung Chi. Almost periodic solutions of linear partial differential equations. (**84c:35012**)
- Nachman, Adrian I. The wave equation on the Heisenberg group. (**84c:58074**)
- Najman, Branko. Eigenvalues of the Klein-Gordon equation. (**84c:35106**)
- Phillips, Ralph S. Scattering theory for the wave equation with a short range perturbation. (**84c:35113**)
- Ralston, James. See Bardos, Claude W.; et al., (**84d:35120**)
- Sabata, Hideki. Motions of singular points of particular solutions of some wave equations. (Italian. English summary) (**84c:35271**)
- Sandefur, James T., Jr. See Goldstein, Jerome A., (**84d:35091**)
- Santosa, Fadil. See Carroll, Robert Wayne, (**84b:35164**)
- Soga, Hideo. Singularities of the scattering kernel for convex obstacles. (**84c:35085**)
- Strack, K.-G. See Bazley, Norman W., (**84c:34067**)
- Strauss, Walter A. See Cooper, Jeffery, (**84j:35135**)
- Symes, W. W. A trace theorem for solutions of the wave equation, and the remote determination of acoustic sources. (**84g:35165**)
- Topil'er, N. G. Behavior of the solution of the Cauchy problem for the equation $u_{xx} - q(x)u_{tt} = 0$ for large time values t . (Russian) (**84f:35017**)
- Trudinger, P. L. The inverse scattering problem for perturbed wave equations. (**84d:35149**)
- Vessella, Sergio. Some inverse problems for the vibrating string equation. (**84b:35168**)
- Wu, Shao Ping. See Zhang, Gong Qing; et al., (**84b:35011**)
- Zhang, Gong Qing (with Wu, Shao Ping; Li, Shu Jie) Multiple periodic solutions for an asymptotically linear wave equation. (**84b:35011**)

35L10 Second-order equations, general

- Amonov, B. K. On the question of the uniqueness and stability of the solution of an equation of hyperbolic type. (Russian) (See **84m:35003**)
- Bubnov, B. A. A boundary value problem for a class of second-order equations. (Russian) (See **84c:34002**)
- Cheeger, Jeff (with Taylor, Michael E.) On the diffraction of waves by conical singularities I. **84b:35091a**
(with Taylor, Michael E.) On the diffraction of waves by conical singularities. II. **84b:35091b**
- Chirikalov, V. A. See Kalaida, A. F., **84a:35144**
- Isakov, V. M. Uniqueness of the extension of solutions of hyperbolic equations. (Russian) **84b:35073**
- Kalaida, A. F. (with Chirikalov, V. A.) Solution of an equation of hyperbolic type with discontinuous coefficients by the splitting method. (Russian) **84a:35144**
- Kokinisidi, P. D. Construction of the Riemann function for some hyperbolic equations. (Russian) **84m:35067**
- Lerner, M. E. Representation of the derivatives of the Riemann function in terms of the Riemann function. (Russian) **84a:35145**

- Mankin, Romi. Über sphärische Wellenfamilien höherer Ordnung bei Huygensschen Differentialgleichungen. [On higher-order spherical wave families for Huygens differential equations] **84c:35096**
- McLenaghan, R. G. Huygens' principle. (French summary) **84c:35091**
- Mel'nikova, T. V. (with Yakhno, V. G.) An inverse problem for a hyperbolic equation. (Russian) (See **84b:65004**)
- Taylor, Michael E. See Cheeger, Jeff, **84b:35091a** and **84b:35091b**
- Tsimbal, V. M. A singularly perturbed hyperbolic equation. (Russian) **84m:35068**
A mixed problem for a second-order singularly perturbed hyperbolic system. (Russian) **84m:35069**
- Yakhno, V. G. See Mel'nikova, T. V., (See **84b:65004**)
- Yoshikawa, Atsushi. A parametrix for a completely regularly hyperbolic operator. **84g:35105**

secondary classifications:

- Kadykenov, B. M. Asymptotic behavior of the solution of a singularly perturbed mixed problem with an initial jump for second-order hyperbolic equations. (Russian) (**84m:35014**)
- Kreith, Kurt. Qualitative behavior of solutions of hyperbolic partial differential equations. (**84c:35007**)
Picone-type theorems for hyperbolic partial differential equations. (**84a:35017**)
(with Pagan, Gordon) Qualitative theory for hyperbolic characteristic initial value problems. (**84g:35011**)
- Lerner, M. E. The maximum principle for hyperbolic equations in simply and multiply connected domains of arbitrary form. (Russian) (See **84m:35003**)
- Ley Koo, E. (with Wang, Ren Chuan; Sun, Zong Yang; Ren, Shang Fen) On the expansions of a paraboloidal wave in cylindrical and spherical waves. (Chinese summary) (**84b:35028**)
- Pagan, Gordon. See Kreith, Kurt, (**84g:35011**)
- Ren, Shang Fen. See Ley Koo, E.; et al., (**84b:35028**)
- Sandefur, James T., Jr. Existence and uniqueness of solutions of second order nonlinear differential equations. (**84g:34111**)
- Schenk, Dieter. Lösung einer hyperbolischen Gleichung mittels Laplacetransformation. [Solution of a hyperbolic equation using the Laplace transform] (**84a:35046**)
- Sun, Zong Yang. See Ley Koo, E.; et al., (**84b:35028**)
- Tsimbal, V. M. Angular boundary layer in a mixed singularly perturbed problem for a hyperbolic equation. (Russian) (**84a:35023**)
- Wang, Ren Chuan. See Ley Koo, E.; et al., (**84b:35028**)
- Yakhno, V. G. Theorem on existence "in the small" of a multidimensional inverse problem. (Russian) (See **84m:35003**)
- Zolin, A. F. Error estimation in the solution of the Goursat problem by the least squares method. (Russian) (**84a:35014**)

35L15 Second-order equations, initial value problems

- Burlachenko, V. P. (with Romanenko, Yu. I.) Approximation by the approximation method of the solution of the Cauchy problem with constant coefficients. (Russian) **84d:35084**
- Du, Xin Hua. A note on Oleviski's formula for selfadjoint hyperbolic equations of the second order. **84c:35092**
- Gourdin, Daniel. Problème de Cauchy faiblement hyperbolique. (English summary) [The weakly hyperbolic Cauchy problem] **84b:35092**
- Koz'mina, E. S. The Cauchy problem for a class of quasilinear equations of hyperbolic type. (Russian) **84b:35074**
- Nishitani, Tatsuo. Sur l'inégalité d'énergie pour une classe des opérateurs pseudo-différentiels fortement hyperboliques. [The energy inequality for a class of strongly hyperbolic pseudodifferential operators] **84c:35068**
- Orochko, Yu. B. The property of global finite rate of propagation of a second-order elliptic differential expression. (Russian) **84b:35075**
- Romanenko, Yu. I. See Burlachenko, V. P., **84d:35084**
- Tsimbal, V. M. The Goursat problem for a second-order hyperbolic equation with small parameter. (Ukrainian. Russian summary) **84c:35069**

secondary classifications:

- Hegedüs, J. Asymptotic behavior of the solution of the Cauchy problem for a hyperbolic equation with a large parameter. (Russian) (**84c:35017**)
- John, Fritz. Lower bounds for the life span of solutions of nonlinear wave equations in three dimensions. (**84a:35172**)

35L20 Second-order equations, boundary value problems

- Bamberger, A. (with Schatzman, Michelle) New results on the vibrating string with a continuous obstacle. **84g:35106**
- Buldigin, V. V. The statistical approach to the problem of the existence of a classical solution in a boundary value problem for a homogeneous hyperbolic equation. (Russian) **84m:35070**
- Dzhokhadze, O. M. Solvability of the Cauchy problem in the large for a quasilinear hyperbolic equation with parabolic degeneration. (Russian. English and Georgian summaries) **84c:35093a**
Characteristic Goursat problem in the large for a class of quasilinear hyperbolic equations. (Russian) **84c:35093b**
- Faierman, Melvin (with Knowles, Ian) On a mixed problem for a hyperbolic equation with a discontinuity in the principal coefficients. **84d:35085**
- Firmani, Bruno. Singular cases of the Goursat problem. (Italian. English summary) **84c:35094**
- Ivrii, V. Ya. Propagation of singularities of solutions of nonclassical boundary value problems for second-order hyperbolic equations. (Russian) **84a:35146**
- Knowles, Ian. See Faierman, Melvin, **84d:35085**

Meĭnikov, I. I. Singularities of the solution of a mixed problem for second-order hyperbolic equations in domains with a piecewise-smooth boundary. (Russian) **84j:35106**

Nishitani, Tatsuo Sur les équations hyperboliques dans la classe de Gevrey. [Hyperbolic equations in the Gevrey class] (See **84b:35003**)

Schatzman, Michelle See Bamberger, A., **84g:35106**

Shafiev, N. K. On a mixed problem for a hyperbolic equation with a small parameter. (Russian. English and Azerbaijani summaries) **84c:35087**

Shevchenko, G. N. The Dirichlet problem in a square for an equation of hyperbolic type. (Russian) (See **84m:35003**)

Smiley, Michael W. Results on linear and nonlinear hyperbolic boundary value problems at resonance. (Italian summary) **84b:35076**

Solov'ev, S. P. Boundary value problems of Cauchy type for an equation of hyperbolic type. (Russian) **84a:35147**

Taniguchi, Masaru Mixed problem for hyperbolic equations of second order in a domain with a corner. **84b:35093**

secondary classifications:

Ciborowska-Wojdyga, Eugenia On Lyapunov's stability for solutions of hyperbolic type equations including some coefficients dependence on spatial variable. (**84b:35010**)

Dikasov, V. M. Some correlations between solutions of mixed problems for equations of parabolic and hyperbolic type. (Russian) (**84f:35068**)

Gomilko, A. M. Spectral properties of a hyperbolic boundary value problem. (Russian. English and Azerbaijani summaries) (**84c:35110**)

Guseinov, M. M. Solution of a mixed problem for a quasilinear equation of hyperbolic type in an infinite domain. (Russian) (**84c:35279**)

Kalantarov, V. K. Collapse of solutions of parabolic and hyperbolic equations with nonlinear boundary conditions. (Russian. English summary) (**84m:35053**)

Kreith, Kurt Picone-type theorems for semidiscrete hyperbolic equations. (**84c:35009**)

Nesterova, T. N. The method of matching asymptotic expansions for the solution of a hyperbolic equation with a small parameter. (Russian) (**84j:35025**)

Oshorov, B. B. Some boundary value problems for a class of systems of second-order partial differential equations. (Russian) (**84a:35065**)

Visintin, Augusto A model for hysteresis of distributed systems. (**84f:35156**)

Williams, Marc H. Diffraction by a finite strip. (**84c:78020**)

Yakhno, V. G. A theorem on uniqueness and stability of a one-dimensional inverse problem for the wave equation. (Russian) (**84a:35291**)

35L25 Higher-order equations, general

Mikhailova, T. Yu. Symmetrization of invariant hyperbolic equations. (Russian) **84m:35071**

Renno, Pasquale The fundamental solution of a hyperbolic operator in three-dimensional thermochemistry. (Italian. English summary) **84c:35095**

secondary classifications:

Aldashev, S. A. A nonlocal boundary value problem and the Goursat problem for a higher-order equation. (Russian) (**84f:35081**)

Hitchin, N. J. Kählerian twistor spaces. (**84b:32014**)

Isenberg, James A. See Yasskin, Philip B., (**84b:83023**)

Ivanov, L. A. (with Kipriyanov, I. A.) Hadamard's method for equations that split into factors. (Russian) (**84m:35024**)

Kipriyanov, I. A. See Ivanov, L. A., (**84m:35024**)

Tsuji, Mikio Localisation et front d'onde analytique. [Localization and analytic wave front] (**84b:35034**)

Yasskin, Philip B. (with Isenberg, James A.) Non-self-dual nonlinear gravitons. (**84b:83023**)

35L30 Higher-order equations, initial value problems

Ivanov, L. A. The Cauchy problem for some operators with singularities. (Russian) **84a:35148**

See also Kipriyanov, I. A., **84d:35086**

Ivrii, V. Ya. See Zaitseva, O. V., **84b:35094**

Kipriyanov, I. A. (with Ivanov, L. A.) J. Hadamard's method for some classes of hyperbolic equations with variable coefficients. (Russian) **84d:35086**

Mandai, Takeshi On energy inequalities and regularity of solutions to weakly hyperbolic Cauchy problems. **84d:35087**

Maz'ya, V. G. See Vainberg, B. R., **84a:35149**

Nikonov, V. A. See Nikonova, G. A., **84g:35107** and **84g:35108**

Nikonova, G. A. (with Nikonov, V. A.) The Cauchy problem for hyperbolic operators and one generalization of it. (Russian) **84g:35107**

(with Nikonov, V. A.) The Cauchy problem for multidimensional linear systems over Gevrey spaces. (Russian) **84g:35108**

Nishitani, Tatsuo Sur les opérateurs fortement hyperboliques qui ne dépendent que du temps. [Strongly hyperbolic operators that depend only on time] **84c:35070**

Takasaki, Kanehisa Singular Cauchy problems for a class of weakly hyperbolic differential operators. **84g:35109**

Vainberg, B. R. (with Maz'ya, V. G.) The characteristic Cauchy problem for a hyperbolic equation. (Russian. English summary) **84a:35149**

Wakabayashi, Seiichi The Cauchy problem for operators with constant coefficient hyperbolic principal part and propagation of singularities. **84a:35150**

Singularities of solutions of the Cauchy problems for operators with nearly constant coefficient hyperbolic principal part. **84c:35096**

Yamamoto, Kazuhiro The Cauchy problem for hyperbolic operators with nonsmooth characteristic roots. **84g:35110**

Yoshikawa, Atsushi Parametries for a class of effectively hyperbolic operators. **84b:35077**

Zaitseva, O. V. (with Ivrii, V. Ya.) Correctness of the Cauchy problem for some hyperbolic operators with characteristics of high variable multiplicity. (Russian) **84b:35094**

secondary classifications:

Oganesyan, G. R. Necessary and sufficient conditions for well-posedness of the Cauchy problem for weakly hyperbolic equations with coefficients that depend only on the time variable. (Russian. English and Armenian summaries) (**84c:35114**)

35L35 Higher-order equations, boundary value problems

Marcinkowska, H. On a class of mixed boundary value problems for linear hyperbolic equations. **84c:35097**

Sanchez, L. See Zhang, Gong Qing, **84b:35095**

Tarama, Shigeo Sur le problème de Cauchy pour une classe des opérateurs différentiels du type faiblement hyperbolique. [On the Cauchy problem for a class of differential operators of weakly hyperbolic type] **84j:35107**

Venttsel', T. D. Estimates of solutions of a one-dimensional system of gas dynamics equations with "viscosity" that do not depend on the "viscosity". (Russian. English summary) **84d:35088**

Zhang, Gong Qing (with Sanchez, L.) Nontrivial periodic solutions of a nonlinear beam equation. **84b:35095**

secondary classifications:

Baranski, Feliks (with Musialek, Jan) On a certain limit problem for the rectangular parallelepiped. (**84f:35023**)

Gindikin, S. G. See Volevich, L. R., (**84c:35078**)

Musialek, Jan See Baranski, Feliks, (**84f:35023**)

Volevich, L. R. (with Gindikin, S. G.) A mixed problem for $(2b+1)$ -hyperbolic equations. (Russian) (**84c:35078**)

35L40 First-order systems, general

Cinquini, Silvio On the reduction to characteristic form of systems of partial differential equations of hyperbolic type. (Italian) **84c:35071**

Eckhoff, Knut S. On stability for symmetric hyperbolic systems. II. **84j:35108**

Garifullin, R. M. Analytic solution of certain systems of quasilinear equations. (Russian) **84g:35111**

Geveci, T. (with Kok, B.) Local energy decay of solutions of linearized shallow-water equations. **84f:35084**

Hanouz, B. (with Joly, Jean-Luc) Bilinear maps compatible with a system. (See **84c:35001**)

Iwasaki, Chisato (with Morimoto, Yoshinori) Propagation of singularities of solutions for a hyperbolic system with nilpotent characteristics. I. **84a:35151**

Joly, Jean-Luc See Hanouz, B., (See **84m:35001**)

Kasimov, Dzavid An inverse scattering problem for a hyperbolic system of differential equations in characteristic variables. (Russian) **84a:35152**

Klainerman, Sergiu (with Majda, Andrew) Singular limits of quasilinear hyperbolic systems with large parameters and the incompressible limit of compressible fluids. **84d:35089**

Kok, B. See Geveci, T., **84f:35084**

Majda, Andrew See Klainerman, Sergiu, **84d:35089**

Morimoto, Yoshinori See Iwasaki, Chisato, **84a:35151**

Mureşan, Anton S. The maximum modulus principle for hyperbolic systems of partial differential equations. (Romanian) **84f:35085**

Romanenko, R. V. Conditional stability of an inverse nonstationary scattering problem. (Russian) **84c:35153**

Strumia, A. Main field and symmetric-hyperbolic form of the Dirac equation. **84g:35112**

Tadmor, Eitan Hyperbolic systems with different time scales. **84c:35097**

Wang, Xu Dong See Zhou, Li, **84a:35154**

Zhou, Li (with Wang, Xu Dong) Application of Fourier integral operators in a hyperbolic system. **84a:35154**

secondary classifications:

Bardos, Claude W. (with Rauch, Jeffrey) Maximal positive boundary value problems as limits of singular perturbation problems. (**84j:35012**)

Clarke, B. M. N. Eigenvalue assignment by delayed boundary feedback for a class of linear hyperbolic systems. (**84a:93041**)

Nizhnik, L. P. (with Tarasov, V. G.) An inverse stationary scattering problem for a hyperbolic system of equations. (Russian) (**84a:35227**)

Orlovskii, D. G. On the problem of determining the right-hand side of a hyperbolic system. (Russian) (**84m:35122**)

Rauch, Jeffrey See Bardos, Claude W., (**84j:35012**)

Tarasov, V. G. See Nizhnik, L. P., (**84a:35227**)

35L45 First-order systems, initial value problems

Gilliam, David S. (with Schulenberg, John R.) Electromagnetic waves in a three-dimensional half space with a dissipative boundary. **84d:35090**

Goldstein, Jerome A. (with Sandefur, James T., Jr.) Equipartition of energy. **84d:35091**

Ichinose, Wataru Propagation of singularities for a hyperbolic system with double characteristics. **84a:35155**

Jannelli, Enrico Symmetric hyperbolic systems with coefficients depending only on time. (Italian. English summary) **84j:35109**

Li, Da Qian (with Yu, Wen Ci) Solutions régulières globales des systèmes hyperboliques quasi linéaires d'ordre 1. [Global regular solutions of first-order quasilinear hyperbolic systems] **84g:35113**

(with Shi, Jia Hong) Singularities of solutions for first order quasilinear hyperbolic systems. **84g:35114**

- Mizohata, Sigeru On the hyperbolicity in the domain of real analytic functions and Gevrey classes. **84c:35088**
- Romanovskii, R. K. On Riemann matrices of the first and second kind. (Russian) **84c:35089**
- Sandefur, James T., Jr. See Goldstein, Jerome A., **84d:35091**
- Schulenberg, John R. See Gilliam, David S., **84d:35090**
- Shi, Jia Hong See Li, Da Qian, **84g:35114**
- Yu, Wen Ci See Li, Da Qian, **84g:35113**

secondary classifications:

- Georgiev, V. S. Inverse scattering problem for symmetric strictly hyperbolic systems. (Russian) **84c:35083**
- Gourdin, Daniel Problème de Cauchy faiblement hyperbolique. (English summary) [The weakly hyperbolic Cauchy problem] (**84c:35092**)
- Rangelov, Ts. V. Existence of the wave operators for dissipative hyperbolic systems in the exterior of moving obstacle. (**84c:35084**)

35L50 First-order systems, boundary value problems

- Beirão da Veiga, Hugo Homogeneous and nonhomogeneous boundary value problems for first order linear hyperbolic systems arising in fluid mechanics. I. **84d:35092**
- Homogeneous and nonhomogeneous boundary value problems for first order linear hyperbolic systems arising in fluid mechanics. II. **84d:35093**
- Blokhin, A. M. A mixed problem for symmetric t -hyperbolic systems of acoustic type. (Russian) **84c:35098**
- Maulenov, O. Mixed problem for a semilinear hyperbolic system of two equations with a small parameter multiplying a derivative with respect to time in one of them. (Russian) **84f:35086**
- Moroşanu, Gheorghe Mixed problems for a class of nonlinear differential hyperbolic systems. **84f:35087**
- Zheng, Song Mu Differentiability of solutions to initial-boundary value problems for first-order symmetric hyperbolic systems with characteristic boundary. (Chinese. English summary) **84f:35088**

35L55 Higher-order hyperbolic systems

- Christodoulou, Demetrios The boost problem for weakly coupled quasilinear hyperbolic systems of the second order. **84a:35156**
- Garnir, H. G. (with Lejeune-Rifaut, E.) Application d'un théorème de Hörmander à l'étude des singularités des problèmes aux limites hyperboliques. (English summary) [Application of a theorem of Hörmander to the study of singularities in hyperbolic boundary value problems] **84i:35099**
- Kharibegashvili, S. S. On a Goursat-type problem for a class of systems of second-order equations of hyperbolic type. (Russian) **84a:35157**
- Solvability of a problem of Goursat type for second-order normally hyperbolic systems with variable coefficients. (Russian) **84b:35078**
- Kiselev, V. Yu. Strictly hyperbolic equations in spaces of almost-periodic functions. (Russian. English summary) **84c:35098**
- Kovachev, V. Khr. Microlocal parametrix for the Cauchy problem for hyperbolic symmetric systems with symplectic multiple characteristics. I. **84c:35090**
- Lejeune-Rifaut, E. See Garnir, H. G., **84i:35099**
- Malovichko, V. A. The Goursat problem for a second-order hyperbolic system. (Russian) **84a:35158**
- Marchuk, N. G. Existence of a solution of a mixed problem for a second-order vector hyperbolic equation. (Russian) **84c:35099**
- Petkov, Vesselin Le problème inverse de la diffusion pour les systèmes hyperboliques. [The inverse scattering problem for hyperbolic systems] **84c:35072**
- Spitsyn, V. L. The Cauchy problem for a system of equations of hyperbolic type. (Russian) (See **84m:35003**)
- Vainberg, B. R. Local decrease of energy of solutions of hyperbolic systems. (Russian. English summary) **84j:35110**

secondary classifications:

- Maiores, I. V. An extremum principle for a degenerate hyperbolic system. (Russian) (**84c:35016**)
- Nikonov, V. A. See Nikonova, G. A., (**84g:35108**)
- Nikonova, G. A. (with Nikonov, V. A.) The Cauchy problem for multidimensional linear systems over Gevrey spaces. (Russian) (**84g:35108**)
- Tsimbal, V. M. A mixed problem for a second-order singularly perturbed hyperbolic system. (Russian) (**84m:35069**)

35L60 First-order nonlinear equations and systems

- Aliev, A. B. Solvability "in the large" of the Cauchy problem for quasilinear equations of hyperbolic type with a nonlocal nonlinearity. (Russian. English and Azerbaijani summaries) **84c:35073**
- Boillat, Guy Symétrisation des systèmes d'équations aux dérivées partielles avec densité d'énergie convexe et contraintes. (English summary) [Symmetrization of systems of partial differential equations with constraints and convex energy density] **84d:35094**
- Chen, Shu Xing The initial-boundary value problems for the quasilinear symmetric hyperbolic system and their applications in gas dynamics. (See **84i:00020**)
- Cinquini, Silvio Another aspect of reduction to characteristic form of a system of partial differential equations of hyperbolic type. (Italian) **84g:35116**
- On some aspects of the reduction of systems of partial differential equations to characteristic form. (Italian) **84g:35115**
- Filimonov, A. M. See Myshkis, A. D., (See **84c:34002**)
- Fitzgibbon, W. E. Initial-boundary value problems for the Carleman equation. **84m:35072**

- Fusco, Domenico Remarks on a class of first-order quasilinear conservative hyperbolic systems of two equations in two independent variables. (Italian. English summary) **84g:35117**
- Gu, Chao Hao Some problems of nonlinear hyperbolic systems. **84j:35111**
- Joly, Jean-Luc Sur la propagation des oscillations par un système hyperbolique semi-linéaire en dimension 1 d'espace. (English summary) [On the propagation of oscillations by a hyperbolic semilinear system in one space dimension] **84j:35112**
- Kruzhkov, S. N. Cauchy's problem in the large for nonlinear hyperbolic equations and for the Korteweg-de Vries equation. (See **84i:00016**)
- Lyapidevskii, V. Yu. A mixed problem for an inhomogeneous quasilinear hyperbolic system of equations. (Russian) **84d:35095**
- Maulenov, O. (with Myshkis, A. D.) Mixed problem for a semilinear hyperbolic system on an interval with small parameters multiplying derivatives with respect to time. I. (Russian. Kazakh summary) **84m:35073a**
- (with Myshkis, A. D.) Mixed problem for a semilinear hyperbolic system on an interval with small parameters multiplying derivatives with respect to time. II. (Russian. Kazakh summary) **84m:35073b**
- Moroşanu, Gheorghe Stability of solutions of nonlinear boundary value problems for hyperbolic systems. **84f:35089**
- On a class of nonlinear differential hyperbolic systems. (See **84c:34002**)
- Myshkis, A. D. (with Filimonov, A. M.) Continuous solutions of quasilinear hyperbolic systems with two independent variables. (Russian) (See **84c:34002**)
- See also Maulenov, O., **84m:35073a** and **84m:35073b**
- Rasche, Michel On some "viscous" perturbations of quasilinear first order hyperbolic systems arising in biology. **84b:35096**
- Rauch, Jeffrey (with Reed, Michael C.) Propagation of singularities in nonstrictly hyperbolic semilinear systems: examples. **84a:35159**
- Reed, Michael C. See Rauch, Jeffrey, **84a:35159**
- Serre, Denis Invariants du premier ordre des systèmes hyperboliques semi-linéaires. [First-order invariants of semilinear hyperbolic systems] **84j:35113**
- Tartar, L. Systèmes hyperboliques non linéaires. [Nonlinear hyperbolic systems] **84c:35097**
- Tsujii, Mikio Formation of singularities for Hamilton-Jacobi equation. I. **84b:35098**

secondary classifications:

- Bilchev, S. I. Generalized stream functions for the asymmetric case of systems of two first-order partial differential equations. (Russian) (See **84c:34002**)
- Cinquini, Silvio On the reduction to characteristic form of systems of partial differential equations of hyperbolic type. (Italian) (**84c:35071**)
- Elenin, G. G. A type of quasilinear equation that models the pursuit of prey by a predator. (Russian) (**84h:92045**)
- Greenberg, James M. (with Xiao, Ling) The Riemann problem for the system $u_t + a_x = 0$ and $(\sigma - f(u))_t + (\sigma - \mu f(u))_x = 0$. (**84c:35126**)
- Klainerman, Sergiu (with Majda, Andrew) Compressible and incompressible fluids. (**84a:35264**)
- Majda, Andrew See Klainerman, Sergiu, (**84a:35264**)
- Prüss, Jan On the qualitative behaviour of populations with age-specific interactions. (**84h:92035**)
- Radzikowski, J. (with Sadkowski, W.) On the stability of solutions of some hyperbolic systems. (See **84c:34002**)
- Rogers, Joel C. W. Incompressible flows as a system of conservation laws with a constraint. (**84c:76021**)
- Sadkowski, W. See Radzikowski, J., (See **84c:34002**)
- Xiao, Ling See Greenberg, James M., (**84c:35126**)

35L65 Conservation laws [See also 76-XX.]

- Chang, Peter H. Exact solutions for a certain hyperbolic 2-conservation law. **84c:35074**
- Chen, Nei Mao On types of singularities for solutions of nonlinear hyperbolic systems. **84b:35079**
- Cheng, Kuo Shun Decay rate of periodic solutions for a conservation law. **84a:35160**
- Constructing solutions of a single conservation law. **84m:35074**
- The space BV is not enough for hyperbolic conservation laws. **84d:35096**
- Dafermos, C. M. Conservation laws with dissipation. (See **84c:00009**)
- Diaz Diaz, Jesús Ildefonso (with Véron, Laurent) Existence theory and qualitative properties of the solutions of some first order quasilinear variational inequalities. **84b:35099**
- DiPerna, Ronald J. Finite difference schemes for conservation laws. **84b:35100**
- Conservation laws. (See **84f:35004**)
- Generalized solutions to conservation laws. (See **84j:35004**)
- Convergence of approximate solutions to conservation laws. **84c:35091**
- Glimm, James Theoretical problems and numerical results for nonlinear conservation laws. (See **84f:35004**)
- Greenberg, James M. Recent results for hyperbolic conservation laws. (See **84f:35004**)
- Harten, Amiram On the symmetric form of systems of conservation laws with entropy. **84j:35114**
- Hattori, Harumi The partial differential equation $u_t + f(u)_x = -cu$. **84a:35161**
- Hoff, David On the smoothening of initial discontinuities and the development of singularities in solutions of certain quasilinear hyperbolic equations. **84b:35101**
- The sharp form of Oleinik's entropy condition in several space variables. **84b:35080**
- Keyfitz, Barbara L. (with Kranzer, Herbert C.) The Riemann problem for a class of hyperbolic conservation laws exhibiting a parabolic degeneracy. **84a:35162**
- Kranzer, Herbert C. See Keyfitz, Barbara L., **84a:35162**
- Li, Bang He Qualitative theory of solutions of a conservation law. **84j:35115**
- Li, Cai Zhong A note on Lagrange coordinate systems. (Chinese. English summary) **84m:35075**
- See also Wang, Jing Hua, **84f:35093**
- Liu, Tai Ping A system of quasilinear hyperbolic partial differential equations. **84c:35092**

- Lyons, William K. Conservation laws with sharp inhomogeneities. **84d:35097**
- Malek-Madani, Reza Formation of singularities for a conservation law with damping term. **84m:35076**
- Mazet, P. A. On a variational approach to conservative hyperbolic systems. **84m:35077**
- Osher, Stanley The Riemann problem for nonconvex scalar conservation laws and Hamilton-Jacobi equations. **84j:35116**
- Petrosyan, N. S. Asymptotic behavior of the solution of the Cauchy problem for a first-order quasilinear equation with nonconvex state function. (Russian) **84f:35090**
- Qin, Meng Zhao (with Tu, Gui Zhang) Three basic conservation laws of a class of evolution equations. (Chinese. English summary) **84a:35163**
- Shearer, Michael The Riemann problem for a class of conservation laws of mixed type. **84a:35164**
- Temple, Blake Global solution of the Cauchy problem for a class of 2×2 nonstrictly hyperbolic conservation laws. **84f:35091**
- Systems of conservation laws with coinciding shock and rarefaction curves. (See **84f:35004**)
- Tu, Gui Zhang Conservation laws and symmetries of nonlinear evolution equations. **84d:35093**
- See also Qin, Meng Zhao, **84a:35163**
- Véron, Laurent See Diaz Diaz, Jesús Ildelfonso, **84h:35099**
- Volkov, L. G. Conservation laws in one-dimensional nonlinear hyperelasticity. (Russian) **84m:35078**
- Wagner, David H. The Riemann problem in two space dimensions for a single conservation law. **84f:35092**
- Wang, Jing Hua The asymptotic behavior of solutions of a single conservation law. **84a:35165**
- (with Li, Cai Zhong) Study of the global solutions for nonlinear conservation laws. **84f:35093**

secondary classifications:

- Chang, Peter H. Necessary and sufficient conditions for the existence of shock curves of hyperbolic 1-conservation laws. **(84a:35168)**
- Cherednik, I. V. Conservation laws and elements of scattering theory for principal chiral fields ($d=1$). (Russian. English summary) **(84f:81090)**
- Douglas, Jim, Jr. (with Wheeler, Mary Fanett) Implicit, time-dependent variable grid finite difference methods for the approximation of a linear waterflood. **(84a:65078)**
- Erig, W. See Steeb, Willi-Hans; et al., **(84h:58056)**
- Flaschka, H. Construction of conservation laws for Lax equations. Comments on a paper: "On two constructions of conservation laws for Lax equations" [Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 128, 491-512; MR 83e:58043] by G. Wilson. **(84f:58059)**
- Jeffrey, Alan Discontinuous change and superposition in nonlinear waves. **(84h:35144)**
- Kobayasi, Kazuo (with Ôharu, S.) On nonlinear evolution operators associated with certain nonlinear equations of evolution. **(84m:35029)**
- LeVeque, Randall J. Large time step shock-capturing techniques for scalar conservation laws. **(84e:65099)**
- Ôharu, S. See Kobayasi, Kazuo, **(84m:35029)**
- Olver, Peter J. Conservation laws of free boundary problems and the classification of conservation laws for water waves. **(84e:35156)**
- Osher, Stanley (with Ralston, James) L^1 stability of travelling waves with applications to convective porous media flow. **(84j:35090)**
- Ralston, James See Osher, Stanley, **(84j:35090)**
- Rosencrans, S. I. Conservation laws generated by pairs of non-Hamiltonian symmetries. **(84c:58235)**
- Schönbek, Maria Elena Convergence of solutions to nonlinear dispersive equations. **(84h:35135)**
- Schröter, J. See Steeb, Willi-Hans; et al., **(84h:58056)**
- Sokolov, V. V. See Svinolupov, S. I., **(84j:35152)**
- Steeb, Willi-Hans (with Schröter, J.; Erig, W.) A comment on conservation laws and constants of motion. **(84h:58056)**
- Şuhubi, Erdoğan S. Conservation laws for one-dimensional isentropic gas flows. **(84m:76072)**
- Svinolupov, S. I. (with Sokolov, V. V.) Evolution equations with nontrivial conservation laws. (Russian) **(84j:35152)**
- Wheeler, Mary Fanett See Douglas, Jim, Jr., **(84e:65078)**
- (Wilson, George) See Flaschka, H., **(84f:58059)**
- Zharinov, V. V. Conservation laws for linear systems. (Russian) **(84a:58037)**

35L67 Shocks and singularities

- Blokhin, A. M. Estimation of the energy integral of a mixed problem for gas dynamics equations with boundary conditions on the shock wave. (Russian) **84a:35166**
- Boillat, Guy Chocs avec contraintes de densité d'énergie convexe. (English summary) [Shocks with constraints and convex energy density] **84a:35167**
- Chang, Peter H. Necessary and sufficient conditions for the existence of shock curves of hyperbolic 1-conservation laws. **84a:35168**
- Cheng, Kuo Shun Formation of singularities for nonlinear hyperbolic partial differential equations. **84m:35079**
- Gardner, Robert A. On the detonation of a combustible gas. **84g:35118**
- Keyfitz, Barbara L. (with Kranzer, Herbert C.) Nonstrictly hyperbolic systems of conservation laws: formation of singularities. **84h:35102**
- Kranzer, Herbert C. See Keyfitz, Barbara L., **84h:35102**
- Li, Bang He Measure of original points of shock waves on real axis. **84a:35169**
- Liu, Tai Ping Quasilinear hyperbolic partial differential equations and the mathematical theory of shock waves. (See **84f:35004**)
- Luskin, Mitchell (with Temple, Blake) The existence of a global weak solution to the nonlinear waterhammer problem. **84h:35103**
- Majda, Andrew The stability of multidimensional shock fronts. **84e:35100**
- Pego, Robert L. Linearized stability of extreme shock profiles for systems of conservation laws with viscosity. **84h:35104**

- Shearer, Michael Admissibility criteria for shock wave solutions of a system of conservation laws of mixed type. **84c:35075**
- Temple, Blake Systems of conservation laws with invariant submanifolds. **84m:35080**
- See also Luskin, Mitchell, **84h:35103**
- Teshukov, V. M. A two-dimensional analogue of centered Riemann and Prandtl-Meyer waves. (Russian) **84a:35098**

secondary classifications:

- Arrenbrecht, W. (with Ballmann, J.) Unstetigkeitsflächen in der Kontinuumsmechanik. (English summary) [Moving surfaces of discontinuity in continuum mechanics] **(84c:01041)**
- Ballmann, J. See Arrenbrecht, W., **(84c:01041)**
- Belov, S. Ya. The flow problem for a system of equations of the one-dimensional motion of a viscous heat-conducting gas. (Russian) **(84h:73060)**
- Blokhin, A. M. Uniqueness of the classical solution of a mixed problem for equations of gas dynamics with boundary conditions on a shock wave. (Russian) **(84h:35120)**
- Carini, Giovanni Observations on the theory of shocks and consequent applications in fluid dynamics. (Italian. English summary) **(84h:76082)**
- Chen, Nei Mao On types of singularities for solutions of nonlinear hyperbolic systems. **(84h:35079)**
- (Datti, P. S.) See Morawetz, Cathleen S., **(84g:35153)**
- Ferraioli, F. See Virgopina, N., **(84h:76047)**
- Hunter, John K. (with Keller, Joseph B.) Weak shock diffraction. **(84m:76066)**
- Jeffrey, Alan See Menon, V. V.; et al., **(84h:73014)**
- Keller, Joseph B. See Hunter, John K., **(84m:76066)**
- Kruzhkov, S. N. (with Petrosyan, N. S.) The asymptotic behavior of solutions of the Cauchy problem for first-order quasilinear equations. (Russian) **(84c:35022)**
- Laubin, P. Propagation des singularités analytiques pour des opérateurs à caractéristiques de multiplicité variable. (English summary) [Propagation of analytic singularities for operators with characteristics of variable multiplicity] **(84g:35004)**
- Menon, V. V. (with Sharma, V. D.; Jeffrey, Alan) On the general behavior of acceleration waves. **(84h:73014)**
- Morawetz, Cathleen S. ★ Lectures on nonlinear waves and shocks. **(84g:35153)**
- Nobel, John A. A nonlinear conservation law with memory. **(84c:45021)**
- Petrosyan, N. S. See Kruzhkov, S. N., **(84c:35022)**
- Prasad, Phoolan Kinematics of a multidimensional shock of arbitrary strength in an ideal gas. **(84h:76046)**
- Sharma, V. D. See Menon, V. V.; et al., **(84h:73014)**
- Shirotu, Taira On the stability of planar step shock fronts in multidimensional spaces. **(84f:76038)**
- Tsuji, Mikio Formation of singularities for Hamilton-Jacobi equation. I. **(84h:35098)**
- Virgopina, N. (with Ferraioli, F.) Interaction between a weak discontinuity wave and a blast wave: search for critical times for transmitted waves in self-similar flows. (Italian and Russian summaries) **(84h:76047)**

35L70 Second-order nonlinear equations and systems

- Azov, D. G. A class of hyperbolic Monge-Ampère equations. (Russian) **84d:35099**
- Bachelot, Alain Problème de Cauchy pour des systèmes hyperboliques semi-linéaires. [Cauchy problem for semilinear hyperbolic systems] (See **84i:35003**)
- Brenner, Philip On L_p -decay and scattering for nonlinear Klein-Gordon equations. **84d:35094**
- Brézis, Haim Periodic solutions of nonlinear vibrating strings. **84c:35100**
- Cesari, Lamberto (with Kannan, Rangachary) Periodic solutions of nonlinear wave equations with damping. **84g:35119a**
- (with Kannan, Rangachary) Solutions of nonlinear wave equations with nonlinear damping. **84g:35119b**
- Chen, Chang Ping (with von Wahl, Wolf) Das Rand-Anfangswertproblem für quasilineare Wellengleichungen in Sobolevräumen niedriger Ordnung. (English summary) [The initial-boundary value problem for quasilinear wave equations in Sobolev spaces of lower order] **84b:35081**
- Citrini, Claudio (with Marchionna, Clelia) On the problem of the point shaped obstacle for the vibrating string equation $\square y = f(x, t, y, y_x, y_t)$. (Italian. English summary) **84h:35082**
- Davtyan, M. D. The Dirichlet problem for a certain nonlinear hyperbolic equation. (Russian. English and Armenian summaries) **84j:35117**
- Dragieva, N. A. Solution of a nonlinear hyperbolic equation. (Russian) (See **84c:40002**)
- Ebihara, Yukiyo On solutions of semilinear wave equations. **84h:35105**
- (Fey, B.) See Höder, Ernst, **84c:35076**
- Gegya, D. I. Characteristic problem for the Monge-Ampère equation of hyperbolic type. (Russian) **84h:35083**
- Gikhman, I. I. A nonlinear stochastic boundary value problem for an equation of hyperbolic type. (Russian) **84a:35170**
- Glassey, Robert T. Existence in the large for $\square u = F(u)$ in two space dimensions. **84h:35106**
- Grigoliya, M. P. A modified characteristic problem for hyperbolic systems with singularities. (Russian) **84a:35171**
- Hall, William S. Recent results for wave equations of Rayleigh and van der Pol type. **84m:35081**
- Höder, Ernst Approximation von Extremalfächentücken (hyperbolischen Typs) durch charakteristische räumliche Vierecke. (English summary) [Approximation of pieces of extremal surfaces (of hyperbolic type) by characteristic spatial quadrangles] **84c:35076**
- Hofer, Helmut On the range of a wave operator with nonmonotone nonlinearity. **84e:35101**
- John, Fritz Lower bounds for the life span of solutions of nonlinear wave equations in three dimensions. **84c:35172**
- Kannan, Rangachary See Cesari, Lamberto, **84g:35119**
- Kantor, B. E. Uniqueness of the solution of a Monge-Ampère equation of hyperbolic type with two fixed characteristics. (Russian) **84j:35118**

- Klainerman, Sergiu** Classical solutions to nonlinear wave equations and nonlinear scattering. **84c:35095**
 (with Ponce, Gustavo) Global, small amplitude solutions to nonlinear evolution equations. **84c:35173**
 On "almost global" solutions to quasilinear wave equations in three space dimensions. **84c:35102**
- Larkin, N. A.** Solvability in the large of boundary value problems for a class of quasilinear hyperbolic equations. (Russian) **84b:35084**
- Marchionna, Celia** See Citrini, Claudio, **84b:35082**
- Marmé, M.** See Höder, Ernst, **84c:35076**
- Me'nik, Z. O.** A mixed problem with unknown boundary for a general second-order two-dimensional hyperbolic equation. (Russian. English summary) **84m:35082**
- Menzala, Gustavo Perla** Some remarks on a wave equation with a nonlocal interaction. **84d:35100**
 On a semilinear wave equation: the Cauchy problem and the asymptotic behavior of solutions. **84m:35083**
- Niwa, Yoshiaki** Existence of global solutions for nonlinear wave equations. **84c:35096**
- Ollivry, Jean-Pascal** Vibrations forcées pour une équation d'onde non linéaire. (English summary) [Forced vibrations for a nonlinear wave equation] **84c:35101**
- Pecher, Hartmut** Decay and asymptotics for higher-dimensional nonlinear wave equations. **84c:35077**
- Peral Alonso, Irene** (with Peral Alonso, Juan C.; Wallias, M.) L^p -estimates for hyperbolic operators. Applications to $\square u = u^3$. (French summary) **84b:35085**
- Peral Alonso, Juan C.** See Peral Alonso, Irene; et al., **84b:35085**
- Pikulin, V. P.** A nonlinear hyperbolic equation. (Russian) **84f:35094**
- Ponce, Gustavo** See Klainerman, Sergiu, **84c:35173**
- Rabinowitz, Paul H.** On nontrivial solutions of a semilinear wave equation. **84j:35119**
- Reed, Michael C.** Recent progress in the singularity theory for semilinear waves. (See **84d:35004**)
- Segeda, Yu. N.** Invariant solutions of a nonlinear wave equation. (Russian. English summary) **84b:35086**
- Serov, N. I.** Nonlinear Lamé and Weyl wave equations. (Russian. English summary) **84b:35087**
- Shibata, Yoshihiro** On the global existence of classical solutions of mixed problem for some second order nonlinear hyperbolic operators with dissipative term in the interior domain. **84m:35084**
 On the global existence of classical solutions of second order fully nonlinear hyperbolic equations with first order dissipation in the exterior domain. **84f:35095**
- Shul'ga, M. V.** Particular solutions of the wave equation with cubic nonlinearity. (Russian. English summary) **84b:35088**
- Smiley, Michael W.** Existence theorems for nonlinear hyperbolic boundary value problems at resonance. **84b:35089**
- Strauss, Walter A.** Stable and unstable states of nonlinear wave equations. **84b:35107**
- Tobias, T.** Approximate determination of parameters in a nonlinear wave propagation model. (Russian) **84c:35174**
- Tsutsumi, Masayoshi** Scattering of solutions of nonlinear Klein-Gordon equations in three space dimensions. **84m:35085**
- Véron, Laurent** Équations d'évolution semi-linéaires du second ordre dans L^1 . [Second-order semilinear evolution equations in L^1] **84c:35102**
- von Wahl, Wolf** See Chen, Chang Ping, **84b:35081**
- Wallias, M.** See Peral Alonso, Irene; et al., **84b:35085**
- Wu, Shao Ping** A resonance case for an asymptotically linear vibrating string equation. **84d:35101**
- Yamada, Yoshio** On some quasilinear wave equations with dissipative terms. **84a:35175**
- Zhukov, A. F.** A sufficient condition for solvability of the Cauchy problem for a nonlinear wave equation. (Russian) **84c:35103**
- secondary classifications:
- Asorov, A.** See Khudaverdiev, K. I., **(84g:35013)**
- Brézis, Haim** Periodic solutions of nonlinear vibrating strings and duality principles. **(84c:35010)**
- Cagnac, Francis** (with Choquet-Bruhat, Yvonne) Solution globale d'une équation non linéaire sur une variété hyperbolique. (English summary) [Global solution of a nonlinear hyperbolic equation on a manifold] **(84i:58119)**
- Cannon, John R.** (with DuChateau, P.) An inverse problem for an unknown source term in a wave equation. **(84g:35161)**
- Cesari, Lamberto** (with Kannan, Rangachary) Periodic solutions of nonlinear wave equations. **(84c:35011)**
- Choquet-Bruhat, Yvonne** See Cagnac, Francis, **(84i:58119)**
- Coron, Jean-Michel** Nontrivial periodic solutions of a nonlinear wave equation. (See **84m:35001**)
 Periodic solutions of a nonlinear wave equation without assumption of monotonicity. **(84d:35010)**
- DuChateau, P.** See Cannon, John R., **(84g:35161)**
- Glasse, Robert T.** (with Pecher, Hartmut) Time decay for nonlinear wave equations in two space dimensions. **(84a:35028)**
- Guo, Bo Ling** The global solutions of some problems for a system of equations of Schrödinger-Klein-Gordon field. **(84a:35260)**
- Haimovici, Adolf** Generalized periodic solutions of hyperbolic partial differential equations. **(84c:35013)**
- Haraux, Alain** Dissipativity in the sense of Levinson for a class of second-order nonlinear evolution equations. **(84a:34069)**
 Generalized almost periodic solutions and ergodic properties of quasi-autonomous dissipative systems. **(84g:34109)**
 Almost-periodic forcing for a wave equation with a nonlinear, local damping term. **(84c:35012)**
- Hofer, Helmut** On strongly indefinite functionals with applications. **(84c:58015)**
- Kannan, Rangachary** (with Lakshmikantham, V.) Periodic solutions of nonlinear hyperbolic problems. **(84g:35012)**
 See also Cesari, Lamberto, **(84c:35011)**
- Keller, Clayton** Large-time asymptotic behavior of solutions of nonlinear wave equations perturbed from a stationary ground state. **(84j:35016)**
- Khrychér, D. A.** On a stochastic quasilinear hyperbolic equation. (Russian) **(84a:35300)**
- Khudaverdiev, K. I.** (with Asorov, A.) Some difficulties that arise in the investigation of periodic (with respect to time) solutions of nonlinear hyperbolic equations. (Russian) **(84g:35013)**
- Korman, Philip** Existence of solutions for a class of nonlinear noncoercive problems. **(84f:35010)**
- Kreith, Kurt** Qualitative theory of hyperbolic characteristic initial value problems. (See **84b:34002**)
- Lakshmikantham, V.** See Kannan, Rangachary, **(84g:35012)**
- Lovicar, Vladimir** Free vibrations for the equation $u_{tt} - u_{xx} + f(u) = 0$ with f sublinear. **(84m:35010)**
- Massatt, Paul** Asymptotic behavior for a strongly damped nonlinear wave equation. (See **84c:00009**)
- Negrini, Paolo** The Darboux problem in Banach spaces. (Italian. English summary) **(84b:35116)**
- Pecher, Hartmut** See Glassey, Robert T., **(84a:35028)**
- Sasaki, Shigeru** On nonlinear hyperbolic evolution equations with unilateral conditions dependent on time. **(84g:34112)**
- Shatah, Jalal** Stable standing waves of nonlinear Klein-Gordon equations. **(84m:35111)**
- Sprekels, Jürgen** (with Voss, Heinrich) Bounds and domains of existence for hyperbolic initial-value problems. (German summary) **(84m:65102)**
- Voss, Heinrich** See Sprekels, Jürgen, **(84m:65102)**
- 35L75 Higher (>2) order nonlinear equations and systems
- Bony, Jean-Michel** Interaction des singularités pour les équations aux dérivées partielles non linéaires. [Interaction of singularities for nonlinear partial differential equations] **84j:35120**
- Cesari, Lamberto** (with Kannan, Rangachary) Solutions of nonlinear hyperbolic equations at resonance. **84a:35176**
- Fu, Hong Yuan** See Zhou, Yu Lin, **84f:35096**
- Kannan, Rangachary** See Cesari, Lamberto, **84a:35176**
- Serov, N. I.** Conformal invariance of nonlinear wave equations. (Russian. English summary) **84b:35090**
- Zhemukhov, Kh. K.** The Cauchy problem for a fourth-order quasilinear degenerate hyperbolic equation. (Russian) (See **84e:78002**)
- Zhou, Yu Lin** (with Fu, Hong Yuan) Quasilinear quasihyperbolic systems of higher order. (Chinese. English summary) **84f:35096**
- secondary classifications:
- Salikhov, Sh. N.** A boundary value problem for a third-order nonlinear equation with real characteristics. (Russian) **(84j:35125)**
- Sanchez, L.** See Zhang, Gong Qing, **(84b:35095)**
- Zhang, Gong Qing** (with Sanchez, L.) Nontrivial periodic solutions of a nonlinear beam equation. **(84b:35095)**
- 35L80 Equations and systems of degenerate type
- Baranovskii, F. T.** The Cauchy problem with modified initial data for a degenerate hyperbolic equation of special form. (Russian) **84a:35177**
 The Goursat problem for a hyperbolic equation that degenerates in the interior and on the boundary of the domain. (Russian) **84b:35091**
- Bryukhanov, V. A.** First mixed problem for a class of degenerate hyperbolic equations. (Russian) **84m:35086**
- Chan Dyk Van** Solvability of a mixed problem for infinite-order nonlinear hyperbolic degenerate equations. (Russian) **84a:35178**
- Gadzhiev, M. M.** A mixed problem for a degenerate hyperbolic equation. (Russian) (See **84m:35003**)
- Kagan, G. M.** The Huygens principle for the solution of the singular Cauchy problem. (Russian) (See **84m:35003**)
- Kokina, N. O.** Uniqueness of the solution of the Δ_2 problem for an equation of hyperbolic type. (Russian) (See **84m:35003**)
- Kuzikov, S. S.** Uniqueness of the solution of a boundary value problem for a degenerate nonlinear hyperbolic system. (Russian) **84a:35179**
- Me'nikova, M. I.** See Volkodavov, V. F., **84a:35183**
- Mirsaburov, M.** See Salakhitdinov, M. S., **84a:35181** and **84b:35092**
- Orazov, I.** A problem with displacement for a hyperbolic equation with noncharacteristic degeneration on part of the boundary. (Russian) **84a:35180**
- Rassias, John Michael** An application of the theory of positive symmetric systems to a degenerate multidimensional hyperbolic equation in \mathbb{R}^3 . **84g:35120**
- Sakamoto, Reiko** Mixed problems for degenerate hyperbolic equations. **84c:35097**
- Salakhitdinov, M. S.** (with Mirsaburov, M.) Some boundary value problems for a hyperbolic equation that degenerates inside the domain. (Russian) **84b:35092**
 (with Mirsaburov, M.) Two nonlocal boundary value problems for a degenerate hyperbolic equation. (Russian) **84a:35181**
- Semerdzhiya, Rositsa I.** A hyperbolic equation with degeneration of order. (Russian) **84a:35182**
 A class of degenerate hyperbolic equations. (Russian) **84b:35108**
 A hyperbolic equation with degeneration of order. (Russian) (See **84c:34002**)
- Shinkai, Kenzo** On the fundamental solution for a degenerate hyperbolic system. **84c:35103**
- Volkodavov, V. F.** (with Me'nikova, M. I.) A problem with nonlocal boundary conditions for a degenerate hyperbolic equation. (Russian) **84a:35183**

secondary classifications:

- Berzhanishvili, D. A.** The initial value problem for the von Kármán equation in the large. (Russian) (84d:35131)
- Dzhokhadze, O. M.** Solvability of the Cauchy problem in the large for a quasilinear hyperbolic equation with parabolic degeneration. (Russian. English and Georgian summaries) (84c:35093a)
- Characteristic Goursat problem in the large for a class of quasilinear hyperbolic equations. (Russian) (84c:35093b)
- Eldeshaev, T.** A formulation of the inverse problem for a hyperbolic equation with characteristic degeneracy of type. (Russian) (84g:35162)
- Li, Zhi Liang** (with Xu, Meng Jie) Existence and uniqueness of a local classical solution of mixed problems of quasilinear hyperbolic-parabolic coupled systems. (Chinese. English summary) (84i:65096)
- Moiseev, E. I.** An integral representation of the solution of the Darboux problem. (Russian) (84b:35094)
- Tarama, Shigeo** Sur le problème de Cauchy pour une classe des opérateurs différentiels du type faiblement hyperbolique. [On the Cauchy problem for a class of differential operators of weakly hyperbolic type] (84j:35107)
- Xu, Meng Jie** See **Li, Zhi Liang**, (84i:65096)
- Yamamoto, Kazuhiro** The Cauchy problem for hyperbolic operators with nonsmooth characteristic roots. (84g:35110)

35L85 Unilateral problems; variational inequalities [See also 35R35, 49A29.]

secondary classifications:

- d'Acunio, Bernardino** (with D'Anna, A.; Renno, Pasquale) On the motion of a viscoelastic solid in presence of rigid wall. I. Darboux and general Cauchy problems for a third-order hyperbolic operator: explicit Riemann function and maximum principles. (Italian summary) (84k:73025)
- Amerio, Luigi** Unilateral problems for quasilinear hyperbolic equations in two variables. (Italian) (84i:35095)
- Battistini, Egidio** ★Analisi di un problema di propagazione con vincolo unilaterale. (Italian) [Analysis of a propagation problem with unilateral bounds] (84k:73037)
- Cocu, Marius** A quasivariational inequality occurring in friction problems. (84c:49009)
- D'Anna, A.** See **d'Acunio, Bernardino**; et al., (84k:73025)
- Diaz Diaz, Jesús Ildefonso** (with Véron, Laurent) Existence theory and qualitative properties of the solutions of some first order quasilinear variational inequalities. (84h:35099)
- Renno, Pasquale** See **d'Acunio, Bernardino**; et al., (84k:73025)
- Véron, Laurent** See **Diaz Diaz, Jesús Ildefonso**, (84h:35099)

35L99 None of the above, but in this section

- Aurilia, A.** (with Christodoulou, Demetrios) Theory of strings and membranes in an external field. I. General formulation. (84a:35184)
- Cagnac, Francis** Problème de Cauchy sur un cône caractéristique pour des équations quasi-linéaires. (English summary) [The Cauchy problem on a characteristic conoid for quasilinear equations] (84a:35185)
- Christodoulou, Demetrios** See **Aurilia, A.**, (84a:35184)
- Donato, A.** (with Fusco, Domenico) Some properties of a hyperbolic model of heat transfer. (Italian. English summary) (84a:35186)
- Fusco, Domenico** See **Donato, A.**, (84a:35186)
- Geng, Guang** See **Ling, Ling**, (84g:35122)
- Kobayashi, Takao** Elementary solutions and propagation of singularities for hyperbolic operators with involutive characteristics. (84c:35098)
- Lascar, Bernard** (with Lascar, Richard) Propagation des singularités pour des équations hyperboliques à caractéristiques de multiplicité au plus double et singularités masloviennes. II. [Propagation of singularities for hyperbolic equations with multiplicity of at most two and Maslov singularities. II] (84k:35099)
- Lascar, Bernard** See **Lascar, Bernard**, (84k:35099)
- Lenskii, E. V.** A system of quasilinear equations. (Russian. English summary) (84g:35121)
- Ling, Ling** (with Geng, Guang) The elementary solution of the ultrahyperbolic equation and Asgerisson's theorem. (Chinese) (84g:35122)
- Smiley, Michael W.** An existence theorem for abstract nonlinear hyperbolic boundary value problems at resonance. (84h:35109)
- Umarov, Kh. G.** Solution by Riemann's method of the Goursat problem for certain hyperbolic equations with variable operator coefficients. (Russian) (84d:35102)
- Urbanowski, Paweł** Nonhomogeneous mixed Neumann problem for nonlinear wave equation. (84j:35121)

secondary classifications:

- Bassanini, Piero** (with Salvatori, M. Cesarina) A boundary value problem for nonlinear hyperbolic integro-differential systems. (Italian. English summary) (84h:45015)
- (with Galaverni, Manuela) Multiple contractions, hyperbolic systems and the laser problem. (Italian. English summary) (84m:78034)
- Bellman, Richard Ernest** Nonlinear hyperbolic partial differential equations and dynamic programming. (84j:49023)
- Bernardi, Marco Luigi** Second order abstract differential equations with singular coefficients. (84b:34062)
- Christodoulou, Demetrios** (with Ó Murchadha, N.) The boost problem in general relativity. (84e:83011)
- Cordes, Heinz O.** A version of Egorov's theorem for systems of hyperbolic pseudodifferential equations. (84d:35152)
- Dafermos, C. M.** The equations of elasticity are special. (84m:73035)
- Day, W. D.** Asymptotic behaviour in dynamic linear thermoelasticity: an application of differential iteration. (84j:73094)
- Dietz, Klaus** See **Hadeler, K. P.**, (84h:92031)

- Dossa, Marcel** Inégalités énergétiques sur un cône caractéristique. (English summary) [The energy inequalities on a characteristic cone] (84c:58080)
- Edelstein, Leah** The propagation of fungal colonies: a model for tissue growth. (84f:92007)
- Galaverni, Manuela** See **Bassanini, Piero**, (84m:78034)
- Giambo, S.** Sur l'exceptionnalité stricte pour un fluide relativiste conducteur de chaleur. (English summary) [Strict exceptionality for a heat-conducting relativistic fluid] (84i:76088)
- Gilbert, Robert P.** (with Jeffrey, Alan) A reactive shock in a polytropic gas. (84k:76083)
- Gilliam, David S.** (with Schulerberger, John R.) On the structure of surface waves. (84k:78012)
- Graffi, Dario** On some Italian contributions to nonlinear optics. (Italian) (84j:78001)
- Hadeler, K. P.** (with Dietz, Klaus) Nonlinear hyperbolic partial differential equations for the dynamics of parasite populations. (84h:92031)
- Inan, Esin** The propagation of weak discontinuities in quasilinear hyperbolic systems in the presence of a strong discontinuity. II. Application to hyperelastic media. (Turkish summary) (84c:73033)
- Jeffrey, Alan** See **Gilbert, Robert P.**, (84k:76083)
- Khrychev, D. A.** On the solvability of a nonlinear hyperbolic equation with white noise. (Russian) (84b:35126)
- Kovaler, V. A.** A new method of reconstruction of the solution of a boundary value problem for an equation of hyperbolic type. (Russian) (84i:35033)
- Kreith, Kurt** Oscillation properties of weakly time dependent hyperbolic equations. (84c:35008)
- Kucherenko, V. V.** (with Osipov, Yu. V.) Justification of formal asymptotic solutions for ordinary differential equations with a degenerate symbol. (Russian) (84j:34053)
- Lerat, A.** Propriété d'homogénéité et décomposition des flux en dynamique des gaz. (English summary) [Homogeneous property and flux splitting in gas dynamics] (84j:76030)
- Levit'skii, B. A.** (with Yappa, Yu. A.) On the structure of the energy-momentum tensor and the spin tensor in the covariant theory of a spinor field. (Russian. English summary) (84i:83045)
- Lewis, Jeff E.** (with Parenti, Cesare) Abstract singular parabolic equations. (84h:34088)
- (with Parenti, Cesare) L^p -estimates for a singular hyperbolic equation. (See 84m:42002)
- Lions, Pierre-Louis** ★Generalized solutions of Hamilton-Jacobi equations. (84a:49036)
- Marcati, Pierangelo** Stability analysis of abstract hyperbolic equations using families of Liapunov functions. (See 84j:00010)
- Matsumoto, Hideki** See **Semenoff, G.**; et al., (84d:81047)
- Meleshko, S. V.** A class of solutions of systems of quasilinear differential equations with many independent variables. (Russian) (84j:35029)
- Ó Murchadha, N.** See **Christodoulou, Demetrios**, (84c:83011)
- Osipov, Yu. V.** See **Kucherenko, V. V.**, (84j:34053)
- Palamodov, V. P.** Caustics of wave processes and generalized functions that are connected with singular analytic hypersurfaces. (Russian) (84m:58150)
- Parenti, Cesare** See **Lewis, Jeff E.**, (84h:34088) and (See 84m:42002)
- Pimbley, George H.** On a nonlinear semigroup theory for systems. (84k:34068)
- Radcliffe, J.** (with Rass, L.) Wave solutions for the deterministic nonreducible n -type epidemic. (84i:92070)
- Rass, L.** See **Radcliffe, J.**, (84i:92070)
- Salvatori, M. Cesarina** See **Bassanini, Piero**, (84h:45015)
- Schulerberger, John R.** See **Gilliam, David S.**, (84k:78012)
- Semenoff, G.** (with Matsumoto, Hideki; Umezawa, H.) Position operators for extended objects in quantum field theory. (84d:81047)
- Taylor, Michael E.** Diffraction effects in the scattering of waves. (84h:78016)
- Temchin, A. N.** The Cauchy problem for the Einstein equations. (Russian) (84j:83009)
- Umezawa, H.** See **Semenoff, G.**; et al., (84d:81047)
- Yappa, Yu. A.** See **Levit'skii, B. A.**, (84i:83045)

35M05 Equations and systems of mixed (Tricomi, etc.) or composite type [For degenerate types, elliptic, see 35Jxx, parabolic, see 35Kxx, hyperbolic, see 35Lxx, etc.]

- Abdinazarov, S.** Some boundary value problems of Bitsadze-Samarskii type for a third-order equation with multiple characteristics. (Russian) (84a:35187)
- Aldashev, S. A.** A priori estimates for the Tricomi and Darboux problems. (Russian) (84h:35110)
- Aleksandrova, T. N.** A boundary value problem for a three-dimensional equation in an infinite domain. (Russian) (84a:35188)
- Asta'eva, L. K.** The Tricomi problem with polynomial shift. (Russian) (See 84m:35003)
- On the nonlinear Tricomi problem. (Russian) (84a:35189)
- Aubakirov, B. U.** Regular boundary value problems for an equation of mixed type. (Russian. Kazakh summary) (84g:35123)
- Azovskii, V. V.** (with Gubaidullin, K. A.) Two problems for an equation of composite type in the half plane. (Russian) (84a:35190)
- Bazarbekov, A. B.** (with Kal'menov, T. Sh.) Criterion for the strong solvability of the Tricomi problem for the Lavrent'ev-Bitsadze equation in L_p spaces. (Russian) (84h:35111)
- Berdyshev, A. S.** See **Salakhitdinov, M. S.**, (84a:35210) and (84k:35102)
- Bochkarev, A. P.** Generalized problems Δ_1 and Δ_2 for the Euler-Darboux equation with equal negative parameters that are piecewise constant in the domain considered. I. (Russian) (84a:35191)
- (with Volkodavov, V. F.) The Tricomi problem for an equation of mixed type with special conjugacy conditions. (Russian) (See 84m:35003)
- Bubnov, B. A.** Generalized Tricomi problem for a class of second-order equations. (Russian) (84g:35124)
- Chang, Ch'u Chün** On uniqueness of generalized Tricomi problems. (84g:35125)
- Dachev, G. D.** Boundary value problems for a class of equations of mixed type. (Russian) (84c:35104)

- Dzhuraev, A. An initial-boundary value problem for a second-order multidimensional system of composite type. (Russian) **84m:35087**
- Dzhuraev, T. D. (with Mamazhanov, M.) Some boundary value problems for third-order equations of mixed-composite type, which contain a parabolic-hyperbolic operator with lower-order terms. (Russian) **84m:35192**
(with Mamazhanov, M.) A boundary value problem for a third-order equation of mixed-composite type that contains a parabolic-hyperbolic operator with lowest terms. (Russian) **84m:35093**
(with Mamazhanov, M.) Well-posed formulation of boundary value problems for a class of third-order equations of parabolic-hyperbolic type. (Russian) **84g:35126**
- Egorov, I. E. Global solution for a nonlinear hyperbolic-parabolic equation. (Russian. English summary) **84g:35127**
- Elenin, G. G. A system of quasilinear nonstationary equations of mixed type. (Russian) **84m:35193**
- Fan Dyk Chau. Equations of mixed type with two perpendicular lines of degeneracy. I. Uniqueness theorem. (Russian) **84m:35105a**
Equations of mixed type with two perpendicular lines of degeneracy. II. Existence of a strong solution. (Russian) **84m:35105b**
- Fedyuk, V. F. A system of differential equations of hyperbolic-parabolic type. (Russian. Tajiki summary) **84m:35112**
- Gabor, S. A. (with Malysheva, G. Yu.; Sveshnikov, A. G.) An equation of composite type connected with oscillations of a compressible stratified fluid. (Russian) **84g:35128**
- Gavrilova, E. G. A boundary value problem for an equation of mixed type. (Russian) (See **84c:34002**)
- Gindikin, S. G. See Volevich, L. R., **84c:35078**
- Gu, Chao Hao. On a class of mixed partial differential equations of higher order. (Chinese summary) **84g:35129**
- Gubaidullin, K. A. See Azovskii, V. V., **84m:35190**
- Hong, Jia Xing. On boundary value problems for mixed equations with characteristic degenerate surfaces. (Chinese summary) **84d:35103**
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On boundary value problems for mixed equations with characteristic degenerate surfaces. (See **84d:00020**)
- Isamukhamedov, S. S. (with Oramov, Zh.) On boundary value problems for equations of mixed type of the second kind with a nonsmooth line of degeneracy. (Russian) **84d:35104**
- Ismayil'din, A. Kh. Boundary value problems for a class of solutions of a fourth-order equation with a line of degeneracy in the interior of the domain considered. (Russian) **84c:35195**
- Jamolauskas, Algimantas. Elliptic regularization of systems of composite type. (Russian. English and Lithuanian summaries) **84f:35104**
- Kal'menov, T. Sh. Selfadjoint boundary value problems for the Tricomi equation. (Russian) **84g:35130**
See also Bazarbekov, A. B., **84h:35111**
- Kamynin, L. I. (with Khimchenko, B. N.) On the strict anisotropic extremum principle for a second-order elliptic-parabolic equation. (Russian) **84f:35097**
- Kapustin, N. Yu. On the theory of equations of mixed type. (Russian) **84a:35196**
On the theory of boundary value problems for systems of equations of mixed type. (Russian) **84h:35113**
- Khalfina, E. Kh. A nonclassical problem for an equation of mixed type of the second kind with two lines of degeneracy. (Russian) (See **84m:35003**)
- Kharkhasaev, V. N. A boundary value problem for a fourth-order nonlinear equation of mixed-composite type. (Russian) **84f:35098**
Solvability of the Dirichlet problem for a fourth-order nonlinear equation of mixed type. (Russian) **84f:35099**
- Khasanov, A. On a mixed problem for the equation $\text{sign } y \Delta u^{1/2} + x^n u_{yy} = 0$. (Russian) **84c:35197**
See also Salakhitdinov, M. S., **84m:35089**
- Khimchenko, B. N. See Kamynin, L. I., **84f:35097**
- Khubanov, K. I. Boundary value problems for a third-order equation of mixed type. (Russian) (See **84c:34002**)
- Kislov, N. V. A boundary value problem of mixed type in divergence form. (Russian) **84c:35104**
Well-posed boundary value problems for an equation of mixed type in a rectangular domain. (Russian) (See **84m:35003**)
On the question of the spectrum of the Gevrey problem for an equation of mixed type. (Russian) **84g:35131**
- Kokina, N. O. Solution of a singular Tricomi problem for an equation of mixed type with different parameters. (Russian) **84a:35198**
- Kovachev, D. V. Generalization of the Frankl' problem for an equation with two parallel lines of change of type. (Russian) (See **84c:34002**)
- Kulazhanov, S. K. A mixed problem for a model equation of mixed type. (Russian) **84d:35105**
- Kuliev, M. A. Classical solution of the inverse problem for parabolic-hyperbolic systems of equations. (Russian) **84f:35100**
- Kuzrikov, S. S. Differential properties of solutions of a model of transonic gas dynamics. (Russian) **84g:35132**
- Lyapidevskii, V. Yu. The Cauchy problem for quasilinear systems of equations of variable type. (Russian) (See **84c:34002**)
- Maigorov, I. V. Uniqueness of the solution of the modified Frankl' problem. (Russian) **84c:35100**
- Malysheva, G. Yu. See Gabor, S. A.; et al., **84g:35128**
- Mamazhanov, M. See Dzhuraev, T. D., **84c:35192**; **84m:35093** and **84g:35126**
- Meredova, M. M. Initial-boundary value problem for a sixth-order equation. (Russian. English summary) **84h:35114**
- Mikhailov, K. I. Boundary value problems for a third-order equation of mixed type. (Bulgarian. French and Russian summaries) **84f:35101**
- Mirsaburov, M. A nonlocal boundary value problem for an equation of mixed type with singular coefficients on the line of degeneracy. (Russian) **84a:35199**
- Moiseev, E. I. An integral representation of the solution of the Darboux problem. (Russian) **84b:35094**
- Müller-Rettkowski, A. (with Schneider, Manfred) Über die Existenz und Eindeutigkeit einer Lösung für ein Randwertproblem für eine Gleichung vom gemischten Typ in einem Rechteck. (English summary) [On the existence and uniqueness of a solution for a boundary value problem for an equation of mixed type in a rectangle] **84c:35106**
- Nagornyi, A. M. Some well-posed problems for an equation of mixed-composite type. (Russian) **84m:35200**
Some boundary value problems for third-order equations of parabolic-hyperbolic type. (Russian) **84m:35201**
- Oramov, Zh. Boundary value problems of the Bitsadze-Samarskii problem type for an equation of mixed type of the second kind with a nonsmooth line of degeneracy. (Russian) **84m:35088**
Boundary value problems for an equation of mixed type of the second kind with nonsmooth lines of degeneracy. (Russian) **84c:35101**
See also Isamukhamedov, S. S., **84d:35104**
- Padula, Mariarosaria. An evolution problem for a nonlinear hyperbolic-parabolic system. **84h:35115**
- Pergunov, V. V. The boundary value problem Σ_n for the Euler-Darboux equation with negative parameters. (Russian) **84c:35202**
- Petrov, V. G. A boundary value problem for an equation of mixed type. (Bulgarian. English and Russian summaries) **84f:35102**
A boundary value problem for an equation of mixed type. (Russian) (See **84c:34002**)
- Pleshchinskaya, I. E. The boundary value problem M for a system of equations of mixed type. (Russian) **84c:35203**
- Pleshchinskii, N. B. Application of the integral equation method to the solution of a problem of Gellerstedt type. (Russian) **84a:35204**
- Podgaev, A. G. Some ill-posed problems for equations of variable type. (Russian) **84f:35103**
- Popivanov, N. I. A multidimensional boundary value problem for a hyperbolic-parabolic equation. (Russian) **84b:35095**
- Pul'kin, S. P. (with Tyrsina, L. A.) The Tricomi problem for a nonlinear equation with a modified Karol' operator. (Russian) **84a:35205**
- Pul'kina, L. S. (with Shvetskii, M. V.) A modified Tricomi problem for an equation of mixed type of the second kind in a special bounded domain. (Russian) **84a:35206**
- Rassias, John Michael. Uniqueness and existence theorems for a mixed type equation. **84j:35122**
Mixed type partial differential equations in \mathbb{R}^n . **84j:35124**
Weak solutions of the Frankl problem in the 4-dimensional Euclidean space. (Russian summary) **84j:35123**
An extended Chaplygin problem and a uniqueness theorem for the Chaplygin-Frankl problem. **84d:35106**
- Rudneva, T. P. Uniqueness of the solution of a boundary value problem for an equation of variable type. (Russian) (See **84m:35003**)
- Rustamov, A. S. A mixed problem for an equation of composite type with variable coefficients. (Russian) **84a:35207**
- Sabitov, K. B. A Tricomi type problem for an equation with a modified Karol' operator. (Russian) **84a:35208**
- Salakhitdinov, M. S. (with Urinov, A. K.) Some boundary value problems with shift for an equation of mixed type. (Russian) **84a:35209**
(with Berdyshev, A. S.) Some nonlocal boundary value problems for a mixed parabolic-hyperbolic equation. (Russian) **84a:35210**
(with Khasanov, A.) The Tricomi problem for an equation of mixed type with a nonsmooth line of degeneracy. (Russian) **84m:35089**
(with Berdyshev, A. S.) Tricomi problems for an equation of mixed parabolic-hyperbolic type. (Russian) **84c:35102**
- Salikhov, Sh. N. A boundary value problem for a third-order nonlinear equation with real characteristics. (Russian) **84j:35125**
- Saltykova, N. M. A boundary value problem for an equation of mixed type of the second kind. (Russian) (See **84m:35003**)
- Schneider, Manfred. See Müller-Rettkowski, A., **84c:35106**
- Sergienko, I. S. The Cauchy problem for a degenerate system of composite type of first-order equations. (Russian) **84h:35116**
- Shkhamukov, M. Kh. Some boundary value problems for a third-order equation and extremal properties of its solutions. (Russian) **84g:35133**
- Shvetskii, M. V. See Pul'kina, L. S., **84a:35206**
- Smirnov, M. M. A problem with shift for an equation of mixed type of the second kind with two lines of degeneracy. (Russian) **84d:35107**
- Sokhadze, R. I. The first boundary value problem for an equation of mixed type in a rectangle. (Russian) **84d:35108**
- Sokolovskii, A. B. The generalized problems Δ_1 and Δ_2 for an Euler-Darboux equation with one of the parameters equal to 0. I. (Russian) **84a:35211**
- Sopuev, A. Estimation of the solution of the Gellerstedt problem for an equation of mixed parabolic-hyperbolic type. (Russian) **84a:35212**
Boundary value problems of A. V. Bitsadze for an equation of mixed parabolic-hyperbolic type. (Russian) **84c:35213**
- Sveshnikov, A. G. See Gabor, S. A.; et al., **84g:35128**
- Tyrsina, L. A. See Pul'kin, S. P., **84a:35205**
- Urinov, A. K. Boundary value problems of the Tricomi problem type for an equation of mixed type with a nonsmooth line of degeneracy. (Russian) **84d:35109**
See also Salakhitdinov, M. S., **84a:35209**
- Volevich, L. R. (with Gindikin, S. G.) A mixed problem for $(2b+1)$ -hyperbolic equations. (Russian) **84c:35078**
- Volkodavov, V. F. See Bochkarev, A. P., (See **84m:35003**)
- Zhegalov, V. I. On problems with shifts for an equation of mixed-composite type. (Russian) (See **84m:35003**)
On the Tricomi problem with displacement conditions and generalized gluing. (Russian) **84d:35110**

secondary classifications:

- Abdinazarov, S. See Dzhruev, T. D., (84c:35032)
- Aminov, Yu. A. Determination of a surface in a four-dimensional Euclidean space from its image in a Grassmannian. (Russian) (84a:53003)
- Dzhruev, T. D. (with Abdinazarov, S.) Boundary value problems for third-order equations with multiple characteristics in finite and infinite domains. (Russian) (84c:35032)
- Elenin, G. G. Boundaries of domains of strictly hyperbolic and composite type for nonlinear equations of two-layer "shallow water". (Russian) (84j:65066)
- Kamynin, L. I. On the uniqueness of the solution of a linear boundary value problem for a second-order elliptic-parabolic equation. (Russian) (84j:35078)
- Lavrent'ev, M. M., Jr. A priori estimates of solutions of nonlinear parabolic equations. (Russian) (84i:35025)
- Li, Zhi Liang (with Xu, Meng Jie) Existence and uniqueness of a local classical solution of mixed problems of quasilinear hyperbolic-parabolic coupled systems. (Chinese. English summary) (84i:65096)
- Lupu, Mircea L'étude d'un problème du type Tricomi au cas des mouvements transsoniques. [Study of a Tricomi-type problem in the case of transonic flow] (84f:76037)
- Malitskaya, A. P. The first mixed problem in a half space for the Sonin equation. (Russian) (84g:35100)
- Malovichko, V. A. Boundary value problems for a class of elliptic-parabolic systems. (Russian) (84d:35055)
- Orazov, I. A problem with displacement for a hyperbolic equation with noncharacteristic degeneration on part of the boundary. (Russian) (84a:35180)
- Oshorov, B. B. Some boundary value problems for a class of systems of second-order partial differential equations. (Russian) (84a:35065)
- Saigo, Megumi A certain boundary value problem for the Euler-Darboux equation. (84a:35233)
- A certain boundary value problem for the Euler-Darboux equation. II. (84a:35234)
- A certain boundary value problem for the Euler-Darboux equation. III. (84a:35235)
- Sánchez Mañes, Eva A singular perturbation in a nonlinear transmission problem. (Spanish. English summary) (84j:35014)
- Shearer, Michael The Riemann problem for a class of conservation laws of mixed type. (84a:35164)
- Shkhanukov, M. Kh. Some boundary value problems for a third-order equation and extremal properties of its solutions. (Russian) (84d:35030)
- Shopolov, N. N. The Geyre problem for a mixed-parabolic equation with two perpendicular lines of degeneracy. (Bulgarian. French and Russian summaries) (84f:35080)
- Takhirov, D. M. A boundary value problem for an operator-differential equation of mixed type. (Russian. English and Azerbaijani summaries) (84c:34093)
- Vabishchevich, P. N. Uniqueness of the solution of an inverse problem for determining the right-hand side of an elliptic equation. (Russian) (84c:35110)
- Vodakhova, V. A. A boundary value problem for a third-order equation with the nonlocal condition of A. M. Nakhushev. (Russian) (84m:35063)
- Weinacht, Richard J. A singular perturbation problem for the Lavrent'ev-Bitsadze equation. (84g:35016)
- Xu, Meng Jie See Li, Zhi Liang, (84i:65096)

35Nxx Overdetermined systems [See also 58G05, 58G07, 58Hxx.]

35N05 Constant coefficients

- Berenstein, Carlos A. (with Yang, P. C.) An overdetermined Neumann problem in the unit disk. 84c:35107
- Yang, P. C. See Berenstein, Carlos A., 84c:35107

secondary classifications:

- Nacinovich, Mauro Complex analysis and complexes of differential operators. (84c:58139)

35N10 Variable coefficients, general

- Baouendi, M. S. (with Trèves, François) A local constancy principle for the solutions of certain overdetermined systems of first-order linear partial differential equations. 84f:35105
- Samborskiĭ, S. M. Boundary value problems for overdetermined systems of partial differential equations. (Russian) 84b:35096
- Seleznev, V. A. Overdetermined systems for homeomorphisms in C^n . (Russian) 84c:35105
- Trèves, François See Baouendi, M. S., 84f:35105

secondary classifications:

- Dudnikov, P. I. (with Samborskiĭ, S. M.) Noether boundary value problems for overdetermined systems of partial differential equations. (Russian) (84a:58081)
- Eskin, Michael (with Shamir, Eliahu) Elliptic solvability of augmented differential complexes on piecewise smooth manifolds. (84c:58111)
- Kashiwara, Masaki (with Kawai, Takahiro) Theory of maximally overdetermined systems: the central case of regular singularities. (Japanese) (84c:58210)
- Kawai, Takahiro See Kashiwara, Masaki, (84c:58210)
- Qi, Min You An introduction to Sato's theory of hyperfunctions (one-variable case). II. (Chinese) (84c:58068)
- Samborskiĭ, S. M. Boundary value problems for overdetermined systems of partial differential equations. (Russian) (84a:58082)
- See also Dudnikov, P. I., (84a:58081)
- Shamir, Eliahu See Eskin, Michael, (84i:58111)

35N15 $\bar{\partial}$ -Neumann problem and generalizations; formal complexes [See also 32Fxx and 58G05.]

- Derridj, M. Le problème de Cauchy pour $\bar{\partial}$. Application. [The Cauchy problem for $\bar{\partial}$. Application.] (See 84i:35006)
- Ermine, Jean-Louis Sur un problème de $\bar{\partial}$ avec estimées. [On a $\bar{\partial}$ -problem with bounds] 84f:35106
- Frumin, I. D. Estimate of the solution of the $\bar{\partial}$ -equation in analytic polyhedra in general position. (Russian) 84j:35126
- Greiner, P. C. (with Stein, Erwin) On the solvability of some differential operators of type $\square_{\bar{\partial}}$. 84d:35111
- Jerison, David S. Boundary regularity in the Dirichlet problem for $\square_{\bar{\partial}}$ on CR manifolds. 84g:35134
- Jones, Peter Wilcox L^∞ estimates for the $\bar{\partial}$ problem in a half-plane. 84g:35135
- Kohn, J. J. Several complex variables from the point of view of linear partial differential equations. 84j:35127
- Mikhailov, L. G. Construction of a homeomorphism of a system of Beltrami differential equations with several variables. (Russian. Tajiki summary) 84c:35117
- Stein, Erwin See Greiner, P. C., 84d:35111

secondary classifications:

- Catlin, David Necessary conditions for subellipticity of the $\bar{\partial}$ -Neumann problem. (84c:32021)
- Greene, Robert Everist (with Krantz, Steven G.) Deformation of complex structures, estimates for the $\bar{\partial}$ equation, and stability of the Bergman kernel. (84b:32026)
- Krantz, Steven G. ★ Function theory of several complex variables. (84c:32001)
- See also Greene, Robert Everist, (84b:32026)
- Range, R. Michael An elementary integral solution operator for the Cauchy-Riemann equations on pseudoconvex domains in C^n . (84b:32028)
- Rea, Claudio The Cauchy problem for the $\bar{\partial}$ operator. (Italian summary) (84b:32019)
- Shaw, Mei Chi Hodge theory on domains with conic singularities. (84c:58078)
- Talhaoui, Abdallah Conditions suffisantes de sous-ellipticité pour $\bar{\partial}$. (English summary) [Sufficient conditions of subellipticity for $\bar{\partial}$] (84m:32025)
- Zorn, Paul Analytic functionals and Bergman spaces. (84d:46057)

35N99 None of the above, but in this section

secondary classifications:

- Andersson, Mats Erik Lennart See Berndtsson, B., (84j:32003)
- Berndtsson, B. (with Andersson, Mats Erik Lennart) Henkin-Ramirez formulas with weight factors. (French summary) (84j:32003)
- Fredricks, Gregory A. Functionally independent solutions to certain systems of nonlinear first order partial differential equations. (84d:58079)
- Malikov, Kh. M. Over-determination of a system of differential equations for versal integrals of type A, D, E. (Russian) (84m:58146)
- Xu, Yi Chao On the invariant differential operators of order 2 over N -Siegel domains. (Chinese) (84i:32048)

35Pxx Spectral theory and eigenvalue problems [See also 47Axx, 47Bxx, 47F05.]

- Berthier, Anne-Marie ★ Spectral theory and wave operators for the Schrödinger equation. 84c:35108

35P05 General spectral theory

- Bazarbekov, A. B. Smooth extensions of the Laplace operator in a domain with corner points. (Russian) 84j:35128
- Berthier, Anne-Marie (with Georgescu, Vladimir) Sur la propriété de prolongement unique pour l'opérateur de Dirac. (English summary) [Property of unique continuation for a Dirac operator] 84c:35118
- On the point spectrum of Schrödinger operators. 84c:35106
- de Bivar-Weinholtz, António Sur l'opérateur de Schrödinger avec potentiel singulier magnétique, dans un ouvert arbitraire de \mathbb{R}^3 . (English summary) [On the Schrödinger operator with a singular magnetic potential, in an arbitrary open subset of \mathbb{R}^3] 84a:35214
- Chushov, I. D. On the existence of domains of definition of the Schrödinger operator with a highly singular potential of paired interactions. (Russian) 84c:35079
- Dahlberg, B. E. J. (with Trubowitz, E.) A remark on two-dimensional periodic potentials. 84c:35119
- Dmitrushchenkov, V. A. The spectrum of the Schrödinger operator with periodic potential in a two-dimensional strip. (Russian) 84b:35097
- Eastham, Michael S. P. (with Kalf, Hubert) ★ Schrödinger-type operators with continuous spectra. 84c:35107
- Edmunds, David E. (with Evans, William D.; Fleckinger-Pellé, Jacqueline) Spectre d'opérateurs de Schrödinger à potentiel complexe et répartition de leurs valeurs singulières. (English summary) [Spectrum of Schrödinger operators with complex potential and distribution of their singular values] 84c:35109
- Evans, William D. See Edmunds, David E.; et al., 84c:35109
- Fleckinger-Pellé, Jacqueline See Edmunds, David E.; et al., 84c:35109
- Frolov, I. S. The spectrum of a class of differential-difference operators. (Russian) (See 84f:35003)
- Georgescu, Vladimir See Berthier, Anne-Marie, 84c:35118
- Gimadislamov, M. G. Criterion of discreteness of the spectrum of a hypoelliptic operator. (Russian) 84c:35120
- Gomilko, A. M. Spectral properties of a hyperbolic boundary value problem. (Russian. English and Azerbaijani summaries) 84c:35110
- On the spectrum adjoining the real axis in a problem of elasticity theory. (Russian) 84m:35090

- Iwatsuka, Akira The essential spectrum of two-dimensional Schrödinger operators with perturbed constant magnetic fields. **84c:35103**
- Kalf, Hubert See Eastham, Michael S. P., **84i:35107**
- Kozlov, S. M. (with Shubin, M. A.) A theorem on the coincidence of spectra for random elliptic operators. (Russian) **84d:35112**
- Lewis, Roger T. Singular elliptic operators of second order with purely discrete spectra. **84c:35215**
- Müller-Pfeiffer, E. On the existence of nodal domains for elliptic differential operators. **84c:35121**
- Sarnak, P. Spectral behavior of quasiperiodic potentials. **84g:35136**
- Schenk, Dieter Resolventengleichungen zum Schrödingeroperator. [Resolvent equations for the Schrödinger operator] **84c:35111**
- Shubin, M. A. See Kozlov, S. M., **84d:35112**
- Simader, Christian G. Selbstadjungiertheitsprobleme und spektraltheoretische Fragen für Schrödinger-Operatoren. [Problems of selfadjointness and spectral-theoretic problems for Schrödinger operators] (See **84a:00012**)
- Skriganov, M. M. The spectrum of multidimensional operators with periodic coefficients. (Russian) **84c:35112**
- Multidimensional Schrödinger operator with periodic potential. (Russian) **84j:35129**
- Skubachevskii, A. L. On the spectrum of some nonlocal elliptic boundary value problems. (Russian) **84c:35080**
- Trubowitz, E. See Dahlberg, B. E. J., **84c:35119**
- Veselić, K. On the nonrelativistic limit of the bound states of the Klein-Gordon equation. **84c:35104**
- Vogelsang, Volker Die absolute Stetigkeit des positiven Spektrums der Schwingungsgleichung mit oszillierendem Hauptteil. [The absolute continuity of the positive spectrum of the oscillation equation with oscillating principal part] **84c:35122**
- Die Rellichische Abschätzung für die Schwingungsgleichung mit oszillierendem Hauptteil. [The Rellich estimation for the oscillation equation with oscillating principal part] **84d:35113**
- Zaretskaya, M. A. The spectrum of a class of differential operators. (Russian) **84j:35130**

secondary classifications:

- Avron, Joseph E. (with Simon, Barry) Almost periodic Schrödinger operators. I. Limit periodic potentials. (See **84i:34023**)
- Bastis, A. I. See Zaitsev, A. A., **(84c:35128)**
- Coifman, R. R. (with Deng, D. G.; Meyer, Yves) Domaine de la racine carrée de certains opérateurs différentiels accrétils. (English summary) [Domain of the square root of certain accretive differential operators] (See **84i:35040**)
- Colin de Verdière, Yves Valeurs propres immergées dans le spectre continu d'une surface de Riemann. [Immersed eigenvalues in the continuous spectrum of a Riemann surface] (See **84i:35006**)
- Deng, D. G. See Coifman, R. R.; et al., **(84c:35040)**
- Dermenjian, Yves (with Guillot, Jean-Claude) Théorie spectrale de la propagation des ondes acoustiques dans un milieu stratifié perturbé. [Spectral theory of acoustic wave propagation in a perturbed stratified medium] (See **84i:35003**)
- Eroshenkov, E. P. The spectrum of the Bitsadze-Samarskii problem. (Russian) **(84i:35032)**
- Figotin, A. L. Essential selfadjointness and ergodic properties of the Schrödinger operator with random potential. (Russian. English summary) **(84c:35044)**
- Friedlander, Leonid Sur le spectre de la perturbation faible d'un opérateur auto-adjoint. (English summary) [On the spectrum of a weak perturbation of a selfadjoint operator] **(84i:58110)**
- Geymonat, Giuseppe Perturbations en théorie spectrale. [Perturbations in spectral theory] **(84i:35115)**
- Guillot, Jean-Claude See Dermenjian, Yves, (See **84i:35003**)
- Hess, Peter On the eigenvalue problem for weakly coupled elliptic systems. **(84c:35075)**
- Hoegh-Krohn, Raphael (with Holden, Helge; Martinelli, Fabio) The spectrum of defect periodic point interactions. **(84i:81145)**
- Holden, Helge See Hoegh-Krohn, Raphael; et al., **(84i:81145)**
- Iwatsuka, Akira Spectral representation for Schrödinger operators with magnetic vector potentials. **(84i:81019)**
- Kal'menov, T. Sh. Spectrum of a boundary value problem with shift for the wave equation. (Russian) **(84c:35072)**
- Kirsch, Werner (with Martinelli, Fabio) On the spectrum of Schrödinger operators with a random potential. **(84g:60102b)**
- (with Martinelli, Fabio) On the ergodic properties of the spectrum of general random operators. **(84g:60102a)**
- Kunz, Hervé (with Souillard, Bernard) Random Schrödinger operators and the theory of disordered systems: some rigorous results. **(84m:82065)**
- Kuwabara, Ruishi On spectra of the Laplacian on vector bundles. **(84g:58103)**
- Leinfelder, Herbert Gauge invariance of Schrödinger operators and related spectral properties. **(84i:81024)**
- Littman, Walter Spectral properties of operators arising in acoustic wave propagation in an ocean of variable depth. **(84d:76051)**
- Maksudov, F. G. (with Shakhmurov, V. B.) Estimates of the resolvent for a class of quasilipshitz partial operator-differential equations. (Russian) **(84i:35137)**
- Martinelli, Fabio See Kirsch, Werner, **(84g:60102a); (84g:60102b)** and Hoegh-Krohn, Raphael; et al., **(84i:81145)**
- Meyer, Yves See Coifman, R. R.; et al., **(84c:35040)**
- Poedinechuk, A. E. The exact spectrum of a class of open cylindrical structures. (Russian. English summary) **(84m:35032)**
- Ruijsenaars, S. N. M. Scattering theory for the Federbush, massless Thirring and continuum Ising models. **(84m:81123)**
- Samolilenko, V. G. The spectrum of a differential operator with an infinite number of variables. (Russian) **(84g:47043)**
- Shakhmurov, V. B. See Maksudov, F. G., **(84i:35137)**

Shestopalov, Yu. V. On the spectrum of a family of nonselfadjoint boundary value problems for systems of Helmholtz equations. (Russian) **(84m:78010)**

Sufficient conditions for the existence of a discrete spectrum of natural waves of slot transmission lines. (Russian) **(84j:78043)**

Simon, Barry See Avron, Joseph E., **(84i:34023)**

Smolich, V. P. The spectrum of the perturbed Laplace operator on the fundamental domain of a discrete group on the Lobachevskii plane. (Russian. English summary) **(84m:58158)**

Souillard, Bernard See Kunz, Hervé, **(84m:82065)**

Vugalter, S. A. (with Zhislin, G. M.) On the absence of the Efimov effect in spaces of functions of a given symmetry. (Russian) **(84m:81047)**

(with Zhislin, G. M.) On the finiteness of the discrete spectrum of energy operators of many-atom molecules. (Russian. English summary) **(84i:81154)**

Zaitsev, A. A. (with Bastis, A. I.) Localization of spectral decompositions for a pseudodifferential operator. (Russian) **(84m:35128)**

Zhislin, G. M. See Vugalter, S. A., **(84i:81154)** and **(84m:81047)**

35P10 Completeness of eigenfunctions, eigenfunction expansions

- Amnaberdyyev, Ch. O. The multiple basis property of the eigenfunctions of a boundary value problem. (Russian) **84c:35114**
- Aslanov, G. I. Completeness of the system of eigen- and associated functions of a second-order nonselfadjoint elliptic operator in an unbounded domain. (Russian. English and Azerbaijani summaries) **84c:35105**
- Bastis, A. I. Divergence of spectral expansions of functions from L^2 . (Russian) **84c:35098**
- Convergence almost everywhere of expansions in eigenfunctions of the Laplace operator on a sphere. (Russian) **84c:35123**
- Fincl, Kalmi G_n -summability of eigenfunction expansions of the Laplace operator. (Serbo-Croatian. French summary) **84c:35216**
- Geymonat, Giuseppe (with Grisvard, Pierre) Diagonalisation d'opérateurs non autoadjoints et séparation des variables. (English summary) [Diagonalization of nonselfadjoint operators and separation of variables] **84i:35107**
- Grisvard, Pierre See Geymonat, Giuseppe, **84i:35107**
- Joo, István Expansion in eigenfunctions of the Schrödinger operator with singular potential. (Russian) **84c:35113**
- Joseph, Daniel D. (with Sturges, L. D.; Warner, W. H.) Convergence of biorthogonal series of biharmonic eigenfunctions by the method of Titchmarsh. **84i:35108**
- Kerimov, T. M. Completeness of a system of eigen- and associated functions of a mixed boundary value problem for a second-order elliptic equation. (Russian. English and Azerbaijani summaries) **84j:35131**
- Khazardzhyan, S. M. Closedness of eigenfunctions of nonselfadjoint homogeneous boundary value problems and its practical significance. (Russian) **84i:35109**
- Magerramov, A. M. Expansion in eigenfunctions of a differential operator, the principal part of which has a multiple continuous spectrum. (Russian) **84c:35124**
- Makin, A. S. The basis property of Abel-Poisson means of spectral decompositions corresponding to a strongly elliptic differential operator. (Russian) **84g:35137**
- Maksudov, F. G. (with Shakhmurov, V. B.) On the completeness of a system of eigen- and associated vectors of nonlocal boundary value problems for quasilipshitz partial operator-differential equations. (Russian) **84i:35108**
- Mauceri, Giancarlo Riesz means for the eigenfunction expansions for a class of hypoelliptic differential operators. (French summary) **84c:35125**
- Pulotar, A. K. Conditions for localization of expansions in an N -multiple Fourier integral corresponding to a homogeneous elliptic operator. (Russian) **84c:35114**
- Shakhmurov, V. B. The completeness of the system of eigenvectors and associated vectors of boundary value problems for elliptic partial operator-differential equations. (Russian. English and Azerbaijani summaries) **84m:35091**
- See also Maksudov, F. G., **84i:35108**
- Shkalikov, A. A. Eigenfunction expansion in a plane problem of elasticity theory. (Russian) (See **84m:35003**)
- Slaković, Semiha D -summability of an eigenfunction expansion related to a boundary value problem of a vibrating membrane. (Serbo-Croatian. English summary) **84c:35217**
- Sturges, L. D. See Joseph, Daniel D.; et al., **84i:35108**
- Tabanov, M. B. An asymptotic formula for the value of the split of the eigenvalue in the "whispering gallery" problem. (Russian. English summary) **84d:35115**
- Warner, W. H. See Joseph, Daniel D.; et al., **84i:35108**
- Werner, Peter Spectral properties of the Laplace operator with respect to electric and magnetic boundary conditions. **84g:35138**
- Zaitsev, A. A. Localization of spectral expansions connected with elliptic pseudodifferential operators. (Russian) **84m:35092**

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- Ben-Artzi, Matania Some new results in the spectral and scattering theory of Stark-like Hamiltonians. (French summary) (See **84j:35003**)
- Il'kiv, V. S. A nonlocal boundary value problem for a partial differential equation with constant coefficients. (Russian. English summary) **(84c:35021)**
- Iório, Rafael José, Jr. ★ O método de separação de variáveis e expansões em auto-funções. (Portuguese) [The method of separation of variables, and eigenfunction expansions] **(84c:35027)**
- Mazelis, L. S. Representation of solutions of the S. L. Sobolev problem in the form of an expansion in generalized eigenfunctions. (Russian) **(84i:35094)**
- Picard, R. H. Generalised eigensolution expansions in linear acoustics. (See **84c:73010**)
- Vagabov, A. I. On the incompleteness of a system of eigenfunctions of differential operators in a space of vector functions. (Russian) **(84j:34021)**
- White, Denis A. W. Schrödinger operators with rapidly oscillating central potentials. **(84d:35124)**

35P15 Estimation of eigenvalues, upper and lower bounds

- Albrecht, Julius. See Goerisch, Friedrich. (See 84i:00016)
- Alvino, A. (with Trombetti, G.) A lower bound for the first eigenvalue of an elliptic operator. 84j:35132
- Castro, Eduardo A. See Fernández, Francisco M.; et al. 84i:35111
- Egorov, Yu. V. (with Kondrat'ev, V. A.) Estimate of the first eigenvalue of a selfadjoint elliptic operator. (Russian. English summary) 84i:35110
- Fefferman, Charles (with Phong, D. H.) Lower bounds for Schrödinger equations. 84a:35218
- Fernández, Francisco M. (with Mesón, Alejandro M.; Castro, Eduardo A.) Complementary tight upper and lower bounds to eigenvalues of the Schrödinger equation. (Spanish summary) 84i:35111
- Goerisch, Friedrich (with Albrecht, Julius) Untere Schranken für die Eigenwerte Stekloffscher Eigenwertaufgaben. [Lower bounds for the eigenvalues of Steklov eigenvalue problems] (See 84i:00016)
- Kalf, Hubert (with Krishna Kumar, V.) On the absence of positive eigenvalues of Schrödinger operators with long range potentials. 84d:35116
- Kondrat'ev, V. A. See Egorov, Yu. V., 84i:35110
- Korobchuk, I. V. An estimate for the first eigenvalue for the Laplace operator. (Russian) 84g:35139
- Krishna Kumar, V. See Kalf, Hubert, 84d:35116
- Mesón, Alejandro M. See Fernández, Francisco M.; et al. 84i:35111
- Minskii, Victor Sommerfeld radiation condition for second-order differential operator in a domain with infinite border. 84b:35126
- Najman, Branko Eigenvalues of the Klein-Gordon equation. 84b:35106
- Nguyễn Phong Các On an elliptic boundary value problem not in divergence form. 84c:35115
- Phong, D. H. See Fefferman, Charles, 84a:35218
- Trombetti, G. See Alvino, A., 84j:35132

secondary classifications:

- Bérard, Pierre (with Meyer, Daniel) Inégalités isopérimétriques et applications. [Isoperimetric inequalities and applications] (84b:58147)
- Dodziuk, Jozef Eigenvalues of the Laplacian on forms. (84k:58223)
- Harrell, Evans M., II (with Klaus, Martin) On the double-well problem for Dirac operators. (French summary) (84k:81031)
- Klaus, Martin See Harrell, Evans M., II, (84k:81031)
- Matsuzawa, Tadayuki (with Tanno, Shōkichi) Estimates of the first eigenvalue of a big cup domain of a 2-sphere. (84a:58088)
- Meyer, Daniel See Bérard, Pierre, (84b:58147)
- Sato, Sadao Barta's inequalities and the first eigenvalue of a cap domain of a 2-sphere. (84f:58112)
- Siedentop, Heinz K. H. Localization of eigenvalues of Schrödinger operators—local Birman-Schwinger bound. (84c:81011)
- Tanno, Shōkichi See Matsuzawa, Tadayuki, (84a:58088)

35P20 Asymptotic distribution of eigenvalues and eigenfunctions

- Andreev, Aleksandr Sergeevich Asymptotic behavior of the spectrum of the Dirichlet problem for a class of pseudodifferential operators. (Russian) 84b:35127
- Arutyunyan, T. N. The spectrum of a class of differential operators. (Russian. English and Armenian summaries) 84c:35116
- Ashurov, R. R. The asymptotic behavior of spectral functions of some elliptic operators. (Russian) 84c:35081
- Birman, M. Sh. (with Solomyak, M. Z.) Asymptotic behavior of the spectrum of pseudodifferential variational problems with shifts. (Russian) 84f:35109
- (with Solomyak, M. Z.) The asymptotic behavior of the spectrum of variational problems on solutions of elliptic systems. (Russian) 84c:35082
- Boimakov, K. Kh. The spectral asymptotic behavior of differential and pseudodifferential operators. I. (Russian. English summary) 84a:35219
- Boutet de Monvel, Louis Opérateurs à coefficients polynomiaux, espace de Bargmann, et opérateurs de Toeplitz. [Operators with polynomial coefficients Bargmann spaces, and Toeplitz operators] 84a:35222
- Gottlieb, H. P. W. Hearing the shape of an annular drum. 84i:35112
- Grubb, Gerd Comportement asymptotique du spectre des opérateurs de Green singuliers. (English summary) [Spectral asymptotics for singular Green operators] 84a:35220
- Spectral asymptotics for the "soft" selfadjoint extension of a symmetric elliptic differential operator. 84c:35107
- Helfffer, Bernard (with Robert, Didier) Comportement asymptotique précise du spectre d'opérateurs globalement elliptiques dans \mathbb{R}^n . [Precise asymptotic behavior of the spectrum of globally elliptic operators in \mathbb{R}^n] 84a:35221
- Kozlov, S. M. Distribution of eigenvalues of differential operators in large domains. (Russian) 84b:35099
- Multidimensional spectral asymptotics for elliptic operators. (Russian) 84f:35110
- Laptev, A. A. Spectral asymptotics of a class of Fourier integral operators. (Russian) 84a:35223
- Levendorskii, S. Z. A general method for investigating the asymptotic behavior of a spectrum and its application to the theory of shells. (Russian) 84b:35100
- Asymptotic distribution of eigenvalues. (Russian) 84j:35133
- Mikhailov, V. A. Asymptotic behavior of the spectrum of elliptic operators, and boundary conditions. (Russian) 84g:35140
- Ozawa, Shin Spectra of domains with small spherical Neumann boundary. 84a:35224
- Electrostatic capacity and eigenvalues of the Laplacian. 84m:35093
- Popov, Georgi St. (with Shubin, M. A.) Complete asymptotic expansion of a spectral function for second-order elliptic operators in \mathbb{R}^n . (Russian) 84f:35111
- Robert, Didier Comportement asymptotique des valeurs propres d'opérateurs du type Schrödinger à potentiel "dégénéré". (English summary) [Asymptotic behavior of the eigenvalues of Schrödinger operators with "degenerate" potential] 84d:35117
- See also Helfffer, Bernard, 84a:35221

- Shubin, M. A. See Popov, Georgi St., 84f:35111
- Solnyshkin, S. N. On the asymptotic behavior of the spectrum of a multidimensional oscillator with decreasing perturbations. (Russian. English summary) 84c:35117
- Solomyak, M. Z. See Birman, M. Sh., 84c:35082 and 84f:35109
- Tamura, Hideo Asymptotic formulae with remainder estimates for eigenvalues of Schrödinger operators. 84f:35112
- Yafaev, D. R. Spectral properties of the Schrödinger operator with positive slowly decreasing potential. (Russian) 84d:35118
- Yanagawa, Minoru The spectral remainder estimates for nonisotropic polyharmonic operators on bounded and quasibounded domains. 84g:35141
- The distribution of the eigenvalues for singular semi-elliptic boundary value problems. 84d:35119

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- Bezyaev, V. I. The asymptotic behavior of eigenvalues of hypoelliptic operators on a closed manifold. (Russian) (84b:58144)
- Buslaev, V. S. (with Rybakina, E. A.) The trace formula in Hamiltonian mechanics. (Russian) (84d:58076)
- Chiappinelli, Raffaele The asymptotic distribution of eigenvalues of a nonlinear problem. (Italian summary) (84c:35087)
- Feigin, V. I. Sharp estimates of the residual in the spectral asymptotic expansion for pseudodifferential operators in \mathbb{R}^n . (Russian) (84c:35151)
- Hoegh-Krohn, Raphael (with Mekhkhout, Mohammed) The $1/r$ expansion for the critical multiple well problem. (84m:81049)
- Ivrii, V. Ya. Exact spectral asymptotics for elliptic operators acting in vector bundles. (Russian) (84a:58087)
- The asymptotics of a spectral problem associated to the Laplace-Beltrami operator on a manifold with boundary. (Russian) (84i:58123)
- Mekhkhout, Mohammed See Hoegh-Krohn, Raphael, (84m:81049)
- Petkov, Vesselin See Pham The Lai, (84c:58228)
- Pham The Lai (with Petkov, Vesselin) Comportement asymptotique de la fonction spectrale de l'opérateur de Laplace-Beltrami sur une variété ayant des singularités coniques. [Asymptotic behavior of the spectral function of the Laplace-Beltrami operator on a manifold with conic singularities] (84c:58228)
- Rozenblyum, G. V. The spectral asymptotic behavior of normal operators. (Russian) (84a:58089)
- Rybakina, E. A. See Buslaev, V. S., (84d:58076)
- Tabanov, M. B. An asymptotic formula for the value of the split of the eigenvalue in the "whispering gallery" problem. (Russian. English summary) (84d:35115)
- Urakawa, Hajime Bounded domains which are isospectral but not congruent. (84g:58106)
- Vasil'ev, D. G. Asymptotic behavior of the spectrum of pseudodifferential operators with small parameters. (Russian) (84i:58126)
- Yakubov, S. Ya. A boundary value problem for the Laplace equation with nonclassical spectral asymptotics. (Russian) (84c:35033)

35P25 Scattering theory [See also 47A40.]

- Babich, V. M. (with Ulin, V. V.) Complex ray solutions and eigenfunctions that are concentrated in the neighborhood of a closed geodesic. (Russian. English summary) 84a:35225
- Bardos, Claude W. (with Guillot, Jean-Claude; Ralston, James) La relation de Poisson pour l'équation des ondes dans un ouvert non borné. Application à la théorie de la diffusion. [The Poisson relation for the wave equation in an unbounded open set. Application to scattering theory] 84d:35120
- Beals, Richard William (with Coifman, R. R.) Scattering and inverse scattering related to evolution equations. (See 84m:42002)
- Cho, S. K. On complex poles in scattering theory. 84j:35134
- Coifman, R. R. See Beals, Richard William, (See 84m:42002)
- Colgen, Rainer Some applications of trace class—scattering theory. 84c:35108
- Combes, J.-M. (with Weder, R.) New criterion for existence and completeness of wave operators and applications to scattering by unbounded obstacles. 84b:35128
- Cooper, Jeffery (with Strauss, Walter A.) Scattering of waves by periodically moving bodies. 84j:35135
- Coz, Marcel A Marchenko equation for complex interactions with a regular analytic continuation. 84d:35121
- Fatideev, M. D. See Pavlov, B. S., 84g:35142
- Georgiev, V. S. Inverse scattering problem for symmetric strictly hyperbolic systems. 84c:35083
- Gorbachuk, M. L. (with Kutovoi, V. A.) A scattering problem for operators generated by the Laplace equation in the half plane and various boundary conditions. (Russian) 84a:35226
- Guillot, Jean-Claude See Bardos, Claude W.; et al., 84d:35120
- Ikawa, Mitsuru On the poles of the scattering matrix for two strictly convex obstacles. 84c:35118
- Ikebe, Teruo (with Isozaki, Hiroshi) A stationary approach to the existence and completeness of long-range wave operators. 84f:35113
- I'in, E. M. Scattering characteristics of a problem of diffraction by a wedge and by a screen. (Russian. English summary) 84b:35101
- Scattering by noncompact obstacles. (Russian. English summary) 84m:35094
- Isozaki, Hiroshi See Ikebe, Teruo, 84f:35113
- Kitada, Hitoshi Scattering theory for Schrödinger equations with time-dependent potentials of long-range type. 84c:35119
- Koeri Akoe, D. Scattering theory and the existence of the scattering operator for moving obstacles. (See 84d:47002)
- Kutovoi, V. A. See Gorbachuk, M. L., 84a:35226
- Mochizuki, Kiyoshi (with Uchiyama, Jun) Time dependent representations of the stationary wave operators for "oscillating" long-range potentials. 84c:35120

- Nizhnik, L. P. (with Tarasov, V. G.) An inverse stationary scattering problem for a hyperbolic system of equations. (Russian) **84a:35227**
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- Orochko, Yu. B. On the Carleman resolvent estimate of Schrödinger type operator with arbitrary potential. **84d:35122**
- Pavlov, B. S. Conditions for the analyticity of a partial scattering matrix. (Russian) **84d:35129**
(with Faddeev, M. D.) Scattering on a hollow resonator with a small opening. (Russian. English summary) **84g:35142**
- Peref'muter, M. A. On scattering theory for second-order elliptic operators. (Russian) **84d:35123**
- Petkov, Vesselin Representation of the scattering operator for dissipative hyperbolic systems. **84a:35229**
Propagation of singularities and inverse scattering problem for transparent obstacles. **84a:35230a**
Inverse scattering problem for transparent obstacles. **84a:35230b**
- Petrus, S. V. Continuous dependence of poles of the scattering matrix on coefficients of an elliptic operator. (Russian) **84c:35109**
- Pham Lo'i Vù See Nizhnik, L. P., **84a:35228**
- Phillips, Ralph S. Scattering theory for the wave equation with a short range perturbation. **84d:35113**
- Popov, Georgi St. Asymptotic behaviour of the scattering phase for the Schrödinger operator. **84c:35130**
- Ralston, James See Bardos, Claude W.; et al., **84d:35120**
- Ramm, Alexander G. Perturbation of resonances. **84c:35131**
- Rangelov, Ts. V. Existence of the wave operators for dissipative hyperbolic systems in the exterior of moving obstacle. **84c:35084**
- Rybin, A. V. Trace formulas for resonances. (Russian. English summary) **84c:35110**
- Sabatier, P. C. Inverse scattering problems for nonlinear applications. (See **84c:35001**)
- Saito, Yoshimi Extended limiting absorption method and analyticity of the S -matrix. **84a:35095**
- Sayapova, M. R. (with Yafaev, D. R.) Scattering theory for potentials of zero radius which are periodic with respect to time. (Russian) **84f:35114**
- Soga, Hideo Singularities of the scattering kernel for convex obstacles. **84c:35085**
- Strauss, Walter A. See Cooper, Jeffery, **84j:35135**
- Tamura, Hideo Asymptotic formulas with sharp remainder estimates for bound states of Schrödinger operators. I. **84c:35121a**
The principle of limiting absorption for propagative systems in crystal optics with perturbations of long-range class. **84c:35111**
Asymptotic formulas with sharp remainder estimates for bound states of Schrödinger operators. II. **84c:35121b**
- Tarasov, V. G. See Nizhnik, L. P., **84a:35227**
- Tayoshi, Takao Existence of wave operators in scattering by unbounded obstacles. **84j:35136**
- Uchiyama, Jun See Mochizuki, Kiyoshi, **84c:35120**
- Ulin, V. V. See Babich, V. M., **84c:35225**
- Umeda, Tomio Scattering theory for pseudodifferential operators. I. The existence of wave operators. **84g:35143a**
Scattering theory for pseudodifferential operators. II. The completeness of wave operators. **84g:35143b**
- Vasconcellos, Lucia Maria T. B. On the dependence on a parameter of the scattering operator associated in the Klein-Gordon equation. **84c:35112**
- Weder, R. See Combes, J.-M., **84c:35128**
- White, Denis A. W. Schrödinger operators with rapidly oscillating central potentials. **84c:35124**
- Yafaev, D. R. The nonstationary scattering theory for elliptic differential operators. (Russian) **84c:35086**
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- Albeverio, Sergio (with Bollé, D.; Gesztesy, F.; Hoegh-Krohn, Raphael) Low-energy parameters in nonrelativistic scattering theory. **(84j:81108)**
- Beals, Richard William (with Coifman, R. R.) Scattering, transformations spectrales et équations d'évolution non linéaires. [Scattering, spectral transformations and nonlinear evolution equations] **(84d:35129)**
- Ben-Artzi, Matania A limiting absorption principle for Schrödinger operators with spherically symmetric exploding potentials. **(84d:35037)**
- Birman, M. Sh. (with Yafaev, D. R.) Asymptotic behavior of limit phases for scattering by potentials without spherical symmetry. (Russian. English summary) **(84a:81037)**
- Bollé, D. See Albeverio, Sergio; et al., **(84j:81108)**
- Carmona, René (with Simon, Barry) Pointwise bounds on eigenfunctions and wave packets in N -body quantum systems. V. Lower bounds and path integrals. **(84m:81052a)**
- Carroll, Robert Wayne ★ Transmutation, scattering theory and special functions. **(84b:35114)**
- Caudrey, P. J. The inverse problem for a general $n \times n$ spectral equation. **(84a:35254)**
- Cohen, Jeffrey M. See Pechenick, Kay R., **(84c:35150)**
- Coifman, R. R. See Beals, Richard William, **(84d:35129)**
- Combes, Monique Spectral and scattering theory for a class of strongly oscillating potentials. **(84c:31030)**
- Davies, Edward Brian Energy dependence of the scattering operator. II. **(84f:81094)**
- Dubrovskii, B. A. Analytical properties of spectral data for nonselfadjoint linear operators connected with real periodic solutions of the sine-Gordon equation. (Russian) **(84d:35132)**
- Enss, Volker Asymptotic observables on scattering states. **(84j:81110)**
- Gesztesy, F. See Albeverio, Sergio; et al., **(84j:81108)**
- Glassey, Robert T. (with Pecher, Hartmut) Time decay for nonlinear wave equations in two space dimensions. **(84a:35028)**
- Hegedüs, J. Asymptotic behavior of the solution of the Cauchy problem for a hyperbolic equation with a large parameter. (Russian) **(84c:35017)**
- Hoare, M. R. (with Raval, S.; Rahman, Mizan) The Rayleigh model: singular transport theory in one dimension. **(84m:45030)**
- Hoegh-Krohn, Raphael See Albeverio, Sergio; et al., **(84j:81108)**
- Iagolnitzer, D. Analyticity properties of the S -matrix: historical survey and recent results in S -matrix theory and axiomatic field theory. **(84m:81163)**
- Ikawa, Mitsuru On the distribution of the poles of the scattering matrix for two strictly convex obstacles. **(84c:35086)**
- Iório, Rafael José, Jr. Time-independent methods in quantum scattering theory. (Portuguese) **(84k:81117)**
- Izergin, A. G. (with Korepin, V. E.) Quantum inverse scattering method. **(84b:81068)**
- Kondrat'ev, Yu. G. (with Koshmanenko, V. D.) The scattering problem for operators associated with Dirichlet forms. (Russian) **(84c:47018)**
- Korepin, V. E. See Izergin, A. G., **(84b:81068)**
- Koshmanenko, V. D. See Kondrat'ev, Yu. G., **(84c:47018)**
- Lichtenstein, Woody Quadrature, scattering, and representations. **(84b:43009)**
- Lieb, Elliott H. (with Simon, Barry) Pointwise bounds on eigenfunctions and wave packets in N -body quantum systems. VI. Asymptotics in the two-cluster region. **(84m:81052b)**
- Merkur'ev, S. P. Three-body Coulomb scattering. **(84c:81070)**
- Minskii, Victor Sommerfeld radiation condition for second-order differential operator in a domain with infinite border. **(84c:35126)**
- Muthuramalingam, P. L. Spectral and scattering theory for a Schrödinger operator with a class of momentum-dependent long-range potentials. **(84f:81096)**
- Najman, Branko Wave operators and similarity for some matrix operators with applications. (Serbo-Croatian summary) **(84f:47007)**
- Obermann, Peter Adiabatic switching in abstract scattering theory. **(84b:47014)**
- Pechenick, Kay R. (with Cohen, Jeffrey M.) Inverse scattering with coinciding-pole reflection coefficients. **(84c:35150)**
- Pecher, Hartmut See Glassey, Robert T., **(84a:35028)**
- Perry, Peter A. Propagation of states in dilation analytic potentials and asymptotic completeness. **(84f:81097)**
- Petkov, Vesselin Le problème inverse de la diffusion pour les systèmes hyperboliques. [The inverse scattering problem for hyperbolic systems] **(84c:35072)**
La distribution des pôles de la matrice de diffusion. [Distribution of poles of the scattering matrix] (See **84c:35006**)
- Pham Lo'i Vù A nonstationary scattering problem for a system of second-order equations. (Russian) **(84a:35287)**
- Prosser, Reese T. Formal solutions of inverse scattering problems. IV. Error estimates. **(84b:81095)**
- Rahman, Mizan See Hoare, M. R.; et al., **(84m:45030)**
- Ramm, Alexander G. Spectral properties of some nonselfadjoint operators and some applications. **(84g:47019)**
- Raval, S. See Hoare, M. R.; et al., **(84m:45030)**
- Sevost'yanova, E. V. Properties of a perturbed elliptic operator with periodic coefficients. (Russian) **(84g:35044)**
- Simon, Barry See Carmona, René, **(84m:81052a)** and Lieb, Elliott H., **(84m:81052b)**
- Strauss, Walter A. (with Wainger, Stephen) An application of L^p estimates to scattering theory. **(84m:81160)**
- Thirring, Walter Classical scattering theory. **(84a:70011)**
- Trudinger, P. L. The inverse scattering problem for perturbed wave equations. **(84d:35149)**
- Vugal'ter, S. A. (with Zhislin, G. M.) On the discrete spectrum of Schrödinger operators of multiparticle systems with two-particle virtual levels. (Russian) **(84g:81057)**
- Wainger, Stephen See Strauss, Walter A., **(84m:81160)**
- Yafaev, D. R. See Birman, M. Sh., **(84a:81037)**
- Yajima, Kenji The quasiclassical approximation to Dirac equation. I. **(84a:81006a)**
The quasiclassical approximation to Dirac equation. II. Scattering theory. **(84a:81006b)**
- Zhislin, G. M. See Vugal'ter, S. A., **(84g:81057)**
- Spectral scattering theory ★ Spectral scattering theory. (Japanese) **(84b:81002)**
- Symposium:
Spectral Scattering Theory ★ Spectral scattering theory. (Japanese) **(84b:81002)**
- 35P30 Nonlinear eigenvalue problems
- Benguria, Rafael (with Depassier, M. Cristina) Upper and lower bounds for eigenvalues of nonlinear elliptic equations. I. The lowest eigenvalue. **84c:35113**
- Boccardo, Lucio Positive eigenfunctions for a class of quasilinear operators. (Italian summary) **84a:35231**
- Chiappinelli, Raffaele The asymptotic distribution of eigenvalues of a nonlinear problem. (Italian summary) **84c:35087**
- Depassier, M. Cristina See Benguria, Rafael, **84c:35113**
- secondary classifications:
- Bongers, Achim (with Heinz, Hans-Peter; Küpper, Tassilo) Existence and bifurcation theorems for nonlinear elliptic eigenvalue problems on unbounded domains. **(84c:35007)**
- Caudrey, P. J. The inverse spectral problem for a system of three coupled first order equations. **(84c:35139)**
- Dubrovskii, V. G. See Konopel'chenko, B. G., **(84j:35145)**
- de Figueiredo, Djairo Guedes Positive solutions of semilinear elliptic problems. **(84c:35067)**
- Heinz, Hans-Peter See Bongers, Achim; et al., **(84b:35007)**
- Klainerman, Sergiu Classical solutions to nonlinear wave equations and nonlinear scattering. **(84c:35095)**
- Konopel'chenko, B. G. (with Dubrovskii, V. G.) On the general structure of nonlinear equations integrable by the general linear spectral problem. **(84j:35145)**

- Kubrusly, R. S. (with Oden, John Tinsley) Nonlinear eigenvalue problems characterized by variational inequalities with applications to the postbuckling analysis of unilaterally-supported plates. (84c:47046)
- Küpper, Tassilo See Bongers, Achim; et al., (84c:35007)
- Novikova, L. V. Linear normalizing transformations for a class of nonlinear operators in Sobolev spaces. (Russian) (84d:47094)
- Oden, John Tinsley See Kubrusly, R. S., (84c:47046)
- Schmitt, Klaus ★ A study of eigenvalue and bifurcation problems for nonlinear elliptic partial differential equations via topological continuation methods. (84g:35064)

35P99 None of the above, but in this section

- Canuto, Claudio (with Quarteroni, Alfio) Spectral and pseudospectral methods for parabolic problems with nonperiodic boundary conditions. 84c:35132
- Davies, Edward Brian Some norm bounds and quadratic form inequalities for Schrödinger operators. 84c:35123b
- Hughes, Rhonda J. Singular perturbations in the interaction representation. II. 84c:35122
- Kato, Tosio Holomorphic families of Dirac operators. 84c:35114
- Quarteroni, Alfio See Canuto, Claudio, 84c:35132
- Simon, Barry Hardy and Rellich inequalities in nonintegral dimension. 84c:35123a
- Starkov, A. S. Degeneracy and resonance phenomena in problems of wave propagation. (Russian. English summary) 84c:35232
- Zachary, W. W. Povzner-Levitan representations for eigenfunctions of higher order differential equations. (See 84m:00012)
- Zaman, F. D. Perturbation of a biharmonic eigenvalue problem. 84c:35115
- Zelditch, Steven Szegő limit theorems in quantum mechanics. 84c:35124

secondary classifications:

- Abdel-Raouf, Mohamed Assad On the variational methods for bound-state and scattering problems. (84j:81106)
- Albeverio, Sergio (with Blanchard, Philippe; Heegh-Krohn, Raphael) Feynman path integrals and the trace formula for the Schrödinger operators. (84c:81010) (with Gesztesy, F.; Heegh-Krohn, Raphael; Streit, L.) Charged particles with short range interactions. (French summary) (84j:81107)
- Béllissard, J. (with Lima, R.; Scoppola, E.) Localization in ϵ -dimensional incommensurate structures. (84c:39012b)
- Berenstein, Carlos A. (with Yang, P. C.) An overdetermined Neumann problem in the unit disk. (84c:35107)
- Blanchard, Philippe See Albeverio, Sergio; et al., (84c:81010)
- Carroll, Robert Wayne On the characterization of transmutations. (84c:35005)
- Choudhury, M. H. The spectral properties of many-electron atomic Hamiltonians and the method of configuration interaction. II. Compactness proof associated with an infinite system of linear equations for n -electron atoms. (84c:81149a)
- The spectral properties of many-electron atomic Hamiltonians and the method of configuration interaction. III. Compactness proof associated with an infinite system of linear equations for n -electron atoms. (84c:81149b)
- Gesztesy, F. See Albeverio, Sergio; et al., (84j:81107)
- Gilliam, David S. (with Schulenberg, John R.) Electromagnetic waves in a three-dimensional half space with a dissipative boundary. (84d:35090)
- Guillemin, Victor (with Uribe, A.) Spectral properties of a certain class of complex potentials. (84j:58129)
- Herbst, Ira W. (with Simon, Barry) Dilation analyticity in constant electric field. II. N -body problem, Borel summability. (84b:81016)
- Heegh-Krohn, Raphael See Albeverio, Sergio; et al., (84c:81010) and (84j:81107)
- Intissar, Ahmed A remark on the convergence of Feynman path integrals for Weyl pseudodifferential operators on \mathbb{R}^n . (84c:35174)
- Konopelchenko, B. G. On the adjoint representation for spectral problems and its relation with the AKNS-method, gauge transformations and Riemann problem. (84c:35136)
- Li, Peter (with Yau, Shing Tung) On the Schrödinger equation and the eigenvalue problem. (84c:58225)
- Lima, R. See Béllissard, J.; et al., (84c:39012b)
- Marvizi, Shahla (with Melrose, Richard B.) Some spectrally isolated convex planar regions. (84b:58106)
- Melrose, Richard B. See Marvizi, Shahla, (84b:58106)
- Miklavčič, Milan Eigenvalues of the Orr-Sommerfeld equation in an unbounded domain. (84h:76025)
- Muthuramalingam, P. L. Kato bound for spherically symmetric potentials with respect to square roots of the Laplacian. (84c:47052)
- Netuka, Ivan Monotone extensions of operators and the first boundary value problem. (See 84i:00016)
- Ozawa, Shin Eigenvalues of the Laplacian on wildly perturbed domain. (84c:31004)
- A shape of eigenfunction of the Laplacian under singular variation of domains. (84c:58227)
- Pöschel, Jürgen Examples of discrete Schrödinger operators with pure point spectrum. (84c:39012a)
- Ramm, Alexander G. ★ Iterative methods for calculating static fields and wave scattering by small bodies. (84f:78012)
- Schulenberg, John R. See Gilliam, David S., (84c:35090)
- Scoppola, E. See Béllissard, J.; et al., (84c:39012b)
- Simon, Barry See Herbst, Ira W., (84b:81016)
- Streit, L. See Albeverio, Sergio; et al., (84j:81107)
- Uribe, A. See Guillemin, Victor, (84j:58129)
- Vugal'ter, S. A. (with Zhislin, G. M.) The symmetry and Efimov's effect in systems of three-quantum particles. (84f:81020)
- Yang, P. C. See Berenstein, Carlos A., (84c:35107)
- Yau, Shing Tung See Li, Peter, (84c:58225)
- Yudovich, V. I. The spectrum of some bordered selfadjoint operators. (Russian) (84h:47014)
- Zhislin, G. M. See Vugal'ter, S. A., (84f:81020)

35Qxx Special equations and problems [See also 35J05, 35K05, 35L05.]

secondary classifications:

- Bucur, Maria See Săvulescu, Șt. N.; et al., (84h:76018)
- Dumitrescu, H. See Săvulescu, Șt. N.; et al., (84h:76018)
- Georgescu, Adelina See Săvulescu, Șt. N.; et al., (84h:76018)
- (Iacob, Caius) See Săvulescu, Șt. N.; et al., (84h:76018)
- Săvulescu, Șt. N. (with Dumitrescu, H.; Georgescu, Adelina; Bucur, Maria) ★ Cercetări matematice în teoria modernă a stratului limită. (Romanian) [Mathematical investigations into the modern theory of the boundary layer] (84h:76018)
- 35Q05 Euler-Poisson-Darboux equation and generalizations
- Alt, Hans Wilhelm (with Caffarelli, Luis A.; Friedman, Avner) Axially symmetric jet flows. 84g:35144
- Andriyanova, N. A. Proof of the existence of a solution to a problem with shift for the Euler-Darboux equation with positive parameters. (Russian) (84c:35133)
- Baranovskii, F. T. The Cauchy problem with modified initial data for a generalized Euler-Poisson-Darboux equation. (Russian) 84c:35134
- Caffarelli, Luis A. See Alt, Hans Wilhelm; et al., 84g:35144
- Chan, C. Y. (with Young, Eutiquio C.) Maximal and minimal nonnegative solutions of a semilinear Euler-Poisson-Darboux equation. 84c:35125
- Friedman, Avner See Alt, Hans Wilhelm; et al., 84g:35144
- Ivanov, L. A. An integrated problem for equations decomposing into Euler-Poisson-Darboux factors. (Russian) (See 84m:35003)
- Repin, O. A. See Volkodavov, V. F., 84c:35236
- Saigo, Megumi A certain boundary value problem for the Euler-Darboux equation. 84c:35233
- A certain boundary value problem for the Euler-Darboux equation. II. 84c:35234
- A certain boundary value problem for the Euler-Darboux equation. III. 84c:35235
- Thangaraj, D. (with Venkatarangan, S. N.) Complementary variational principles for generalized Euler-Poisson-Darboux equations. 84j:35137
- Venkatarangan, S. N. See Thangaraj, D., 84j:35137
- Volkodavov, V. F. (with Repin, O. A.) A boundary value problem for the Euler-Darboux equations with positive parameters. (Russian) 84c:35236
- Young, Eutiquio C. See Chan, C. Y., 84d:35125

secondary classifications:

- Bernardi, Marco Luigi Second order abstract differential equations with singular coefficients. (84b:34082)
- Bochkarev, A. P. Generalized problems Δ_1 and Δ_2 for the Euler-Darboux equation with equal negative parameters that are piecewise constant in the domain considered. I. (Russian) (84c:35191)
- Getmanskaya, S. V. A condition for the unique solvability of the Dirichlet problem. (Russian. English summary) (84c:35033)
- Ivanov, L. A. The Cauchy problem for some operators with singularities. (Russian) (84c:35148)
- See also Kipriyanov, I. A., (84d:35086)
- Kipriyanov, I. A. (with Ivanov, L. A.) J. Hadamard's method for some classes of hyperbolic equations with variable coefficients. (Russian) (84d:35086)
- Kokinasi, P. D. Construction of the Riemann function for some hyperbolic equations. (Russian) (84m:35067)
- Pergunov, V. V. The boundary value problem Σ_0 for the Euler-Darboux equation with negative parameters. (Russian) (84c:35202)
- Ratiu, Tudor Euler-Poisson equations on Lie algebras and the N -dimensional heavy rigid body. (84c:58045a)
- Errata: "Euler-Poisson equations on Lie algebras and the N -dimensional heavy rigid body". (84c:58045b)
- Sokolovskii, A. B. The generalized problems Δ_1 and Δ_2 for an Euler-Darboux equation with one of the parameters equal to 0. I. (Russian) (84c:35211)

35Q10 Navier-Stokes equations [See also 76D05.]

- Antanovskii, L. K. A class of exact solutions of a problem with a free boundary for the Stokes system. (Russian) 84c:35114
- Exact solutions of a problem with a free boundary for the Stokes system. (Russian) 84m:35096
- Bardos, Claude W. (with Frisch, Uriel; Sulem, Catherine; Sulem, Pierre-Louis) Euler equation with initial discontinuous velocity and the Kelvin-Helmholtz instability. 84c:35237
- Blake, J. R. See Ton Tran Cong, 84c:35250
- de Brucq, Denis See Vasilache, Sergiu, 84j:35140
- Caffarelli, Luis A. (with Kohn, Robert V.; Nirenberg, Louis) Partial regularity of suitable weak solutions of the Navier-Stokes equations. 84m:35097
- Callisch, Russel E. (with Nicolaenko, Basil) Shock waves and the Boltzmann equation. 84c:35135
- Constantin, Peter (with Foias, Ciprian) Sur le transport des variétés de dimension finie par les solutions des équations de Navier-Stokes. (English summary) [On the transport of finite-dimensional manifolds along the solutions of the Navier-Stokes equations] 84c:35126
- Dridi, Hamadi Comportement asymptotique des équations de Navier-Stokes dans des domaines "aplatis". (English summary) [Asymptotic behavior of Navier-Stokes equations in flattened domains] 84c:35125
- Foias, Ciprian (with Saut, Jean-Claude) Limite du rapport de l'entropie sur l'énergie pour une solution faible des équations de Navier-Stokes. (English summary) [Limit of the ratio of entropy over energy for a weak solution of the Navier-Stokes equations] 84f:35115

- (with Temam, Roger) Homogeneous statistical solutions of Navier-Stokes equations. **84a:35238**
- (with Temam, Roger) Sur la détermination d'un écoulement fluide par des observations discrètes. (English summary) [On the determination of fluid flows by discrete observations] **84c:35088**
- (with Saut, Jean-Claude) Transformation fonctionnelle linéarisant les équations de Navier-Stokes. (English summary) [Functional transform linearizing the Navier-Stokes equations] **84c:35089**
- See also Constantin, Peter, **84d:35126**
- Frisch, Uriel See Bardos, Claude W.; et al., **84a:35237**
- Galdi, Giovanni P. (with Rionero, Salvatore) Global solution of a system of linear parabolic equations and related problems of mathematical physics. **84a:35239**
- (with Rionero, Salvatore) Local estimates and stability of viscous flows in an exterior domain. **84d:35127**
- (with Rionero, Salvatore) On the best conditions on the gradient of pressure for uniqueness of viscous flows in the whole space. **84b:35102**
- Geymonat, Giuseppe Perturbations en théorie spectrale. [Perturbations in spectral theory] **84c:35115**
- Giga, Yoshikazu Time and spatial analyticity of solutions of the Navier-Stokes equations. **84c:35145**
- Glushko, A. V. Asymptotic behavior with respect to time of the solution of the Cauchy problem for a linearized system of Navier-Stokes equations with zero right-hand side. (Russian) **84a:35240**
- Guillope, Colette Comportement à l'infini des solutions des équations de Navier-Stokes et propriété des ensembles fonctionnels invariants (ou attracteurs). (English summary) [Behavior at infinity of the solutions of Navier-Stokes equations and a property of functional invariant sets (or attractors)] **84a:35241**
- Comportement à l'infini des solutions des équations de Navier-Stokes et propriété des ensembles fonctionnels invariants (ou attracteurs). (English summary) [Long-time behavior of the solutions of the time-dependent Navier-Stokes equations and property of functional invariant (or attractor) sets] **84f:35116**
- Illner, Reinhard (with Wick, Joachim) Statistical solutions of differential equations with nonuniquely solvable Cauchy problems. **84c:35136**
- Kapitanskii, L. V. Stationary solutions of Navier-Stokes equations in periodic pipes. (Russian) **84a:35242**
- Kazhikhov, A. V. On the Cauchy problem for the equations of a viscous gas. (Russian) **84j:35138**
- Kohn, Robert V. See Caffarelli, Luis A.; et al., **84m:35097**
- Komech, A. I. See Vishik, M. I., **84f:35119**
- Marchioro, C. (with Pulvirenti, Mario) Hydrodynamics in two dimensions and vortex theory. **84c:35126**
- Matsumura, Akitaka (with Nishida, Takaaki) Initial-boundary value problems for the equations of motion of compressible viscous and heat-conductive fluids. **84c:35137**
- Miklavčič, Milan Nonlinear stability of asymptotic suction. **84m:35098**
- Miyakawa, Tetsuro On nonstationary solutions of the Navier-Stokes equations in an exterior domain. **84j:35139**
- Mogilevskii, I. Sh. Solvability of a general boundary value problem for a linearized nonstationary system of Navier-Stokes equations. (Russian) **84c:35090**
- Nazarov, S. A. (with Piletskas, K. I.) Behavior of solutions of Stokes and Navier-Stokes systems in domains with periodically changing cross-section. (Russian) **84m:35099**
- Neustupa, Jiří The dimension of a set of singularities of weak solutions to the Navier-Stokes equations. (See **84i:00016**)
- Nicolaenko, Basil See Caffarelli, Luis A.; et al., **84h:35135**
- Nirenberg, Louis See Caffarelli, Luis A.; et al., **84m:35097**
- Nishida, Takaaki See Matsumura, Akitaka, **84c:35137**
- O, Yong Guk On a boundary value problem for the Navier-Stokes equations. I. (Korean. English summary) **84c:35116a**
- On a boundary value problem for the Navier-Stokes equations. II. (Korean. English summary) **84c:35116b**
- On the method of orthogonal projections in the space $\dot{D}(\Omega)$ and the Navier-Stokes equations. (Korean. English summary) **84c:35117a**
- On the orthogonal projection method in the space $B(\Omega)$ and Navier-Stokes equations. (Korean. English summary) **84c:35117b**
- Orunkhanov, M. K. (with Smagulov, Sh.) On the theory of the method of fictitious domains. (Russian) **84c:35091**
- Oskolkov, A. P. Certain model nonstationary systems in the theory of non-Newtonian fluids. IV. (Russian) **84c:35243**
- Unsteady flows of viscoelastic fluids. (Russian) **84m:35100**
- Panyushkin, V. N. Solvability of the Cauchy problem for a degenerate system of partial differential equations. (Russian) (See **84m:35003**)
- Petriu, Titus Calculating correction for compressibility in a nonstationary regime. Mathematical considerations and schemes of some solution processes. (Romanian. French summary) **84c:35116**
- Piletskas, K. I. On the existence of solutions of Navier-Stokes equations that have infinite dissipation of energy in a class of domains with a noncompact boundary. (Russian) **84a:35244**
- See also Nazarov, S. A., **84m:35099**
- Prouse, Giovanni On an inequality related to the motion, in any dimension, of viscous, incompressible fluids. (Italian summary) **84b:35103**
- On an inequality related to the motion, in any dimension, of viscous, incompressible fluids. II. (Italian summary) **84c:35117**
- Analysis of a three-dimensional mathematical model of water circulation in a basin. (Italian summary) **84c:35127**
- Pulvirenti, Mario See Marchioro, C., **84c:35126**
- Rautmann, Reinund On error bounds for nonstationary spectral Navier-Stokes approximations. **84c:35092**
- Rionero, Salvatore See Galdi, Giovanni P., **84a:35239**; **84b:35102** and **84d:35127**
- Rolandi, Francesca (with Verri, Maurizio) On the variational inequalities associated to a hydrodynamical model. (Italian summary) **84a:35245**
- Saut, Jean-Claude See Foias, Ciprian, **84c:35089** and **84f:35115**
- Scheffer, Vladimir Boundary regularity for the Navier-Stokes equations. **84c:35118**
- Secchi, Paolo On the initial value problem for the equations of motion of viscous incompressible fluids in the presence of diffusion. (Italian summary) **84b:35104**
- (with Valli, Alberto) A free boundary problem for compressible viscous fluids. **84f:35117**
- Shapiro, Victor L. One-sided conditions for the Navier-Stokes equations. **84a:35246**
- Shifrin, B. The iteration method and solvability conditions for equations of Navier-Stokes type. (Russian. English and Estonian summaries) **84c:35119**
- Smagulov, Sh. See Orunkhanov, M. K., **84c:35091**
- Socolescu, Dan On the convergence at infinity of the steady plane Leray solution of the Dirichlet problem for the Navier-Stokes equations. **84f:35118**
- Solonnikov, V. A. On the solvability of boundary and initial-boundary value problems for the Navier-Stokes system in domains with noncompact boundaries. **84a:35247**
- On the Stokes equations in domains with nonsmooth boundaries and on viscous incompressible flow with a free surface. **84c:35118**
- Solutions of a stationary system of Navier-Stokes equations that have an infinite Dirichlet integral. (Russian) **84a:35248**
- Sulem, Catherine See Bardos, Claude W.; et al., **84a:35237**
- Sulem, Pierre-Louis See Bardos, Claude W.; et al., **84a:35237**
- Temam, Roger See Foias, Ciprian, **84a:35238** and **84c:35088**
- Ton, Bui An On the existence and uniqueness of a local classical solution of an initial-boundary value problem for incompressible nonhomogeneous viscous fluids. **84a:35249**
- Ton Tran Cong (with Blake, J. R.) General solutions of the Stokes flow equations. **84a:35250**
- Valli, Alberto See Secchi, Paolo, **84f:35117**
- Vasilache, Sergiu (with de Bruin, Denis) Sur la résolution de l'équation de Stokes. (English summary) [On the solution of the Stokes equation] **84j:35140**
- Verri, Maurizio See Rolandi, Francesca, **84a:35245**
- Vishik, M. I. (with Komech, A. I.) Generalized solutions of the inverse Kolmogorov equation that corresponds to the stochastic Navier-Stokes system. (Russian. English summary) **84f:35119**
- Wick, Joachim See Illner, Reinhard, **84b:35136**
- secondary classifications:
- Amit, R. (with Hall, C. A.; Porsching, T. A.) An application of network theory to the solution of implicit Navier-Stokes difference equations. (**84d:76016**)
- Babin, A. V. (with Vishik, M. I.) Attractors of the Navier-Stokes system and parabolic equations and estimates of their dimension. (Russian) (**84d:35016**)
- Baibatshev, B. N. Parabolic approximation of equations of magnetohydrodynamics. (Russian) (**84f:76075**)
- Beale, J. Thomas Large-time regularity of viscous surface waves. (See **84f:35004**)
- Belov, Yu. Ya. (with Yanenko, N. N.) Nonlocal equations of a viscous fluid. (Russian) (**84g:76022**)
- Bemelmans, J. Gleichgewichtsfiguren zäher Flüssigkeiten mit Oberflächenspannung. (English summary) [Equilibrium figures of viscous fluids with surface tension] (**84c:76044**)
- Bender, Carl M. See Turner, Leaf, (**84b:76102**)
- Boldrighini, Carlo ★Introduzione alla fluidodinamica. (Italian) [Introduction to fluid dynamics] (**84c:76001**)
- Bugrov, A. N. (with Korobitsyna, Zh. L.) Asymptotic behavior of solutions of initial-boundary value problems in the method of fictitious domains. (Russian) (**84c:76021**)
- Chernous, K. A. Representation of solutions of linearized Navier-Stokes equations. Hydrodynamic potentials. (Russian) (**84c:76045**)
- Cimatti, Giovanni How the Reynolds equation is related to the Stokes equations. (**84c:76029**)
- Foias, Ciprian (with Temam, Roger) Finite parameter approximative structure of actual flows. (**84c:76040**)
- (with Temam, Roger) Sur la détermination d'un écoulement fluide par des observations discrètes: principe de la prédiction d'un écoulement. (English summary) [On the determination of fluid flows by discrete observations: principle of flow prediction] (**84d:86002**)
- (with Manley, O. P.; Temam, Roger; Trève, Yvain M.) Number of modes governing two-dimensional viscous, incompressible flows. (**84f:76026**)
- Franceschini, Valter Two models of truncated Navier-Stokes equations on a two-dimensional torus. (**84c:58054**)
- Fursikov, A. V. Statistical extremal problems and unique solvability of the three-dimensional Navier-Stokes system under almost all initial conditions. (**84c:76046**)
- Properties of solutions of some extremal problems connected with a Navier-Stokes system. (Russian) (**84f:49031**)
- (Gallavotti, Giovanni) See Boldrighini, Carlo, (**84c:76001**)
- Georgescu, Adelina ★Recent results in fluid mechanics. (**84c:76001**)
- Giga, Yoshikazu The Stokes operator in L_p spaces. (**84f:47042**)
- Gishlarska, V. I. Statistical solution of the Navier-Stokes system in the case of infinite average energy. (Russian. English summary) (**84g:35171**)
- Gonzalez de Paz, R. B. Sur le comportement à l'infini des solutions des équations de Stokes. [On the behavior at infinity of the solutions of Stokes equations] (**84c:35012**)
- Hall, C. A. See Amit, R.; et al., (**84d:76016**)
- Joseph, Daniel D. Hydrodynamic stability and bifurcation. (See **84m:76003**)
- Kapitanskii, L. V. On the coincidence of spaces $J_1^2(\Omega)$ and $J_2^2(\Omega)$ for plane domains Ω that have exits at infinity. (Russian) (**84b:46030**)
- Kheshti, Haroon (with Luskin, Mitchell) On the variable sign penalty approximation of the Navier-Stokes equation. (**84m:76039**)
- Klainerman, Sergiu (with Majda, Andrew) Singular limits of quasilinear hyperbolic systems with large parameters and the incompressible limit of compressible fluids. (**84d:35089**)
- Korobitsyna, Zh. L. See Bugrov, A. N., (**84b:76021**)

- Kozlov, L. F. (with Ptukha, Yu. A.) Certain exact solutions of unsteady Navier-Stokes equations in the case of suction. (84f:76027)
- Ladyzhenskaya, O. A. The finite-dimensionality of bounded invariant sets for the Navier-Stokes system and other dissipative systems. (Russian. English summary) (84c:35020)
- Luskin, Mitchell See Khushgi, Haroon, (84m:76039)
- Majda, Andrew See Klainerman, Sergiu, (84d:35089)
- Manley, O. P. See Fofias, Ciprian et al., (84f:76026)
- Marcus, Philip S. (with Press, William H.; Teukolsky, Saul A.) Multiscale model equations for turbulent convection and convective overshoot. (84h:85008)
- Marris, A. W. On the completeness of Trkalian motions of Navier-Stokes fluids. (84h:76017)
- May, M. On the theory of compressible fluids. (German and Russian summaries) (84c:76047)
- Mendez, Raul Numerical study of incompressible flow about immersed elastic boundaries. (84d:76015)
- Okamoto, Hisashi On the semidiscrete finite element approximation for the nonstationary Navier-Stokes equation. (84c:65115)
- Pal, P. K. Limiting amplitudes for forced oscillations in a rotating compressible fluid. (84f:76072)
- Paşa, Gelu (with Polisevski, Dan) Homogenization of a hydrodynamic model. (Romanian. English summary) (84c:49037)
- Petrov, A. S. Initial conditions and boundary conditions for the Navier-Stokes equations in the Helmholtz form. (Russian) (84h:76023)
- Petunin, I. M. Asymptotic expansion for large time of the solution of the Cauchy problem for a linearized system of hydrodynamics of a rotating incompressible fluid. (Russian) (84j:35026)
- Polisevski, Dan See Paşa, Gelu, (84c:49037)
- Porsching, T. A. See Amit, R.; et al., (84d:76016)
- Press, William H. See Marcus, Philip S.; et al., (84h:85008)
- Ptukha, Yu. A. See Kozlov, L. F., (84f:76027)
- Rautmann, Reimund Some open questions in vorticity transport and Navier-Stokes equations. (84g:76023)
- Rosen, Gerald Functional integrals in Navier-Stokes incompressible fluid turbulence. (84c:76076)
- Ruas Santos, Vitoriano B. Une méthode d'éléments finis mixtes non-conformes en vitesse pour le problème de Stokes tridimensionnel. (English and Portuguese summaries) [A method of mixed finite elements that are nonconformal in velocity for the three-dimensional Stokes problem] (84j:76016)
- Sadoury, Robert Quelques problèmes de dynamique des fluides géophysiques. [Some problems of geophysical fluid dynamics] (84m:86005)
- Sobolevskii, P. E. Approximation of the Stokes problem by Neumann problems. (Russian) (84c:65118)
- Stallabrass, M. P. A class of exact solutions of the Navier-Stokes equations. Plane unsteady flow. (84c:76025)
- Temam, Roger See Fofias, Ciprian, (84c:76040); (84d:86002) and (84f:76026)
- Teukolsky, Saul A. See Marcus, Philip S.; et al., (84h:85008)
- Trève, Yvain M. See Fofias, Ciprian et al., (84f:76026)
- Turner, Iain (with Bender, Carl M.) Two-dimensional, steady-state diffusion of a passive scalar in a flow field. (84c:76102)
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- Samoilenko, V. G. (with Prikarpatskii, A. K.) A periodic problem for the Toda lattice. (Russian) (84d:58040)
- Sánchez-Palencia, Enrique Boundary value problems in domains containing perforated walls. (84a:35045)
- Santini, P. M. See Degasperis, Antonio, (84c:45020)
- Saranen, Jukka On an inequality of Friedrichs. (84i:35022)
- Sasaki, Ryu Canonical structure of soliton equations. II. The Kaup-Newell system. (84i:58101b)
- See also Alberty, J. M.; et al., (84i:58101a) and Koikawa, Takao, (84m:58121)
- Satsuma, Junkichi (with Hirota, Ryogo) A coupled KdV equation is one case of the four-reduction of the KP hierarchy. (84g:58057)
- Sattinger, D. H. Gauge theories for soliton problems. (84i:58055)
- Saul'ev, V. K. Application of explicit asymmetric difference approximations for the solution of the Burgers equation. (Russian) (84i:65101)
- Save'ev, M. V. See Leznov, A. N., (84i:81060b) and (84m:58057)
- Sawada, Katsuro See Shimizu, Toru; et al., (84g:73044)

- Schecter, Eric Interpolation of nonlinear partial differential operators and generation of differentiable evolutions. (84c:34074)
- Scott, Alwyn C. The birth of a paradigm. (84c:81035)
See also Solitons in action. (84c:76003a) and (84c:76003b)
- Scott, L. R. See Bona, J. L.; et al. (84j:76011)
- Segal, Irving E. The Cauchy problem for the Yang-Mills equations. (84c:58025)
- Segeda, Yu. N. See Moskaluk, S. S. (84j:81059)
- Sergeenkov, S. A. See Mahan'kov, V. G.; et al. (84m:81205)
- Sestini, Giorgio (with Quilghini, Demore) A one-dimensional two-phase plane problem inverse to the Stefan problem. (Italian. English summary) (84c:35073)
- Seymour, Brian R. (with Varley, Eric) Exact solutions describing soliton-like interactions in a nondispersive medium. (84c:58069)
- Shadwick, W. F. Case's conjecture on Bäcklund transformations and conservation laws. (84j:58114)
See also Rogers, Colin. (84c:58002)
- Shatah, Jalal Global existence of small solutions to nonlinear evolution equations. (84c:35036)
- Shator, A. K. See Gabov, S. A.; et al. (84c:76110)
- Shen, M. C. See Vanden-Broeck, Jean-Marc. (84m:76034)
- Shimizu, Toru (with Sawada, Katsuro; Wadati, Miki) Determination of the one-kink curve of an elastic wire through the inverse method. (84g:73044)
- Shtelen, V. M. Some exact solutions of a system of differential equations of nonlinear wave mechanics. (Russian) (84j:81023)
See also Fushchich, V. I. (84g:35006)
- Shul'man, E. I. Integrability of equations of Davey-Stewartson type. (Russian. English summary) (84m:76033)
- Singh, M. C. See Frydrychowicz, Wacław. (84c:73026)
- Sládek, Ján (with Sládek, Vladimír) Boundary integral equation solution of the Berger equation. (84m:73048)
- Sládek, Vladimír See Sládek, Ján. (84m:73048)
- Smagulov, Sh. See Ruzhik, V. Ya. (84c:76052)
- Sokolov, V. V. See Magadeev, R. A. (84c:58138)
- Steeb, Willi-Hans (with Strampp, W.) Diffusion equations and Lie and Lie-Bäcklund transformation groups. (84c:58011)
(with Oevel, W.) Bäcklund transformation groups of nonlinear evolution equations and the Painlevé property. (84m:58169)
See also Strampp, W.; et al. (84c:35063)
- Steinberg, Stanley See Hlavaty, Ladislav; et al. (84j:35008)
- Strampp, W. (with Steeb, Willi-Hans; Erig, W.) Solutions to nonlinear reaction-diffusion equations in two space dimensions. (84c:35063)
See also Steeb, Willi-Hans. (84c:58011)
- Suhubi, Erdogan S. Conservation laws for one-dimensional isentropic gas flows. (84m:76072)
- Sukhomosov, V. I. Well-posedness in the large of a three-dimensional problem of ocean dynamics. (Russian) (84g:86003)
- Sun, Geng See Guo, Yu Fa. (84c:76017)
- Sveshnikov, A. G. See Gabov, S. A.; et al. (84c:76110)
- Swanson, Charles A. See Noussair, Ezzat S. (84c:35068)
- (Swiney, Harry L.) See Hydrodynamic instabilities and the transition to turbulence. (84m:76003)
- Sychev, Vyacheslav Vladimirovich ★The differential equations of thermodynamics. (84i:80001)
- Symon, K. R. See Lewis, H. Ralph. (84m:76098)
- Szafirski, Bolesław See Capiński, Marek. (84c:35124)
- Taffin, Y. Analytic linearization, Hamiltonian formalism, and infinite sequences of constants of motion for the Burgers equation. (84d:58041)
Erratum: "Analytic linearization, Hamiltonian formalism, and infinite sequences of constants of motion for the Burgers equation" [Phys. Rev. Lett. 47 (1981), no. 20, 1425-1428; MR 84d:58041]. (84c:58113)
See also Anderson, Robert Leonard. (84c:76056)
- Tahraoui, Rabah See Aubert, Gilles. (84c:73019)
- Tajiri, Masayoshi (with Kawamoto, Shunji) Similarity reduction of modified Kadomtsev-Petviashvili equation. (84m:58170)
- Teshukov, V. M. On regular reflection of a shock wave from a rigid wall. (84c:76046)
- Toland, John F. Singular elliptic eigenvalue problems for equations and systems. (84c:35077)
- Trullinger, S. E. See DeLeonardis, R. M. (84c:82049)
- Tsutsumi, Masayoshi Scattering of solutions of nonlinear Klein-Gordon equations in three space dimensions. (84m:35085)
- Tu, Gui Zhang Conservation laws and symmetries of nonlinear evolution equations. (84c:35093)
Symmetries of equations $q_{tt} = g(q, q_x, q_{xx}, \dots)$ and the formal complete integrability of the Boussinesq equation. (84c:58057)
On polynomial symmetries of the sine-Gordon equation. (84j:58112)
A simple approach to Hamiltonian structures of soliton equations. I. (Italian and Russian summaries) (84c:58092)
A new hierarchy of coupled degenerate Hamiltonian equations. (84h:58075)
See also Qin, Meng Zhao. (84c:35163); Boiti, M. (84c:58001); (84f:58058) and (84m:58116)
- Turchetti, G. See Liverani, C. (84h:41035)
- Ueno, Kimio Monodromy preserving deformation and its application to soliton theory. II. (84i:58136)
- Ukai, Seiji On the exterior problem to a linearized Boltzmann equation with the reverse reflection boundary condition. (84c:82018)
- Vanden-Broeck, Jean-Marc (with Shen, M. C.) A note on solitary and cnoidal waves with surface tension. (French summary) (84c:76034)
See also Hunter, John K. (84c:76037)
- Varley, Eric See Seymour, Brian R. (84c:58069)
- Vasconcellos, Lucia Maria T. B. On the dependence on a parameter of the scattering operator associated in the Klein-Gordon equation. (84c:35112)
- Velo, G. See Ginibre, J. (84m:81040)
- Velthuisen, J. See Nijhoff, F. W.; et al. (84g:81050)
- Verheest, Frank (with Hereman, Willy) Nonlinear mode decoupling for classes of evolution equations. (84f:58063)
- Vermiglio, G. See Donato, A. (84g:73035)
- Veselić, K. On the nonrelativistic limit of the bound states of the Klein-Gordon equation. (84c:35104)
- Veselov, A. P. (with Novikov, S. P.) Poisson brackets that are compatible with the algebraic geometry and the dynamics of the Korteweg-de Vries equation on the set of finite-gap potentials. (Russian) (84j:58065)
- Vilasi, G. See de Filippo, S.; et al. (84c:58201)
- Volyak, K. I. Weakly nonlinear interaction of gravity waves on deep water. (84i:86003)
- Wadati, Miki See Shimizu, Toru; et al. (84g:73044) and Ichikawa, Yoshi Hiko; et al. (84c:58108)
- Wang, P. K. C. Nonperiodic oscillations of Langmuir waves. (84a:76027)
- Watanabe, Shinsuke See Yoshimura, Kazuyoshi. (84b:58059)
- Weinstein, Alan See Holm, Darryl D.; et al. (84m:76050)
- West, Bruce J. ★On the simpler aspects of nonlinear fluctuating deep water gravity waves. (84j:76014)
- Wilson, George The modified Lax and two-dimensional Toda lattice equations associated with simple Lie algebras. (84c:58058)
The affine Lie algebra $C_2^{(1)}$ and an equation of Hirota and Satsuma. (84c:58046)
See also Flaschka, H. (84f:58059)
- Wingate, Charles A. Numerical search for a q^4 breather mode. (84c:65104)
- Winternitz, P. See Grundland, A. M.; et al. (84j:58134)
- Witomski, Patrick The steady state heat equation with mixed nonlinear boundary conditions—an example in crystallography. (84j:80013)
- Wolf, Kurt Bernardo See Hlavaty, Ladislav; et al. (84j:35008)
- Wu, Ke See Guo, Han Ying; et al. (84c:58005)
- Xiang, Yan Yu See Guo, Han Ying; et al. (84g:58005)
- Yajima, Nobuo On a growing mode of the Boussinesq equation. (84g:76018)
- Yakushkin, I. G. A solution of modified Burgers equation. (84b:76015)
- Yanenko, N. N. See Rozhdnestvenskiĭ, B. L. (84c:35085)
- (Yankovsky, Eugene) See Sychev, Vyacheslav Vladimirovich. (84i:80001)
- Yoshimura, Kazuyoshi (with Watanabe, Shinsuke) Chaotic behaviour of nonlinear evolution equation with fifth order dispersion. (84b:58059)
- Zabusky, Norman J. Computational synergetics and mathematics innovation: waves and vortices. (84c:00038)
- (Zel'dovich, Ya. B.) See Barenblatt, G. I. (84b:76026)
- Ziemkiewicz, J. See Infeld, E. (84d:81009)
- Znojil, M. Analytic Green function and bound states for the screened Coulomb potential $V(r) = F/r^2 + G/r + H/(r + z^2)$. (84c:81010)
- Zubov, E. N. On double waves of gas dynamics equations for three-dimensional unsteady flows of an ideal gas with variable entropy. (84c:76055)
- Hydrodynamic instabilities and the transition to turbulence ★Hydrodynamic instabilities and the transition to turbulence. (84m:76003)
- Redstone Arsenal, Ala. ★Solitons in action. (84b:76003a)
★Солитоны в действии. (Russian) [Solitons in action] (84b:76003b)
- Solitons in action ★Solitons in action. (84b:76003a)
★Солитоны в действии. (Russian) [Solitons in action] (84b:76003b)
- Workshop:
Solitons ★Solitons in action. (84b:76003a)
★Солитоны в действии. (Russian) [Solitons in action] (84b:76003b)
- 35Q99 None of the above, but in this section
- Abdinazarov, S. Uniqueness of the solution of a boundary value problem of the type of the Bitsadze-Samarskii problem for a third-order equation. (Russian) 84h:35156
- Aliev, K. I. Solvability of a boundary value problem arising in short-term local weather forecasting. (Russian) (See 84m:35003)
- Ambrasevičius, A. A problem on finding the form of the surface of a fluid in a conical vessel with a given volume of fluid. I. (Russian. English and Lithuanian summaries) 84h:35157
- Barone, E. A mathematical model of automobile traffic. (Italian) (See 84a:34003)
- Bogatyrev, V. A. Uniqueness of a potential-vortex flow. (Russian) 84a:35277
- Borzymowski, Andrzej A nonlinear Goursat problem for a 4th order polyvibrating equation. 84h:35158
- Capiński, Marek (with Szafirski, Bolesław) Statistical investigation of the heat equation. (Russian summary) 84c:35102
- Pozio, M. Assunta Some conditions for global asymptotic stability of equilibria of integro-differential equations. 84m:35114
- Szafirski, Bolesław See Capiński, Marek. 84c:35102
- secondary classifications:
- Alberti, Peter M. (with Cress, Bernd) Boltzmannähnliche Gleichungen und H -Theoreme. [Boltzmann-like equations and H -theorems] (84c:76049)
- Alekseevskaya, T. V. Investigation of quasilinear equations arising in problems of electrophoresis. (Russian) (84m:80003)
- Bojarski, Norbert N. Inverse scattering, inverse field, and inverse source theory. (84c:76094)
- Cherednik, I. V. Integrable differential equations and coverings of elliptic curves. (Russian) (84h:58069)
- Chichinadze, R. K. Fundamental solution of the equation of steady-state flow of a micropolar fluid and potentials connected with it. (Russian. English and Georgian summaries) (84c:76016)
- Cress, Bernd See Alberti, Peter M. (84b:76049)
- Domanski, Zdzisław Existenz der Lösung erster Anfangswertaufgabe in der linearen Thermoelastizitätstheorie. [Existence of the solution of the first initial-boundary value problem in linear thermoelasticity theory] (84c:73067)

- Erig, W. See Steeb, Willi-Hans; et al., (84b:58056)
- Fava, Franco *W* congruences, infinitesimal deformations and Bäcklund's problem. (Italian) (84b:58137)
- Feroe, John A. Traveling waves with finitely many pulses in a nerve equation. (84c:52009)
- Fiszdon, W. (with Zajczkowski, W. M.) The initial-boundary value problem for the flow of a barotropic viscous fluid, global in time. (84c:76052)
- Garner, J. B. (with Kellogg, R. B.) A one tube flow problem arising in physiology. (84c:92014)
- Gibbon, John D. (with McGuinness, M. J.) The real and complex Lorenz equations in rotating fluids and lasers. (84b:58097)
- Gzyl, Henryk Integration of the Boltzmann equation in the relaxation time approximation. (84b:82045)
- Hader, K. P. Nonlinear differential equations from biology. (84f:92001)
- Horst, E. On the classical solutions of the initial value problem for the unmodified nonlinear Vlasov equation. II. Special cases. (84b:85001)
- Kellogg, R. B. See Garner, J. B., (84c:92014)
- Khoma, I. Yu. Solvability of boundary value problems of the generalized theory of anisotropic shells. (84g:73059)
- Korman, Philip Existence of periodic solutions for a class of nonlinear problems. (84c:35017)
- Kotlyarov, V. P. Finite-range solutions of the Heisenberg equation. (Russian) (84b:58054)
- Leites, D. A. See Leznov, A. N.; et al., (84f:58061)
- Levitan, B. M. Inverse problem for the Sturm-Liouville operator in the case of finite-range and infinite-range potentials. (Russian) (84j:34011)
- Leznov, A. N. (with Savel'ev, M. V.; Leites, D. A.) The complete integrability of some nonlinear equations of the theory of strings. (Russian) (84f:58061)
- (with Smirnov, V. G.; Shabat, A. B.) Internal symmetry group and integrability conditions for two-dimensional dynamical systems. (Russian. English summary) (84c:58043)
- Lions, Pierre-Louis La méthode de concentration-compacité en calcul des variations. [The concentration-compactness method in the calculus of variations] (84c:49033)
- Malinetskii, G. G. On a class of mathematical models connected with self-organization. (Russian) (84b:80004)
- Matsumura, Akitaka (with Nishida, Takaaki) Initial-boundary value problems for the equations of motion of compressible viscous fluids. (See 84f:35004)
- McGuinness, M. J. See Gibbon, John D., (84b:58097)
- Nesterov, S. V. (with Plis, V. I.) Diffraction of Kelvin waves in a channel with a semi-infinite wall. (Russian) (84c:35046)
- Nishida, Takaaki See Matsumura, Akitaka, (See 84f:35004)
- Novikov, S. P. Commuting operators of rank $l > 1$ with periodic coefficients. (Russian) (84a:58051)
- Olver, Peter J. A nonlinear Hamiltonian structure for the Euler equations. (84b:58057)
- Orazov, M. B. On the normal oscillations of an ideal heavy fluid in a channel with an elastic bottom. (Russian) (84h:73024)
- Otelbaev, M. O. (with Shynbekov, A. N.) Well-posed problems of Bitsadze-Samarskii type. (Russian) (84c:47080)
- Persek, Stephen C. Chaotic traveling waves in general autonomous systems of nonlinear partial differential equations. (84c:58151)
- Picard, Rainer Ein Hodge-Satz für Manningsfaltigkeiten mit nicht-glatten Rand. (English summary) [A Hodge theorem for manifolds with nonsmooth boundary] (84c:58006)
- Plis, A. I. (with Plis, V. I.) Propagation of Kelvin waves from a channel into a semibounded basin. (Russian) (84c:35047)
- Plis, V. I. See Nesterov, S. V., (84c:35046) and Plis, A. I., (84c:35047)
- Rinzel, John (with Terman, David) Propagation phenomena in a bistable reaction-diffusion system. (84c:35128)
- Roerdink, J. B. T. M. (with Weyland, A.) A generalized Fokker-Planck equation in the case of the Volterra model. (84f:92058)
- Savel'ev, M. V. See Leznov, A. N.; et al., (84f:58061)
- Schröter, J. See Steeb, Willi-Hans; et al., (84b:58056)
- Shabat, A. B. See Leznov, A. N.; et al., (84c:58043)
- Shira, V. I. On the resonance self-action of internal waves. (Russian) (84d:86001)
- Shynbekov, A. N. See Otelbaev, M. O., (84c:47080)
- Smirnov, V. G. See Leznov, A. N.; et al., (84c:58043)
- Steeb, Willi-Hans (with Schröter, J.; Erig, W.) A comment on conservation laws and constants of motion. (84b:58056)
- Terman, David See Rinzel, John, (84a:35128)
- Weyland, A. See Roerdink, J. B. T. M., (84f:92058)
- Zajczkowski, W. M. See Fiszdon, W., (84c:76052)

35Rxx Miscellaneous topics {For equations on manifolds, see 58Gxx; for manifolds of solutions, see 58Bxx; for stochastic PDEs, see also 60H15.}

Carroll, Robert Wayne ★ Transmutation, scattering theory and special functions. (84b:35114)

35R05 Equations with discontinuous coefficients or data

Brézis, Haim Problèmes elliptiques et paraboliques non linéaires avec données mesurées. [Nonlinear elliptic and parabolic problems with measure data] (84c:35132)

secondary classifications:

- Canfora, Albino On a quasilinear parabolic equation with discontinuous coefficients. (Italian) (84b:35079)
- Khalilov, G. M. Investigation of a mixed problem for a certain class of third-order partial differential equations with discontinuous coefficients. (Russian) (84a:35056)
- Nguyen Min Chiêng A boundary value problem with a discontinuous boundary condition. (Russian) (84b:35075)

35R10 Difference-partial differential equations, equations with time lag

- Ahmad, Shair (with Vatsala, A. S.) Comparison results of reaction-diffusion equations with delay in abstract cones. (84c:35103)
- Ardito, Ada (with Vernole, Paola) Existence and regularity for delay differential equations in interpolation spaces. (84c:35143)
- Dombrovskii, V. A. (with Kolomiets', V. G.) Investigation of multifrequency random oscillations in systems with distributed parameters and lag. (Russian) (84a:35278)
- Frolov, I. S. Solvability of partial differential-difference equations. (Russian) (84c:35144)
- Gorshkov, A. I. Construction of a solution of a boundary value problem for parabolic equations with deviating arguments and variable coefficients. (Russian. English summary) (84c:35104)
- Guseinov, M. M. Solution of a mixed problem for a quasilinear equation of hyperbolic type in an infinite domain. (Russian) (84a:35279)
- Kamont, Zdzisław On the Cauchy problem for nonlinear systems of partial differential-functional equations of the first order. (84c:35145)
- Kolomiets', V. G. See Dombrovskii, V. A., (84a:35278)
- Kračinica, Barbara On some properties of solutions to a mixed problem for an infinite system of parabolic differential-functional equations in an unbounded domain. (84c:35143)
- Kunisch, Karl (with Schappacher, W.) Necessary conditions for partial differential equations with delay to generate C_0 -semigroups. (84c:35139)
- Malec, Marian Un analogue du lemme Nagumo-Westphal pour des équations différentielles fonctionnelles du type elliptique. (English and Russian summaries) [An analogue to the Nagumo-Westphal lemma for functional-differential equations of elliptic type] (84d:35141)
- Nizhnik, L. P. An inverse scattering problem for a functional-differential equation. (Russian) (84a:35280)
- Nowotarska, Małgorzata Chaplygin method for an infinite system of first order partial differential-functional equations. (84f:35146)
- Pozio, M. Assunta Decay estimates for partial functional-differential equations. (84c:35115)
- Renardy, Michael A class of quasilinear parabolic equations with infinite delay and application to a problem of viscoelasticity. (84c:35133)
- Schappacher, W. See Kunisch, Karl, (84c:35139)
- Szarski, Jacek Infinite systems of parabolic differential-functional inequalities. (Russian summary) (84a:35281)
- Vatsala, A. S. See Ahmad, Shair, (84c:35103)
- Vernole, Paola See Ardito, Ada, (84c:35143)
- Voigt, Wolfgang Nonlinear parabolic differential-functional inequalities with boundary-functional conditions. (84c:35144a)
- Das Differenzenverfahren bei nichtlinearen parabolischen Differential-Funktional-Gleichungen mit Rand-Funktional-Bedingungen. [The difference method in nonlinear parabolic functional-differential equations with boundary-functional conditions] (84c:35144b)
- secondary classifications:
- Andriyanova, N. A. Proof of the existence of a solution to a problem with shift for the Euler-Darboux equation with positive parameters. (Russian) (84b:35133)
- Bainov, D. D. (with Milusheva, S. D.) Application of the partially-multiplicative averaging for a class of functional-differential equations with impulses. (84c:34006)
- Frolov, I. S. The spectrum of a class of differential-difference operators. (Russian) (See 84f:35003)
- Hrusa, William J. A nonlinear functional-differential equation in Banach space with applications to materials with fading memory. (84c:70018)
- Kuchment, P. A. Representations of solutions of periodic partial differential equations. (Russian) (84j:35028)
- Milusheva, S. D. See Bainov, D. D., (84c:34006)
- Nobel, John A. A nonlinear conservation law with memory. (84c:45021)
- Rankin, Samuel M., III Existence and asymptotic behavior of a functional-differential equation in Banach space. (84b:35160)
- Shmarëv, S. I. The second boundary value problem for an integro-differential equation of parabolic type. (Russian) (84m:45033)
- Sinyukov, Yu. M. (with Zhdanov, V. I.) On the solutions of the equations of motion of a one-dimensional bag model with surface energy. (84c:81131)
- Stanković, Bogoljub Linear differential equation with coefficients in a subfield of Mikusiński operators. (84b:44013)
- Szarski, Jan Comparison theorem for infinite systems of parabolic differential-functional equations and strongly coupled infinite systems of parabolic equations. (Russian summary) (84f:35008)
- Webb, G. F. A recovery-relapse epidemic model with spatial diffusion. (84c:92052)
- Zhdanov, V. I. See Sinyukov, Yu. M., (84c:81131)

35R15 Equations on function spaces [See also 58D25.]

- Belyaev, A. A. Solution of the Dirichlet problem in a half space of Hilbert space by means of potentials. (Russian) (84j:35154)
- Bogdan'skii, Yu. V. The Cauchy problem for an essentially infinite-dimensional parabolic equation on an infinite-dimensional sphere. (Russian) (84c:35134)
- Dmitrienko, V. T. (with Zvyagin, V. G.) Homotopy classification of a class of continuous mappings. (Russian) (84a:35282)
- Feller, M. N. Infinite-dimensional selfadjoint Laplace-Lévy differential operators. (Russian) (84m:35115)
- Frolov, N. N. Fundamental solutions of infinite-dimensional differential equations with constant coefficients. (Russian) (84d:35142)
- Khrennikov, A. Yu. Equations with infinite-dimensional pseudodifferential operators. (Russian) (84m:35116)
- Li, Yu Chia Parabolic equations on infinite-dimensional spaces. (84d:35143)
- Applications of the Fourier-Wiener transform to differential equations on infinite-dimensional spaces. II. (84a:35283)

Fundamental solutions for differential equations associated with the number operator. **84c:35140a**

A correction and some additions to: "Fundamental solutions for differential equations associated with the number operator". **84c:35140b**

Piech, M. Ann. Duality of fundamental solutions of parabolic equations in infinite dimensions. **84c:35159**

Samoilenko, V. G. A second-order selfadjoint elliptic operator with an infinite number of variables. (Russian) **84i:35135**

Smolyanov, O. G. Infinite-dimensional pseudodifferential operators and Schrödinger quantization. (Russian) **84d:35144**

Yamanaka, Takesi The Cauchy-Kovalevskaja theorem with a vector valued time variable. **84j:35155**

Zvyagin, V. G. See Dmitrienko, V. T., **84c:35282**

secondary classifications:

Belyaev, A. A. Integral representation of functions harmonic in a domain of Hilbert space. (Russian. English summary) **84d:46067a**

The mean value theorem for harmonic functions in a domain of Hilbert space. (Russian. English summary) **84d:46067b**

Bentkus, Vidmantas-Kastytis Jurgio Ellipticity of an infinite-dimensional iterated Laplace operator. I. (Russian) **84d:46068a**

Ellipticity of an infinite-dimensional iterated Laplace operator. II. (Russian. English and Lithuanian summaries) **84d:46068b**

Berezans'kii, Yu. M. (with Samoilenko, V. G.) Selfadjointness of differential operators with a finite and infinite number of variables, and evolution equations. (Russian) **84c:47062**

El-Saify, H. A. See Gali, I. M., **84f:49032**

Gali, I. M. (with El-Saify, H. A.) Optimal control of systems governed by Petrowsky type equation with an infinite number of variables. **84f:49032**

Hasegawa, Yoshihei Lévy's functional analysis in terms of an infinite-dimensional Brownian motion. I. **84m:60099a**

Lévy's functional analysis in terms of an infinite-dimensional Brownian motion. II. **84m:60099b**

Lévy's functional analysis in terms of an infinite-dimensional Brownian motion. III. **84m:60099c**

Kaptur, Janusz On certain boundary value problems for partial differential equations. (Russian and Polish summaries) **84g:35037**

Kondrat'ev, Yu. G. Perturbation of operators of second quantization. (Russian) **84d:58061**

Lobuzov, A. A. Investigation of boundary value problems for characteristic operators of diffusion processes in Banach spaces. (Russian. English summary) **84g:60129**

Piech, M. Ann. Differentiability of measures associated with parabolic equations on infinite-dimensional spaces. **84c:28014**

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- Pawlow, Irena. A variational inequality approach to generalized two-phase Stefan problem in several space variables. (84c:35088)
- Variational inequality formulation and optimal control of nonlinear evolution systems governed by free boundary problems. (84m:49025)
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- 35R60 Equations and systems with randomness**
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- Capiński, Marek (with Szafirski, Bolesław) On the solutions of the Hopf equation for heat transfer. (Russian summary) (84b:35124)
- Cheremshantsev, S. E. On averaging the solution of the Schrödinger equation with a time-dependent stochastic potential. (Russian) (84b:35125)
- Chueshov, I. D. Statistical solutions of a stochastic system of von Kármán equations. (Russian. English summary) (84c:35299)
- Dawidowicz, Antoni L. On the existence of an invariant measure for a quasilinear partial differential equation. (84b:35173)
- Doku, Isamu. Existence and uniqueness theorem for solutions of random wave equations with stochastic boundary condition. (84c:35157)
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- On the solvability of a nonlinear hyperbolic equation with white noise. (Russian) (84b:35126)
- Krylov, N. V. (with Rozovskii, B. L.) Characteristics of second-order degenerate parabolic Itô equations. (Russian. English summary) (84b:35127)
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- Pozhidav, A. V. On the asymptotic normality of solution of boundary value problems with random coefficients. (Russian) (84b:35128)
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- Ahmed, Nasir Uddin. Stability of a class of stochastic distributed parameter systems with random boundary conditions. (84f:93059)
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- Gikhman, I. I. (with Skorokhod, A. V.) *Стохастические дифференциальные уравнения и их приложения. (Russian) [Stochastic differential equations and their applications] (84g:60003)
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- Jetschke, G. Different approaches to stochastic parabolic differential equations. (84c:60070)
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- Kozlov, S. M. (with Shubin, M. A.) A theorem on the coincidence of spectra for random elliptic operators. (Russian) (84d:35112)
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- Mikhailov, A. S. (with Schimansky-Geier, L.; Ebeling, Werner) Stochastic motion of the propagating front in bistable media. (84j:80022)
- Molchanov, S. A. The local structure of the spectrum of a random one-dimensional Schrödinger operator. (Russian. English summary) (84c:34081)
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- Narita, Kiyomasa. On explosions of solutions of stochastic differential equations. (Japanese) (84c:60084)
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Burns, John A. (with Herdman, Terry L.; Stech, Harlan W.) Differential-boundary operators and associated neutral functional-differential equations. (84j:34062)

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(with Sjöstrand, Johannes) Équation de Schrödinger et propagation des singularités. II. [Schrödinger equation and propagation of singularities. II] (See 84c:35003)

Liess, Otto (with Rodino, Luigi) A general class of Gevrey-type pseudodifferential operators. (See 84c:35003)

Lousberg, Pierre Un théorème de régularité pour les équations paraboliques rétrogrades. [A regularity theorem for backward parabolic equations] 84d:35153

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Shanania, N. A. Existence of nonsmooth solutions. 84c:35150

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Adams, Malcolm R. Spectral properties of zeroth-order pseudodifferential operators. (84m:58141)

Andreev, Aleksandr Sergeevich Asymptotic behavior of the spectrum of the Dirichlet problem for a class of pseudodifferential operators. (Russian) (84c:35127)

Aramaki, Junichi Hypoellipticity for a class of pseudodifferential operators. (84c:35033)
Complex powers of a class of pseudodifferential operators and their applications. (84m:58142)

Baer, A. D. Higher-order degenerate elliptic equations and pseudodifferential operators connected with them. (Russian) (84c:35061)

Belousov, M. V. On the theory of generalized Green operators. (Russian) (84c:58143)

Birman, M. Sh. (with Solomyak, M. Z.) Asymptotic behavior of the spectrum of pseudodifferential variational problems with shifts. (Russian) (84c:35109)

Boimakov, K. Kh. The spectral asymptotic behavior of differential and pseudodifferential operators. I. (Russian. English summary) (84c:35219)

Bourdaud, Gérard Une extension du théorème des commutateurs de Calderón. [An extension of Calderón's commutator theorem] (84m:42024)

Boutet de Monvel, Louis Opérateurs à coefficients polynomiaux, espace de Bargmann, et opérateurs de Toeplitz. [Operators with polynomial coefficients Bargmann spaces, and Toeplitz operators] (84c:35222)

Boyarski, Bogdan Analytical and geometrical properties of generalized potentials. (84j:58121)

Cardoso, Fernando Remarks on the local theory of linear partial differential operators. (Portuguese) (84c:35001)

Chou, Chin Ch'eng Une remarque sur les symboles $S_{\text{cl},0}^m$. [A remark on the symbols $S_{\text{cl},0}^m$] (84j:47086)

Danilov, V. G. (with Dzhezhemysuk, I. A.) Estimates for Fourier integral operators with a complex phase. (Russian) (84f:58109)

Dencker, Nils On the propagation of singularities for pseudodifferential operators of principal type. (84c:58216)

On the propagation of polarization sets for systems of real principal type. (84c:58081)

Dubinskii, Yu. A. The algebra of infinite-order differential operators and pseudodifferential equations with an analytic symbol. (Russian) (84d:35001b)

An algebra of pseudodifferential operators with analytic symbols and its application to mathematical physics. (Russian) (84c:3501a)

Dzhezhemysuk, I. A. See Danilov, V. G., (84f:58109)

El Kohen, A. On Fourier integral operators. (84c:42030)

Elchner, Johannes On the index of hypoelliptic one-dimensional pseudodifferential operators. (84g:35038)

A Galerkin method with finite elements for degenerate one-dimensional pseudodifferential equations. (84m:65121)

Farris, Mark K. A generalization of Egorov's theorem. (84j:58117)

Feferman, Charles (with Phong, D. H.) Lower bounds for pseudodifferential operators. (84c:47039)

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Giga, Yoshikazu The Stokes operator in L_p spaces. (84f:47042)

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Grigis, A. Propagation des singularités le long de courbes microbicharactéristiques pour des opérateurs pseudo-différentiels à caractéristiques doubles. I. [Propagation of singularities along microbicharacteristic curves for pseudodifferential operators with double characteristics. I] (84c:35003)

Propagation des singularités sur des groupes de Lie nilpotents de rang 2. II. [Propagation of singularities on nilpotent Lie groups of rank 2. II] (84c:35004)

Heffer, Bernard (with Robert, Didier) Comportement asymptotique précise du spectre d'opérateurs globalement elliptiques dans R^n . [Precise asymptotic behavior of the spectrum of globally elliptic operators in R^n] (84c:35221)

(with Robert, Didier) Asymptotique des niveaux d'énergie pour des hamiltoniens à un degré de liberté. [Asymptotics of energy levels for Hamiltonians with one degree of freedom] (84m:58144)

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Kawai, Takahiro Algebraic study of parts of the theory of systems of pseudodifferential equations. 9th Iyanaga prize awarded to Masaki Kashiwara. (Japanese) (84b:01048)

Laptev, A. A. Spectral asymptotics of a class of Fourier integral operators. (Russian) (84c:35223)

Lascar, Bernard (with Lascar, Richard) Propagation des singularités pour des équations hyperboliques à caractéristiques de multiplicité au plus double et singularités masloviennes. II. [Propagation of singularities for hyperbolic equations with multiplicity of at most two and Maslov singularities. II] (84c:35099)

Lascar, Richard ★ Propagation des singularités des solutions d'équations pseudo-différentielles à caractéristiques de multiplicités variables. (French) [Propagation of singularities of solutions of pseudodifferential equations with characteristics of variable multiplicities] (84c:35006)

See also Lascar, Bernard, (84c:35099)

Laubin, P. Front d'onde analytique et décomposition microlocale des distributions. [Analytic wave front and microlocal decomposition of distributions] (See 84c:35003)

Laurent, V. Deuxième microlocalisation. Condition de Levi pour un système. [Second microlocalization. Levi condition for a system] (84a:58073)

- Levendorskii, S. Z. Asymptotic distribution of eigenvalues. (Russian) (84j:35133)
- Liess, Otto. Antilocality of complex powers of elliptic differential operators with analytic coefficients. (84j:58124)
- Lyakhov, L. N. Compactness and pseudocompactness of singular pseudodifferential operators. (Russian) (84m:47065)
- Mendoza, Gerardo. Symbol calculus associated with intersecting Lagrangians. (84j:58119)
- Miller, Kenneth G. Invariant pseudodifferential operators on two-step nilpotent Lie groups. (84i:58118)
- Morimoto, Yoshinori. On hypoelliptic operators with multiple characteristics of odd order. (84i:35041)
- Paiväranta, Lassi. Pseudodifferential operators in Hardy-Triebel spaces. (German and Russian summaries) (84m:47066)
- Phong, D. H. See Fefferman, Charles. (84i:47069)
- Plamenevskii, B. A. On algebras generated by pseudodifferential operators with isolated singularities of symbols. (Russian) (84e:58072)
- Popov, Georgi St. Microlocal properties of a class of pseudodifferential operators with multiple characteristics. II. (84a:35060)
- Qi, Min You. On a class of singular pseudodifferential operators. (84i:58217)
- Robert, Didier. See Helffer, Bernard. (84a:35221) and (84m:58144)
- Rodino, Luigi. Microlocal analysis for spatially inhomogeneous pseudodifferential operators. (84i:58145)
- Shu, Mu Zeng (with Tang, Xian Jiang). The L^p -continuity of a class of pseudodifferential operators. (Chinese. English summary) (84b:47062)
- Solomyak, M. Z. See Birman, M. Sh. (84i:35109)
- Sternin, B. Yu. Differential equations of subprincipal type. (Russian) (84g:35039)
- Tang, Xian Jiang. See Shu, Mu Zeng. (84b:47062)
- Umeda, Tomio. Scattering theory for pseudodifferential operators. I. The existence of wave operators. (84g:35143a)
- Scattering theory for pseudodifferential operators. II. The completeness of wave operators. (84g:35143b)
- Volevich, L. R. (with Gindikin, S. G.) Differential operators with constant coefficients of principal type with respect to a Newton polyhedron. (Russian) (84m:58147)
- (with Gindikin, S. G.) Differential operators with variable coefficients of principal type with respect to a Newtonian polyhedron. (Russian) (84m:58148)
- Wang, Xu Dong. See Zhou, Li. (84a:35154)
- Yamazaki, Masao. Continuité des opérateurs pseudo-différentiels et para-différentiels dans les espaces de Besov et les espaces de Triebel-Lizorkin non-isotropes. (English summary) [Boundedness of pseudodifferential and para-differential operators in anisotropic Besov spaces and Triebel-Lizorkin spaces] (84i:47061)
- Zaidman, Samuel. Remarks on Kohn-Nirenberg's pseudodifferential operators of order zero. (84m:47068)
- Zaitsev, A. A. Localization of spectral expansions connected with elliptic pseudodifferential operators. (Russian) (84m:35092)
- Zhou, Li (with Wang, Xu Dong). Application of Fourier integral operators in a hyperbolic system. (84a:35154)
- Astérisque ★Astérisque. 95. (French) (84c:35002)

35S10 Initial value problems

- Baouendi, M. S. (with Goulaouic, C.) Sharp estimates for analytic pseudodifferential operators and application to Cauchy problems. (84g:35173)
- Goulaouic, C. See Baouendi, M. S. (84g:35173)
- Oganesyan, G. R. Necessary and sufficient conditions for well-posedness of the Cauchy problem for weakly hyperbolic equations with coefficients that depend only on the time variable. (Russian. English and Armenian summaries) (84c:35114)

secondary classifications:

- Lousberg, Pierre. Backward parabolic equations. (84a:35119)
- Meyer, Yves. Intégrales singulières, opérateurs multilinéaires et équations aux dérivées partielles. [Singular integrals, multilinear operators and partial differential equations] (See 84i:35006)
- Nishitani, Tatsuo. Sur l'inégalité d'énergie pour une classe des opérateurs pseudo-différentiels fortement hyperboliques. [The energy inequality for a class of strongly hyperbolic pseudodifferential operators] (84c:35068)
- Shishmarev, I. A. The Cauchy problem and T -products for hypoelliptic systems. (Russian) (84j:35043)
- Yoshikawa, Atsushi. Parametrix for a class of effectively hyperbolic operators. (84b:35077)
- Astérisque ★Astérisque. 95. (French) (84c:35002)

35S15 Boundary value problems

- Rempel, Stephan (with Schulze, Bert-Wolfgang). Parametrix of general elliptic pseudodifferential boundary value problems. (Russian) (See 84c:34002)
- (with Schulze, Bert-Wolfgang). Complex powers for pseudodifferential boundary problems without the transmission property. (84m:35129)
- Schulze, Bert-Wolfgang. See Rempel, Stephan. (84m:35129) and (See 84c:34002)

secondary classifications:

- Belousov, M. V. Generalized Green operators with a finite group of shifts on the boundary. (Russian) (84d:58077)
- Grubb, Gerd. The heat equation associated with a pseudodifferential boundary problem. (84h:35069)
- Spectral asymptotics for the "soft" selfadjoint extension of a symmetric elliptic differential operator. (84k:35107)
- Juhl, Andreas. An index formula of Agranovich-Dynin-type for oblique derivative problems. (See 84c:58103)

- Lousberg, Pierre. Singularités des solutions des problèmes aux limites non diffractifs pour les systèmes de multiplicité constante. [Singularities of solutions of nondiffractive boundary value problems for systems of constant multiplicity] (84c:35008a)

Singularités des solutions des problèmes aux limites non diffractifs pour les systèmes de multiplicité constante. II. [Singularities of solutions of nondiffractive boundary value problems for systems of constant multiplicity. II] (84c:35008b)

Singularités des solutions des problèmes aux limites non diffractifs pour les systèmes de multiplicité constante. III. [Singularities of solutions of nondiffractive boundary value problems for systems of constant multiplicity. III] (84c:35008c)

On a theorem of composition of differentiable singularities. (84b:46042)

- Speck, Frank-Olme. Eine Methode zur Lösung mehrdimensionaler Kopplungsprobleme. [A method for the solution of multidimensional transmission problems] (84c:35138)

35S99 None of the above, but in this section

- Bony, Jean-Michel. Calcul symbolique et propagation des singularités pour les équations aux dérivées partielles non linéaires. [Symbolic calculus and propagation of singularities for nonlinear partial differential equations] (84c:35177)
- Lyakhov, L. N. A class of spherical functions and singular pseudodifferential operators. (Russian) (84m:35130)

secondary classifications:

- Aoki, Takashi. Growth order of microdifferential operators of infinite order. (84a:58072)
- Invertibility for microdifferential operators of infinite order. (84c:58079)
- Beals, Michael. L^p boundedness of Fourier integral operators. (84m:42026)
- Bogorodskaya, T. E. (with Shubin, M. A.) Variational principle for the density of states of random pseudodifferential operators and its applications. (Russian) (84m:35126)
- Khrennikov, A. Yu. Equations with infinite-dimensional pseudodifferential operators. (Russian) (84m:35116)
- Lada, A. A method for the asymptotic solution of pseudodifferential equations in the analysis of a stochastic process of birth and death type. (Russian) (84m:35025)
- Shubin, M. A. See Bogorodskaya, T. E. (84m:35126)
- Smolyanov, O. G. Infinite-dimensional pseudodifferential operators and Schrödinger quantization. (Russian) (84d:35144)
- Taniguchi, Kazuo. An integral equation of Volterra type and multiproducts of pseudodifferential operators. (84b:45007)

39-XX FINITE DIFFERENCES AND FUNCTIONAL EQUATIONS

secondary classifications:

- Redlin, L. Works on functional equations. VII. (84i:00007)

Bibliography:

Functional equations. See Redlin, L. (84i:00007)

39-01 Elementary exposition, textbooks

secondary classifications:

- Ross, Bertram. On the solution to a complicated functional equation. (84g:40001)

39-02 Advanced exposition (research surveys, monographs, etc.)

39-03 Historical (must also be assigned at least one classification number from Section 01)

39-04 Explicit machine computation and programs (not the theory of computation or programming)

39-06 Proceedings, conferences, etc.

- Functional equations and their applications ★Functional equations and their applications. (84m:39001)

Symposium:

Functional equations and their applications ★Functional equations and their applications. (84m:39001)

secondary classifications:

- (Comi, Roberto). See Ordinary differential equations and functional equations. (84a:34003)

- (Sestini, Giorgio). See Ordinary differential equations and functional equations. (84a:34003)

- (Villari, Gabriele). See Ordinary differential equations and functional equations. (84a:34003)

Conference:

Equadiff ★Equazioni differenziali ordinarie ed equazioni funzionali. [Ordinary differential equations and functional equations] (84a:34003)

Ordinary Differential Equations and Functional Equations ★Equazioni differenziali ordinarie ed equazioni funzionali. [Ordinary differential equations and functional equations] (84a:34003)

- Florence ★Equazioni differenziali ordinarie ed equazioni funzionali. [Ordinary differential equations and functional equations] (84a:34003)

- Ordinary differential equations and functional equations ★Equazioni differenziali ordinarie ed equazioni funzionali. [Ordinary differential equations and functional equations] (84a:34003)

39Axx Finite differences [See also 65-XX.]

39A05 General

- Aksiev, A. Z. See Bykov, Ya. V., 84m:39002
 Bykov, Ya. V. (with Aksiev, A. Z.) Singular periodic solutions of a class of finite difference equations. (Russian) 84m:39002

secondary classifications:

- Ash, J. Marshall (with Jones, Roger L.) Optimal numerical differentiation using three function evaluations. (84c:65008)
 Brunner, Norbert Relative Differenzeigenschaften. (Czech summary) [Relative difference property] (84b:26009)
 Burney, S. M. Agil (with Hussain, Ghulam) Finite difference calculus and moments of some discrete probability distributions. (84b:62031)
 Crstici, Borislav (with Neagu, Mihai) Extensions of some finite difference equations for the case of distributions. (84g:46055)
 Feigenbaum, Mitchell J. (with Kadanoff, Leo P.; Shenker, Scott J.) Quasiperiodicity in dissipative systems: a renormalization group analysis. (84f:58101)
 Fudali, Stanislaw Divided differences of type $r \geq 2$. (Russian) (84c:53005)
 Hussain, Ghulam See Burney, S. M. Agil, (84b:62031)
 Jones, Roger L. See Ash, J. Marshall, (84c:65008)
 Kadanoff, Leo P. See Feigenbaum, Mitchell J.; et al., (84f:58101)
 Neagu, Mihai See Crstici, Borislav, (84g:46055)
 Serdyukova, S. I. Asymptotic properties of difference schemes of a maximal odd order of accuracy. (Russian) (84c:65119)
 Shenker, Scott J. See Feigenbaum, Mitchell J.; et al., (84f:58101)

39A10 Difference equations

- Agarwal, Ravi P. On multipoint boundary value problems for discrete equations. 84c:39001
 (Russian) 84b:39001
 Aizikov, A. A. Criterion for the nonoscillation of solutions of a difference equation. (Russian) 84b:39003
 Aksiev, A. Z. Solvability of the Cauchy problem for a class of loaded sum-difference equations. (Russian) 84m:39003
 Attia Hussein, H. On the bounded solution of certain linear equations in partial differences equations. 84b:39001
 Bykov, Ya. V. Periodic solutions of a class of finite difference equations. (Russian) 84c:39002
 Oscillatory properties of first-order sum-difference equations. (Russian) 84m:39004
 Chen, Yin Tong (with Liu, Huai Jun) A note on general properties of a system of first-order linear homogeneous difference equations. (Chinese. English summary) 84m:39005
 See also Li, Guo Ping; et al., 84j:39002
 Cheng, Sui Sheng On a class of fourth order linear difference equations. 84b:39002
 Monotone solutions of $\Delta^2 x(k) = Q(k)x(k+1)$. 84c:39001
 A discrete analogue of the inequality of Lyapunov. 84c:39001
 Craig, Walter Pure point spectrum for discrete almost periodic Schrödinger operators. 84c:39002
 Danilov, V. Ya. Construction of quasiperiodic solutions of nonlinear systems of difference equations. (Russian) 84c:39001
 Danković, B. See Stanković, Miomir S., 84c:39008
 Di Natale, Marina (with Roux, Delfina) Some observations on a finite-difference equation. (Italian. English summary) 84b:39002
 Dragan, V. A. Method of averaging systems of sum-difference equations. (Russian) 84c:39002
 Methods of averaging and freezing of systems of finite difference equations of two variables. (Russian) 84c:39003
 Eloe, P. W. Difference equations and multipoint boundary value problems. 84c:39004
 A boundary value problem for a system of difference equations. 84j:39001
 Exton, Harold Basic Sturm-Liouville theory. (Spanish summary) 84j:39002
 Golovina, V. G. See Ved', Yu. A., 84m:39009 and 84m:39010
 Gracia, Juan M. See Zaballa, Ion, 84m:39012
 Guseinov, G. Sh. Reconstruction of a second-order difference equation from a spectral matrix. (Russian) 84f:39001
 Hayashi, Mitsutoshi On convolution laws and arithmetic functions. (Japanese) 84i:39003
 Hooker, John W. A Hille-Wintner type comparison theorem for second order difference equations. 84b:39003
 H. Van Hoa Solution of general inhomogeneous linear difference equations. 84g:39003
 Kaparov, M. K. See Ved', Yu. A., 84c:39001
 Kaptagaev, E. S. See Ved', Yu. A., 84m:39011
 Kečkić, Jovan D. Riccati's difference equation and a solution of the linear homogeneous second order difference equation. 84c:39003
 Kohda, Tohru (with Murao, Kenji) Piecewise polynomial Galerkin approximation to invariant densities of one-dimensional difference equations. 84m:39006
 Lew, John S. (with Quarles, Donald A., Jr.) Nonnegative solutions of a nonlinear recurrence. 84m:39007
 Li, Guo Ping (with Chen, Yin Tong; Liu, Huai Jun) General properties of systems of linear first-order homogeneous difference equations (an operator form of Nörlund theory). (Chinese) 84j:39002
 Li, Zhao Hua On the proof of the Poincaré theorem and the Perron theorem. (Chinese. English summary) 84b:39004
 The asymptotic estimates of solutions of difference equations. 84g:39001
 Liu, Huai Jun See Li, Guo Ping; et al., 84j:39002 and Chen, Yin Tong, 84m:39005
 Mickens, Ronald E. Periodic solutions of second-order nonlinear difference equations containing a small parameter. 84c:39005
 Murao, Kenji See Kohda, Tohru, 84m:39006

- Naidu, D. S. (with Rao, A. Kailasa) Singular perturbation methods for a class of initial- and boundary value problems in discrete systems. 84c:39003
 Popenda, Jerzy Finite difference inequalities. 84c:39006
 (with Schmeidel, Ewa) Some properties of solutions of difference equations. 84c:39007
 Popovici, Parascovia An iterative solution of nonlinear finite-difference equations. 84f:39002
 Potts, Renfrey B. van der Pol difference equation. 84g:39002
 Quarles, Donald A., Jr. See Lew, John S., 84m:39007
 Rao, A. Kailasa See Naidu, D. S., 84c:39003
 Roux, Delfina See Di Natale, Marina, 84b:39002
 Ryaben'kii, V. S. General construction of the Green difference formula and boundary projector and interior boundary conditions corresponding to it on the basis of a subsidiary Green difference function and the notion of a clear difference trace. (Russian) 84m:39008
 Schmeidel, Ewa See Popenda, Jerzy, 84c:39007
 Shugrin, S. M. See Voevodin, A. F., 84f:39004
 Silyusachuk, V. E. Exponential dichotomy of solutions of discrete systems. (Russian) 84f:39003
 Stanković, Miomir S. (with Danković, B.) On a transform which maps partial derivatives into partial differences. 84c:39008
 Some applications of transforms which map derivatives into generalized differences. 84b:39003
 Tanaka, Sen-ichiro On asymptotic solutions of difference equations. 84c:39009
 Tu, Gui Zhang A formula for general solutions of homogeneous trinomial recurrences. (Chinese. English summary) 84c:39001
 Ved', Yu. A. (with Kaparov, M. K.) Convergence to finite limits of solutions of systems of summed-difference equations. (Russian) 84c:39001
 (with Golovina, V. G.) Criteria for the existence of solutions with a linear asymptotic behavior of second-order difference equations. (Russian) 84m:39009
 (with Golovina, V. G.) Criterion for the existence of asymptotically constant solutions of systems of second-order difference equations. (Russian) 84m:39010
 (with Kaptagaev, E. S.) Asymptotic equilibrium and estimates of solutions of nonlinear sum-difference systems. (Russian) 84m:39011
 Voevodin, A. F. (with Shugrin, S. M.) The parallel double sweep method for systems of difference equations that are defined on graphs. (Russian) 84f:39004
 Voitshek, A. V. Probabilistic approach to finding the asymptotic behavior of the solution of nonlinear difference equations. (Russian. English summary) 84b:39004
 Werowski, Jaroslaw (with Wyrwiska, Aleksandra) On summability of solutions of second order difference equations. 84c:39010
 Wyrwiska, Aleksandra See Werowski, Jaroslaw, 84c:39010
 Yanagihara, Niro Meromorphic solutions of some difference equations of higher order. II. 84c:39002
 Zaballa, Ion (with Gracia, Juan M.) On difference linear periodic systems. I. Homogeneous case. (Russian and Czech summaries) 84m:39012

secondary classifications:

- Attila, Szabo See Tsuchiya, Takashi; et al., (84c:58120)
 Broomhead, D. S. (with Rowlands, George) On the analytic treatment of nonintegrable difference equations. (84i:58101)
 Brown, Archibald Solutions of period seven for a logistic difference equation. (84c:58067)
 Cobb, Loren Stochastic difference equations with sociological applications. (See 84i:00045)
 Dorninger, Dietmar (with Länger, Helmut) An explicit formula for the solution of the Fisher-Wright selection model in population genetics. (84c:92047)
 Faigl, Ulrich Linear growth: a unifying approach to linear systems of difference and differential equations. (84c:34011)
 Flatto, Leopold (with Jacobson, David Norman) Functions satisfying a discrete mean value property. (84g:31004)
 Gohberg, Israel (with Lancaster, Peter; Rodman, Leiba) Perturbations of H -selfadjoint matrices, with applications to differential equations. (84f:47014)
 Hastings, Harold M. The May-Wigner stability theorem. (84c:92058)
 Hlawka, Edmund Lineare Differenzengleichungen in mehreren Variablen. [Linear difference equations of several variables] (84f:10043)
 Huang, Chun Tsung Semi tail upper bounds on the class of admissible estimators in discrete exponential families with applications to Poisson and negative binomial distributions. (84j:62013)
 Hutson, V. C. L. (with Moran, William) Persistence of species obeying difference equations. (84c:92030)
 Jacobson, David Norman See Flatto, Leopold, (84g:31004)
 Kapur, J. N. Two general nonlinear discrete-time discrete-age-scale population models. (84c:92044)
 Lancaster, Peter See Gohberg, Israel; et al., (84f:47014)
 Länger, Helmut See Dorninger, Dietmar, (84c:92047)
 Makhmudov, Adiljan On Fibonacci's model of infectious disease. (See 84f:92002)
 Matano, Hiroshi See Ushiki, Shigehiro; et al., (84i:92073)
 Moran, William See Hutson, V. C. L., (84c:92030)
 Nemirovskii, A. S. Prediction under conditions of indeterminacy. (84c:93053)
 Orlov, Konstantin Effective finding of the solutions of the form $\sum_{i=1}^{\infty} a_i/x^i$ for the differential equations of the finite and infinite order. (84c:34012)
 Rodman, Leiba See Gohberg, Israel; et al., (84f:47014)
 Roerdink, J. B. T. M. Approximate solution methods for linear stochastic difference equations. I. Moments. (84i:60084)
 Rowlands, George See Broomhead, D. S., (84i:58101)
 Saitō, Nobuhiko See Tsuchiya, Takashi; et al., (84c:58120)
 Smítalová, Kristina On chaos in difference and differential-difference equations. (See 84i:00016)
 Tsuchiya, Takashi (with Attila, Szabo; Saitō, Nobuhiko) Exact solutions of simple nonlinear difference equation systems that show chaotic behavior. (84c:58120)

- Ushiki, Shigehiro (with Yamaguti, Masaya; Matano, Hiroshi) Discrete population models and chaos. (84i:92073)
 Yamaguti, Masaya See Ushiki, Shigehiro; et al., (84i:92073)
 Zannier, Umberto A note on recurrent mod p sequences. (84b:10017)

39A11 Stability of difference equations

- Albrycht, Jerzy (with Szulc, Tomasz) Lyapunov functions for linear mappings. 84d:39002
 Bulgakov, N. G. On the theory of Lyapunov's second method for systems with discrete time. (Russian) 84f:39005
 Meimaridou, A. See Schinas, J., 84h:39004
 Schinas, J. (with Meimaridou, A.) Some perturbation results on multivalued difference equations. 84h:39004
 Shimanov, S. S. The Liapunov function for the second order difference systems. 84m:39013
 Szulc, Tomasz See Albrycht, Jerzy, 84d:39002
 Van der Cruyssen, P. Nonhomogeneous recursions and generalised continued fractions. 84c:39004

secondary classifications:

- Briggs, W. (with Newell, A. C.; Saric, T.) The mechanism by which many partial difference equations destabilize. (See 84b:00033)
 Fujii, Hiroshi (with Mimura, Masayasu; Nishiura, Y.) A picture of the global bifurcation diagram in ecological interacting and diffusing systems. (84c:92056)
 Hassan, Mohammed F. (with Younis, Mohamed I.; Mahmoud, Magdi S.) Linear multilevel estimators for stabilization of discrete systems. (84g:93061)
 Karlin, Samuel See Lessard, Sabin, (84f:92024)
 Lessard, Sabin (with Karlin, Samuel) A criterion for stability-instability at fixation states involving an eigenvalue one with applications in population genetics. (84f:92024)
 Lipatov, A. V. A geometric criterion for stability of discrete time-independent systems with a single nonlinearity. (Russian) (84f:93037)
 Mahmoud, Magdi S. See Hassan, Mohammed F.; et al., (84g:93061)
 Mimura, Masayasu See Fujii, Hiroshi; et al., (84c:92056)
 Newell, A. C. See Briggs, W.; et al., (See 84b:00033)
 Nishiura, Y. See Fujii, Hiroshi; et al., (84c:92056)
 Saric, T. See Briggs, W.; et al., (See 84b:00033)
 Smital, Jaroslav (with Smitalová, Kristina) Structural stability of nonchaotic difference equations. (84d:58046)
 Smitalová, Kristina See Smital, Jaroslav, (84d:58046)
 Younis, Mohamed I. See Hassan, Mohammed F.; et al., (84g:93061)

39A12 Discrete version of topics in analysis

- Belishev, M. I. Inverse spectral problem for a trinomial recurrence formula (the case of variable sign). (Russian) 84j:39003
 Bellissard, J. (with Lima, R.; Scoppola, E.) Localization in n -dimensional incommensurate structures. 84c:39012b
 Bruschi, M. (with Ragnisco, O.) Nonlinear differential-difference matrix equations with n -dependent coefficients. 84d:39003
 Bykov, Ya. V. (with Matakava, A. I.) Oscillatory properties of solutions of difference and differential-difference equations with deviating arguments. (Russian) 84j:39004
 Gaishun, I. V. Completely solvable multidimensional discrete equations. (Russian) 84m:39014
 Gerdzhirov, V. S. (with Ivanov, M. I.) The Hamiltonian structure of multicomponent nonlinear Schrödinger difference equations. (Russian. English summary) 84c:39011
 Ivanov, M. I. See Gerdzhirov, V. S., 84c:39011
 Lima, R. See Bellissard, J.; et al., 84c:39012b
 Matakava, A. I. See Bykov, Ya. V., 84j:39004
 Popov, V. I. See Shapovalenko, V. V., 84h:39005
 Pöschel, Jürgen Examples of discrete Schrödinger operators with pure point spectrum. 84c:39012a
 Ragnisco, O. See Bruschi, M., 84d:39003
 Scoppola, E. See Bellissard, J.; et al., 84c:39012b
 Shapovalenko, V. V. (with Popov, V. I.) An algorithm for constructing a complex Green function for difference domains. (Russian) 84h:39005
 Teptin, A. L. On the sign of the Green function of a difference boundary value problem. (Russian) 84g:39004
 Welstead, Stephen T. Boundary conditions at infinity for difference equations of limit-circle type. 84h:39005
 Yger, Alain Fonctions définies dans le plan et vérifiant certaines propriétés de moyenne. (English summary) [Functions defined in the plane and satisfying certain mean properties] 84c:39005

secondary classifications:

- Bellissard, J. (with Simon, Barry) Cantor spectrum for the almost Mathieu equation. (84h:81019)
 Bibikova, R. I. A method for solving the second boundary value problem for a difference equation of elliptic type. (Russian. Tajiki summary) (84c:65107)
 Danković, B. See Stanković, Miomir S., (84c:39008)
 Date, Etsurō (with Jimbo, Michio; Miwa, Tetsuji) Method for generating discrete soliton equations. I, II. (84k:58103a)
 (with Jimbo, Michio; Miwa, Tetsuji) Method for generating discrete soliton equations. III. (84k:58103b)
 (with Jimbo, Michio; Miwa, Tetsuji) Method for generating discrete soliton equations. IV, V. (84k:58103c)
 Domschke, Steffen (with Weinelt, Wilfried) Optimale Konvergenzaussagen für ein Differenzenverfahren zur Lösung einer Klasse von Variationsungleichungen. [Optimal

statements of convergence for a difference method for solving a class of variational inequalities] (84i:69061)

- Jimbo, Michio See Date, Etsurō; et al., (84k:58103a); (84k:58103b) and (84k:58103c)
 Kayano, Takashi (with Yamasaki, Maretsugu) Dirichlet finite solutions of Poisson equations on an infinite network. (84f:31012)
 Levi, D. See Pilloni, L., (84c:35269)
 McCoy, Barry M. (with Wu, Tai Tsun) Nonlinear partial difference equations for the 'Green's functions of the 2-dimensional Ising model. (See 84g:81005)
 McKee, Sean Generalised discrete Gronwall lemmas. (German and Russian summaries) (84d:26016)
 Miwa, Tetsuji See Date, Etsurō; et al., (84k:58103a); (84k:58103b) and (84k:58103c)
 Murawawa, Tadashi Discrete potential and its properties. I. (84g:31007)
 Narita, Kazuaki Soliton solution to extended Volterra equation. (84c:34116)
 Nikiforov, A. F. (with Suslov, S. K.; Uvarov, V. B.) Racah polynomials and dual Hahn polynomials as a generalization of classical orthogonal polynomials of a discrete variable. (Russian) (84j:33011)
 Pilloni, L. (with Levi, D.) The inverse scattering transform for solving the discrete sine-Gordon equation. (84c:35269)
 Potts, Renfrey B. van der Pol difference equation. (84g:39002)
 Scruton, R. E. Some thoughts on solution in series. (84c:34005)
 Simon, Barry See Bellissard, J., (84h:81019)
 Stanković, Miomir S. (with Danković, B.) On a transform which maps partial derivatives into partial differences. (84c:39008)
 Suslov, S. K. See Nikiforov, A. F.; et al., (84j:33011)
 Uvarov, V. B. See Nikiforov, A. F.; et al., (84j:33011)
 Weinelt, Wilfried See Domschke, Steffen, (84c:49061)
 Wu, Tai Tsun See McCoy, Barry M., (See 84g:81005)
 Yamasaki, Maretsugu See Kayano, Takashi, (84f:31012)
 Zhelondek, Kh. The essential spectrum of an N -particle additive cluster operator. (Russian. English summary) (84c:82032)

39A70 Difference operators [See also 47B39.]

- Blekher, P. M. Estimates of Green's functions of difference operators in arbitrary domains and their applications. (Russian. English summary) 84d:39004
 Pleijel, Ake On Weyl's limit-point and limit-circle theory for recurrence equations. (See 84d:47002)
 Toscano, Letterio Sur quelques formules opératoires différentielles et aux différences finies. (English summary) [On some finite-difference and operator-differential formulas] 84j:39005

secondary classifications:

- Lorch, Lee (with Newman, Donald J.) On the composition of completely monotonic functions and completely monotonic sequences and related questions. (84i:26015)
 Muskhelishvili, B. A criterion for nonlinearity of the resolvent of a Sturm-Liouville difference operator. (Russian. Kazakh summary) (84c:47043)
 Newman, Donald J. See Lorch, Lee, (84i:26015)

39A99 None of the above, but in this section

39Bxx Functional equations [See also 30D05.]

39B05 General

- Adamczyk, Henryk Applications of fixed point theorems in the theory of functional equations. (See 84d:47002)
 Bajraktarević, Mahmut Sur un opérateur particulier figurant dans l'équation fonctionnelle $\varphi + A\varphi = F$. [On a certain operator appearing in the functional equation $\varphi + A\varphi = F$] 84i:39004
 Benz, Walter Die Heavisidefunktion als spezielle Lösung ihrer Funktionalgleichung. [The Heaviside function as special solution of its functional equation] 84d:39005
 Dyjak, Czesław On a characterization of trigonometrical and hyperbolic functions by functional equations. 84c:39005
 Jarczyk, W. On a set of functional equations having continuous solutions. (Serbo-Croatian summary) 84c:39005
 Kannappan, P. On a generalization of sum form functional equation. II. 84c:39013
 Saint-Raymond, Jean Sur l'équation fonctionnelle $f(x) = f(\frac{1}{2}(x+1)) + f(\frac{1}{2}(x-1))$. [The functional equation $f(x) = f(\frac{1}{2}(x+1)) + f(\frac{1}{2}(x-1))$] 84j:39006
 Savić, Branko A new proceeding for solving of certain class of functional equations. 84h:39006
 Turinici, Mihai Sequentially iterative processes and applications to Volterra functional equations. (Russian and Polish summaries) 84g:39005
 Volkmann, Peter Charakterisierung der Funktion $f(x) = x$ par un système de deux équations fonctionnelles. [Characterization of the function $f(x) = x$ by a system of two functional equations] 84b:39007

secondary classifications:

- Alsina, Claudi Functional equations and negations of distribution functions. (Catalan. English summary) (See 84i:03003)
 Antonevich, A. B. (with Rykkin, V. B.) Operators generated by homeomorphisms of the circle that are conjugate to rotation. (Russian) (84j:47049)
 Bachurskaya, A. F. (with Tsalyuk, Z. B.) Existence of solutions of a class of Volterra integro-functional equations. (Russian) (84j:45006)
 Banas, Józef (with Wędychowicz, Stanisław) Functional equations occurring in the theory of delayed differential equations. (84c:34095)
 Belavin, A. A. (with Drinfel'd, V. G.) Solutions of the classical Yang-Baxter equation for simple Lie algebras. (Russian) (84c:81034)

- Borisov, I. S. A criterion for Gaussian random processes to be Markov processes. (Russian. English summary) **84c:60054**
- Cohen, Stephen D. Polynomials and finite sets connected with an identity. **(84i:12019)**
- Drinfel'd, V. G. See Belavin, A. A., **(84c:81034)**
- Duggal, B. P. Functional equations and linear transformations. V. Self-reciprocal functions. **(84d:44003)**
- Gross, Fred (with Osgood, Charles F.) On the functional equation $f^n + g^n = h^n$ and a new approach to a certain class of more general functional equations. **(84c:30027)**
- Hartmann, Erich Über Moufang-Ovale. [On Moufang ovals] **(84c:51006)**
- Klemmt, Heinz-Jürgen Ein maßtheoretischer Satz mit Anwendungen auf Funktionalgleichungen. [A measure-theoretic theorem with applications to functional equations] **(84c:33001)**
- Kominek, Zygfryd On the continuity of Q -convex functions and additive functions. **(84c:26012)**
- Lawrence, John W. The Shannon kernel of a nonnegative information function. **(84c:94008)**
- Lin, Michael (with Sine, Robert C.) Ergodic theory and the functional equation $(I-T)x=y$. **(84m:47015)**
- Osgood, Charles F. See Gross, Fred, **(84c:30027)**
- Rytkin, V. B. See Antonevich, A. B., **(84j:47049)**
- Sine, Robert C. See Lin, Michael, **(84m:47015)**
- Tsalyuk, Z. B. See Bachurskaya, A. F., **(84j:45006)**
- Wędyrowicz, Stanisław See Banas, Józef, **(84c:34095)**
- Yagzhiev, A. V. On a functional equation of theoretical physics. (Russian) **(84j:81054)**
- Ye, Zhi Jiang Well-expanded solutions of linear functional equations. (Chinese. English summary) **(84c:68017)**

39B10 Equations containing iterates, equations of rank one

- Czugała, Józefa On the continuous solutions of a functional equation containing iterations of the unknown function. **84c:39006**
- Forti, Gian Luigi On some conditional Cauchy equations on thin sets. (Italian summary) **84c:39007**
- Kečkić, Jovan D. A few remarks on automorphic functions. **84d:39006**
- Mukherjee, Arunava (with Ratti, J. S.) On a functional equation involving iterates of a bijection on the unit interval. **84j:39007**
- Pelyukh, G. P. General solution of systems of nonlinear functional equations in the neighborhood of singular points. (Russian) **84m:39015**
- Ratti, J. S. See Mukherjee, Arunava, **84j:39007**
- Schulz, Wolfgang Ein gruppentheoretisches Kriterium für die Lösbarkeit der Funktionalgleichung $f(x+y)=F(f(x),f(y))$. [A group-theoretic criterion for the solvability of the functional equation $f(x+y)=F(f(x),f(y))$] **84c:39006**
- Steinmetz, Norbert On the functional equation $\varphi(x)=\varphi(px)+\varphi(qx+p)$. **84c:39006**

secondary classifications:

- Baker, I. N. (with Rubinstein, Zalman) Simultaneous iteration by entire or rational functions and their inverses. **(84d:30039)**
- Cossard, Michel Comportement d'itérations d'un opérateur de renormalisation. (English summary) [Behavior of the iterations of a renormalization operator] **(84c:58076)**
- Liedl, Roman (with Netzer, N.; Reitberger, H.) Über eine Methode zur Auffindung stetiger Iterationen in Lie-Gruppen. [On a method for finding continuous iterations in Lie groups] **(84c:22013)**
- Netzer, N. See Liedl, Roman; et al., **(84c:22013)**
- Reitberger, H. See Liedl, Roman; et al., **(84c:22013)**
- Rubinstein, Zalman See Baker, I. N., **(84d:30039)**
- Smital, Jaroslav (with Smitalová, Kristina) Structural stability of nonchaotic difference equations. **(84d:58046)**
- Smitalová, Kristina See Smital, Jaroslav, **(84d:58046)**

39B20 Equations for one unknown function of one variable, rank greater than one

- Cholewa, Piotr W. The stability of the sine equation. **84m:39016**
- Forti, Gian Luigi General solution of the functional equation $\{cf(x+y) - af(x) - bf(y) - d\} \{f(x+y) - f(x) - f(y)\} = 0$. (Italian. English summary) **84c:39008**
- Lyubich, Yu. I. The closed graph method for an additive homological equation on the circle. (Russian) **84c:39014**
- Milici, C. (with Vuc, L.; Rachin, N.) On the integral equation $\int_{[0,x]} z(x,y)g(y)dy = q(x)$ $[z_1(x,y)=z(x,y)]$ (some technological applications). (Romanian. English summary) **84c:39008**
- Rachin, N. See Milici, C.; et al., **84c:39008**
- Vuc, L. See Milici, C.; et al., **84c:39008**

secondary classifications:

- Benz, Walter Die Heavisidefunktion als spezielle Lösung ihrer Funktionalgleichung. [The Heaviside function as special solution of its functional equation] **(84c:39005)**
- Feigenbaum, Mitchell J. (with Kadanoff, Leo P.; Shenker, Scott J.) Quasiperiodicity in dissipative systems: a renormalization group analysis. **(84f:58101)**
- Kadanoff, Leo P. See Feigenbaum, Mitchell J.; et al., **(84f:58101)**
- Neuman, František Simultaneous solutions of a system of Abel equations and differential equations with several deviations. **(84c:34082)**
- Shenker, Scott J. See Feigenbaum, Mitchell J.; et al., **(84f:58101)**

39B30 Equations for several unknown functions of one variable, systems

- Gurdial On measurable solutions of a functional equation and their application to information theory. (Russian and Czech summaries) **84m:39017**

- Járai, A. Regularity properties of functional equations. **84c:39015**
- Pelyukh, G. P. Investigation of systems of nonlinear functional equations with singularities. (Russian) **84m:39018**

39B40 Equations for functions of several variables

- Benz, Walter On a functional equation in connection with derivations. **84m:39019**
- Janić, Radovan R. (with Pečarić, Josip E.) On some functional equations for functions of several variables. (Serbo-Croatian summary) **84j:39008**
- Krapež, A. Functional equations of generalized associativity, bisymmetry, transitivity and distributivity. **84d:39007**
- Pečarić, Josip E. See Janić, Radovan R., **84j:39008**
- Stanković, Miomir S. Transform which maps derivatives into generalized differences. (Macedonian summary) **84c:39009**
- Szabó, Gy. Some functional equations related to quadratic functions. (Serbo-Croatian summary) **84c:39016**

secondary classifications:

- Aczél, J. (with Ng, C. T.) Determination of all semisymmetric recursive information measures of multiplicative type on n positive discrete probability distributions. **(84j:94016)**
- Ebanks, Bruce R. Generalized-recursive entropies. **(84b:94005)**
- Kannappan, P. Information functions on open domain. IV. **(84b:94017)**
- On some functional equations from additive and nonadditive measures. V. **(84d:94012)**
- Ng, C. T. See Aczél, J., **(84j:94016)**
- Sahoo, P. K. On some functional equations connected to sum form information measures on open domains. **(84m:94009)**

39B50 Functional equations on algebraic structures

- Aczél, J. Some good and bad characters I have known and where they led (harmonic analysis and functional equations). **84j:39009**
- Anand, Ranjna See Nath, Prem, **84d:39010**
- Bagyinszki, János The solution of the Hosszú equation over finite fields. (Russian and Hungarian summaries) **84d:39008**
- Baker, John A. A generalized Pexider equation. **84c:39003**
- Corovei, I. Some properties of the cosine functional equation solutions in the nilpotent groups. (Romanian. English summary) **84j:39010**
- Forti, Gian Luigi (with Paganoni, Luigi) A method for solving a conditional Cauchy equation on abelian groups. (Italian summary) **84d:39009**
- Kečkić, Jovan D. Four variations on a theme of S. B. Prešić concerning semigroup functional equations. **84c:39009**
- On some classes of linear equations. IV. **84j:39012**
- (with Stanković, Miomir S.) On some classes of linear equations. III. **84j:39011**
- Mosznier, Zenon Quelques remarques sur les solutions continues de l'équation de translation sur un groupe. [Some remarks on the continuous solutions of the translation equation on a group] **84c:39017**
- Nath, Prem (with Anand, Ranjna) Sine and hyperbolic functional equations on groups. **84d:39010**
- Paganoni, Luigi See Forti, Gian Luigi, **84d:39009**
- Rukhin, Andrew L. The solution of the functional equation of d'Alembert's type for commutative groups. **84g:39006**
- Sathyabhama, V. The RC-functional equation on quasigroups and GD-groupoids. **84c:39006**
- Stanković, Miomir S. See Kečkić, Jovan D., **84j:39011**
- Świątak, Halina On alternatives equivalent to the Cauchy functional equation and a related equation. **84c:39007**
- Székeleyhidi, László The stability of d'Alembert-type functional equations. **84m:39020**
- On a class of linear functional equations. **84j:39013**

secondary classifications:

- Belousov, V. D. A theorem on balanced identities. (Russian) **(84m:20075)**
- Forti, Gian Luigi On some conditional Cauchy equations on thin sets. (Italian summary) **(84c:39007)**
- Krapež, A. Functional equation of generalized associativity. **(84b:20083)**
- Functional equations of generalized associativity, bisymmetry, transitivity and distributivity. **(84d:39007)**

39B60 Matrix functional equations

- Bykov, Ya. V. (with Linenko, V. G.; Tankiev, I. A.) Periodic solutions of a class of sum-difference equations. (Russian) **84d:39011a**
- (with Linenko, V. G.) Partial averaging in systems of sum-difference equations of standard type. (Russian) **84d:39011b**
- Linenko, V. G. See Bykov, Ya. V.; et al., **84d:39011**
- Tankiev, I. A. See Bykov, Ya. V.; et al., **84d:39011a**

39B70 Functional equations on abstract spaces or structures

- Bulgakov, A. I. (with Lyapin, L. N.) Connectedness of sets of solutions of functional inclusions. (Russian) **84b:39010**
- Fenyő, István (with Rusconi, Daniela) On the distributions which satisfy a functional equation. (Italian. English summary) **84d:39012**
- Lyapin, L. N. See Bulgakov, A. I., **84b:39010**
- Marcus, Moshe Global existence theory for models of population dynamics. **84b:39010**
- Mosznier, Zenon Le prolongement de la solution de l'équation et de l'inégalité de translation avec l'agrandissement borné de la fibre. [Extension of the solution of the translation equation and inequality with bounded growth from the fiber] **84c:39004**
- Rusconi, Daniela See Fenyő, István, **84d:39012**

secondary classifications:

- Babescu, Gh. Spectral theorems for functions whose values are cosine and sine operators. (Russian) (84m:47051)
 Fischer, Pal (with Mokanski, J. P.) A class of symmetric biadditive functionals. (84d:15025)
 Gnesi, Stefania (with Montanari, Ugo; Martelli, Alberto) Dynamic programming as graph searching: an algebraic approach. (84b:90102)
 Lutz, Dieter On bounded time-dependent perturbations of operator cosine functions. (84c:47041)
 Martelli, Alberto See Gnesi, Stefania; et al., (84b:90102)
 Mokanski, J. P. See Fischer, Pal, (84d:15025)
 Montanari, Ugo See Gnesi, Stefania; et al., (84b:90102)

39B99 None of the above, but in this section

- Belov, B. I. Solution of a system of functional equations and its use for determining $\lim_{k \rightarrow \infty} \sqrt[k]{\omega(k)}$. (Russian) 84m:39021
 Kirov, G. Kh. (with Totkov, G. A.) Distribution of zeros of derivatives of the function $\lambda(x)$. (Russian) (See 84c:34002)
 Mosicki, Jan Note on characterizations of some set-classes connected with the continuity of additive functions. (Polish summary) 84a:39008
 Totkov, G. A. See Kirov, G. Kh., (See 84c:34002)

secondary classifications:

- Écalle, Jean ★ Les fonctions résurgentes. Tome I. (French) [Resurgent functions. Vol. I] (84h:30077a)
 ★ Les fonctions résurgentes. Tome II. (French) [Resurgent functions. Vol. II] (84h:30077b)

39C05 Functional inequalities [See also 26Dxx.]

- Albert, Michael (with Baker, John A.) Bounded solutions of a functional inequality. 84c:39018
 Baker, John A. See Albert, Michael, 84c:39018
 Daróczy, Z. (with Páles, Zolt) On comparison of mean values. 84c:39007
 Páles, Zolt See Daróczy, Z., 84c:39007
 Sander, Wolfgang Boundedness properties for functional inequalities. 84d:39013
 Some functional inequalities. 84b:39011
 Turdza, Erwin On an iterative functional inequality. 84b:39011

secondary classifications:

- Kaur, Parvinder A characterization of hypodivergence measure. (84c:94010)
 Pachpatte, B. G. On some fundamental discrete inequalities in two independent variables. (84k:26019)

40-XX SEQUENCES, SERIES, SUMMABILITY

40-01 Elementary exposition, textbooks

- Chevallard, Y. ★ Théorie des séries. I. (French) [Theory of series. I] 84m:40001a
 See also Rolland, Raymond, 84m:40001b
 Colegrave, Robert Binomial expansions as a source of rapidly convergent series. 84b:40001
 Meschkowski, Herbert ★ Unendliche Reihen. (German) [Infinite series] 84d:40001
 Rolland, Raymond ★ Théorie des séries. 2. (French) [Theory of series. 2] 84m:40001b
 See also Chevallard, Y., 84m:40001a
 Ross, Bertram On the solution to a complicated functional equation. 84g:40001

secondary classifications:

- И'ин, V. A. (with Poznyak, È. G.) ★ Fundamentals of mathematical analysis. Part 2. (84b:26001b)
 Poznyak, È. G. See И'ин, V. A., (84b:26001b)
 (Shokurov, Vladimir) See И'ин, V. A.; et al., (84b:26001b)

40-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

- Wimp, Jet ★ Sequence transformations and their applications. (84c:65005)

40-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Dimito, Salvatore Series expansions from Mengoli to Newton. (Italian) (84c:01023)
 Golovinskii, I. A. The Euler-Boole summation formula. (Russian) (84k:01029)
 Mejibo, Lars C. On the early history of infinite series. (Danish. English summary) (84k:01001)
 Pulatova, M. I. Euler's procedure for summation of series by means of differential equations. (Russian) (84k:01031)

40-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Van der Cruyssen, P. Discussion of algorithms for the computation of generalized continued fractions. (84a:65014)

40-06 Proceedings, conferences, etc.

40Axx Convergence and divergence of infinite limiting processes

40A05 Convergence and divergence of series and sequences

- Aljančić, S. Regularly varying functions in asymptotic Mercerian theorems. 84b:40001
 Audinayana Moorthy, S. Addendum: "Infinite series and the derived set of the aggregate of the fractional parts of its partial sums" [Bull. Austral. Math. Soc. 21 (1980), no. 2, 253-264; MR 81g:40001]. 84b:40002
 Bhattacharyya, S. K. (with Lahiri, B. K.) Properties of some sets of infinite series. 84m:40002
 Castoldi, Luigi Interpretation of a "test" of Kummer: conjugate numerical series. (Italian. English summary) 84j:40001
 Enchev, O. B. How do partial sums of an infinite series vary when the variation of its general term is regular? (Bulgarian) 84b:40002
 Johnston, Elgin H. Rearrangements of divergent series. 84g:40002
 Lahiri, B. K. See Bhattacharyya, S. K., 84m:40002
 Megarayan, R. M. A generalization of Riemann's theorem on unconditional convergence of number series. (Russian. English and Armenian summaries) 84a:40001
 Neubrunnová, Anna Remarks on transfinite series of functions. (Russian and Slovak summaries) 84m:40003
 Öztürk, Ekrem On a generalization of Riemann's theorem and its application to summability methods. 84f:40001
 Tănăsie, Dan A class of sequences. (Romanian) 84f:40002

secondary classifications:

- Jha, S. N. (with Singh, Madan Prasad) A generalisation of Mertens' theorem. (84h:12024)
 Singh, Madan Prasad See Jha, S. N., (84h:12024)
 Tripathy, B. K. A note on generalized Nörlund means. (84m:40015)

40A10 Convergence and divergence of integrals

- Sinha, Sushil Kumar Comparison of the order property of a generalized Laplace-Stieltjes integral. 84d:40002

secondary classifications:

- Chakravarty, N. K. On the convergence of Laplace integral. (84g:44001)

40A15 Convergence and divergence of continued fractions [See also 30B70.]

- Bodnar, D. I. Tests for the convergence of branching continued fractions with partial terms of the form $(1 - g_{i_1} \dots g_{i_k}) / (g_{i_1} \dots g_{i_k} + 1)$. (Russian) 84j:40002
 Gautschi, Walter On the convergence behavior of continued fractions with real elements. 84c:40001
 Gill, John Convergence acceleration for continued fractions $K(a_n/1)$ with $\lim a_n = 0$. 84c:40001
 Truncation error analysis for continued fractions $K(a_n/1)$, where $\sqrt[n]{|a_n|} + \sqrt[n]{|a_{n-1}|} < 1$. 84c:40001
 Jacobsen, Lisa A method for convergence acceleration of continued fractions $K(a_n/1)$. 84c:40002
 Some periodic sequences of circular convergence regions. 84c:40003
 (with Waadeland, Haakon) Some useful formulas involving tails of continued fractions. (Russian summary) 84c:40004
 Convergence acceleration for continued fractions $K(a_n/1)$. 84c:40002
 Jones, William B. (with Reid, Walter M.) Uniform twin-convergence regions for continued fractions $K(a_n/1)$. 84c:40005
 Mikhail'chuk, R. I. (with Syavavko, M. S.) Continuous analogue of continued fractions. (Russian) 84d:40003
 Reid, Walter M. See Jones, William B., 84c:40005
 Syavavko, M. S. See Mikhail'chuk, R. I., 84d:40003
 Waadeland, Haakon See Jacobsen, Lisa, 84c:40004

secondary classifications:

- Boese, G. An a priori estimate for the truncation error of a continued fraction expansion to the Gaussian error function. (German summary) (84f:33002)
 Bowman, K. O. (with Shenton, L. R.) Continued fractions and the polygamma functions. (84j:33001)
 Čížek, Jiří (with Vrsáček, E. R.) Asymptotic estimation of the coefficients of the continued fraction representing the Binet function. (84a:30009)
 Jones, William B. (with Steinhardt, Allan) Digital filters and continued fractions. (84c:94005)
 (with Njåstad, Olav; Thron, W. J.) Continued fractions and strong Hamburger moment problems. (84j:44009)
 See also Analytic theory of continued fractions, (84b:30002)
 Lange, L. J. δ -fraction expansions of analytic functions. (84c:30010)

Lomontseva, I. V. Best uniform approximation of functions by continued fractions. (Russian) (84m:65032)

Njåstad, Olav. See Jones, William B.; et al., (84j:44009)

Overholt, Marius. A class of element and value regions for continued fractions. (84c:30011)

Panov, A. A. The mean for a sum of elements in a class of finite continued fractions. (Russian) (84d:10053)

Reid, Walter M. Parameterizations and factorizations of element regions for continued fractions $K(a_n/1)$. (84d:30012)

Shenton, L. R. See Bowman, K. O., (84j:33001)

Steinhart, Allan. See Jones, William B., (84c:94005)

Thron, W. J. (with Waadeland, Haakon) On a certain transformation of continued fractions. (84c:30012)

(with Waadeland, Haakon) Modifications of continued fractions, a survey.

(84j:30013)

See also Jones, William B.; et al., (84j:44009) and Analytic theory of continued fractions, (84b:30002)

Van der Cruyssen, P. Nonhomogeneous recursions and generalised continued fractions. (84c:39004)

Vrscay, E. R. See Čížek, Jiří, (84c:30009)

Waadeland, Haakon. See Thron, W. J., (84c:30012); (84j:30013) and Analytic theory of continued fractions, (84b:30002)

Znojil, M. Extended continued fractions and energies of the anharmonic oscillators. (84c:81021)

Analytic theory of continued fractions ★ Analytic theory of continued fractions. (84b:30002)

Loen ★ Analytic theory of continued fractions. (84b:30002)

Seminar:

Analytic Theory of Continued Fractions ★ Analytic theory of continued fractions. (84b:30002)

40A20 Convergence and divergence of infinite products

40A25 Approximation to limiting values (summation of series, etc.) (For the Euler-Maclaurin summation formula, see 65B15.)

secondary classifications:

Ermakov, S. M. Summation of series connected with integral equations. (Russian. English summary) (84m:45003)

40A30 Convergence and divergence of series and sequences of functions

Lamina, M. A. Absolute and conditional convergence of series of continuous functions. (Russian) (84c:40002)

Menshov, D. E. Properties of subsequences of partial sums of functional series. (Russian) (84d:40004)

Orlov, Konstantin. The general methods of finding the sum S_n for all kinds of series. I. (84j:40003a)

The general methods of finding the sum S_n for all kinds of series. II. (84j:40003b)

secondary classifications:

Megrabyan, R. M. A generalization of Riemann's theorem on unconditional convergence of number series. (Russian. English and Armenian summaries) (84c:40001)

Móricz, Ferenc. On the Cesàro means of orthogonal sequences of random variables. (84c:60042)

Riedel, Roland. Asymptotische Entwicklung der Restsummen gewisser alternierender Reihen. I. [Asymptotic expansion of residual sums of certain alternating series. I] (84c:65008)

Rippon, P. J. Infinite exponentials. (84b:30028)

40A99 None of the above, but in this section

Toader, Gh. The representation of n -convex sequences. (84b:40003)

40B05 Multiple sequences and series (should also be assigned at least one other classification number in this section)

40Cxx General summability methods

40C05 Matrix methods

Belyaev, V. A. The structure of a set of summability of power series. (Russian) (84m:40004)

Buriy, M. F. (with Sokolenko, A. I.) Bounds of indeterminacy in summation of a double numerical series of a regular positive matrix. (Russian) (84m:40005)

Davidov, M. O. See Vlasenko, V. F., (84j:40006)

Faulstich, Karin (with Luh, Wolfgang; Tomm, Ludwig) On equiconvergent matrix transforms of power series. (84m:40006)

Kal'nei, S. G. Summability of Jacobi series by triangular matrices. (Russian) (84m:40007)

Khapugin, S. P. Determining sets of matrix regular summation methods. (Russian) (84j:40004)

Kuttner, B. (with Thorpe, B.) Series of terms of given moduli. (84j:40005)

Luh, Wolfgang. See Faulstich, Karin; et al., (84m:40006)

Mishra, K. N. On the absolute Nörlund summability factors of infinite series. (84b:40003)

Mursaleen. Infinite matrices and absolute almost convergence. (84m:40008)

On some new invariant matrix methods of summability. (84b:40004)

Neuser, Rolf. Summation of almost convergent divergent sequences, topological methods. (84d:40005)

Öztürk, Ekrem. On summability methods. (84c:40001)

Sirajudeen, S. M. See Somasundaram, D., (84c:40003)

Sokolenko, A. I. See Buriy, M. F., (84m:40005)

Somasundaram, D. (with Sirajudeen, S. M.) Matrix transformation of I_p to $\Gamma(\Gamma^*, \Gamma_c$ and $q)$. (84c:40003)

Thorpe, B. See Kuttner, B., (84j:40005)

Tietz, Hubert. Inäquivalenzsätze in der Limitierungstheorie. [Nonequivalence theorems in the theory of summability] (84j:40003)

Tomm, Ludwig. See Faulstich, Karin; et al., (84m:40006)

Vlasenko, V. F. (with Davidov, M. O.) An analogue of Daresvskii's theorem for bounded sequences. (Russian) (84j:40006)

secondary classifications:

Freedman, A. R. See Sember, J. J., (84c:40006)

Gupta, Manjul (with Kamthan, P. K.) On matrix transformations. (84j:46013)

Johnson, Peter D., Jr. (with Mohapatra, Ram Narayan) Best possible results in a class of inequalities. (84j:26022)

Kamthan, P. K. See Gupta, Manjul, (84j:46013)

Kudryavtsev, G. I. Once again on the singularity of an integral that is connected with the linear method of summing a Fourier series. (Russian) (84c:42013)

Kuttner, B. (with Rhoades, B. E.) Comments on a paper: "Some properties of the Leisinger generalized Hausdorff matrix" [Houston J. Math. 6 (1980), no. 2, 287-299; MR 82c:40005] by V. Mayes and Rhoades. (84c:40006)

Mohapatra, Ram Narayan. See Johnson, Peter D., Jr., (84j:26022)

Móricz, Ferenc. Matrix transformations of weakly dependent random variables. (84j:60058)

Rhoades, B. E. See Kuttner, B., (84c:40006)

Sember, J. J. (with Freedman, A. R.) On summing sequences of 0's and 1's. (84c:40006)

Sirajudeen, S. M. Invariant means and matrix transformations of some generalized sequence spaces. (84c:40007)

Swartz, Charles. The Schur lemma for bounded multiplier convergent series. (84b:46015)

Tomm, Ludwig. A summability approximation theorem for Taylor series of meromorphic functions. (84d:30007)

Turnpu, H. Maximal theorems for function series. (Russian. English summary)

(84b:42044)

40C10 Integral methods

40C15 Function-theoretic methods (including power series methods and semicontinuous methods)

Bustoz, Joaquin (with Wright, Donald J.) Correction to: "A note on Gronwall transforms" [Applicable Anal. 6 (1976/77), no. 1, 39-45; MR 54 #5665]. (84c:40002)

Wright, Donald J. See Bustoz, Joaquin, (84c:40002)

secondary classifications:

Belyaev, V. A. The structure of a set of summability of power series. (Russian) (84m:40004)

Davidov, M. O. The kernel in Knopp's sense of a regular positive transformation. (Russian) (84b:40005)

Tolmachev, S. T. The generalized potential of a regular system of dipoles. (Russian. English summary) (84f:78003)

40C99 None of the above, but in this section

Mishra, K. N. (with Srivastava, R. S. L.) The A -summability of Jacobi series by a class of regular matrix methods. (84m:40009)

Srivastava, R. S. L. See Mishra, K. N., (84m:40009)

40Dxx Direct theorems on summability

40D05 General theorems

Atalla, Robert E. Generalized almost-convergence vs. matrix summability. (84c:40004)

Davidov, M. O. The kernel in Knopp's sense of a regular positive transformation. (Russian) (84b:40005)

Sirajudeen, S. M. See Somasundaram, D., (84m:40010)

Somasundaram, D. (with Sirajudeen, S. M.) Matrix transformations of some generalized sequence spaces and convolution of summability methods. (84m:40010)

secondary classifications:

Geluk, J. L. (with de Haan, L.) On functions with small differences. (84m:10039)

de Haan, L. See Geluk, J. L., (84m:10039)

Musieliak, Julian. Modular approximation by a filtered family of linear operators. (84c:46028)

Sirajudeen, S. M. Inclusion theorems on matrix transformations of some generalized sequence spaces. (84j:40009)

See also Somasundaram, D., (84c:40003)

Somasundaram, D. (with Sirajudeen, S. M.) Matrix transformation of I_p to $\Gamma(\Gamma^*, \Gamma_c$ and $q)$. (84c:40003)

40D09 Structure of summability fields

40D10 Tauberian constants and oscillation limits

40D15 Convergence factors and summability factors

- Ahmad, Z. U. Absolute summability factors of infinite series. **84j:40007**
 See also Siddiqui, Zakawat U., **84j:40008**
 Baron, S. On a generalization of a theorem of B. Tyler. **84h:40006**
 Barve, S. See Chandra, Prem, **84c:40006**
 Chandra, Prem (with Barve, S.) Factors for the absolute Nörlund summability. **84c:40006**
 Kangro, G. General properties of summability factors. (Russian. English summary) **84f:40004**
 Mohapatra, Premalata Generalised quasi-Nörlund summability factors. **84f:40005**
 Siddiqui, Zakawat U. (with Ahmad, Z. U.) Summability factors for lower-semi-matrix transformations. **84j:40008**

40D20 Summability and bounded fields of methods

secondary classifications:

- Rempulska, Lucyna On the equivalence of logarithmic methods of summability of orthonormal series. (**84h:42042**)

40D25 Inclusion and equivalence theorems

- Aggarwal, Anandita On generalised Nörlund methods of summability. II. **84k:40003**
 Ahmad, Z. U. (with Varshney, K. C.) A note on an inclusion relation between (N, p) and (C, α) -methods. **84f:40006**
 Beekmann, Wolfgang (with Chang, Shao Chien) An invariance problem in summability. **84k:40004**
 Boos, Johann Vergleich μ -beschränkter Wirkfelder mit Hilfe von Quotientendarstellungen. [Comparison of μ -limited fields of effectiveness by means of quotient representations] **84d:40006**
 Chang, Shao Chien See Beekmann, Wolfgang, **84k:40004**
 DeFranza, J. A general inclusion theorem for I -Nörlund summability. **84k:40005**
 Freedman, A. R. See Sember, J. J., **84c:40006**
 Lototskii, V. A. Conditions for the coincidence of kernels of Cesàro and Poisson-Abel means. (Russian) **84h:40007**
 Schaefer, Paul Mappings of positive integers and subspaces of m . **84d:40007**
 Sember, J. J. (with Freedman, A. R.) On summing sequences of 0's and 1's. **84k:40006**
 Sirajudeen, S. M. Inclusion theorems on matrix transformations of some generalized sequence spaces. **84j:40009**
 Invariant means and matrix transformations of some generalized sequence spaces. **84c:40007**
 Varshney, K. C. See Ahmad, Z. U., **84f:40006**

40D99 None of the above, but in this section

40Exx Inversion theorems

40E05 Tauberian theorems, general

- Bitotskii, N. N. Theorems of Tauberian type for matrix methods of summing series that are uniformly translatable on the right. (Russian) **84k:40007**
 Buntinas, Martin Approximation by Abel means and Tauberian theorems in sequence spaces. **84i:40002**
 Krishnan, V. K. A converse theorem for the infinite summability of sequences. **84c:40005**
 Kwee, B. An improvement on a theorem of Hardy and Littlewood. **84m:40011**
 Malenica, Mirjana Two theorems on the series $\sum_{n=0}^{\infty} (-1)^n (F(f'(x)) - F(b))$. (Serbo-Croatian. French summary) **84j:40010**
 Mishra, Babban Prasad (with Srivastava, Anand Prakash) Some Tauberian theorems of functions. **84k:40008**
 Peters, James V. A Tauberian theorem for the Radon transform. **84g:40003**
 Reimers, E. The problem of equivalence of sequences and Tauberian theorems. I. (Russian. English summary) **84c:40006**
 Samandarov, E. G. Tauberian theorems in the form of explicit inequalities for power series. (Russian. Tajiki summary) **84c:40007**
 Sörmsus, T. One method for weakening Tauberian σ -conditions into O -conditions. (Russian. German summary) **84c:40008**
 Srivastava, Anand Prakash See Mishra, Babban Prasad, **84k:40008**

secondary classifications:

- Geluk, J. L. (with de Haan, L.) On functions with small differences. (**84m:10039**)
 de Haan, L. See Geluk, J. L., (**84m:10039**)
 Stadtmüller, U. Tauberian theorems for Laplace and Stieltjes transforms. (**84k:44005**)

40E10 Growth estimates

- Mel'nik, V. I. Tauberian theorems with a remainder for the Laplace operator in the plane. (Russian) **84d:40008**
 Vuković, Mirjana On a general O -inverse theorem. (Serbo-Croatian. English summary) **84j:40011**

secondary classifications:

- Aljančić, S. Regularly varying functions in asymptotic Mercerian theorems. (**84h:40001**)

40E15 Lacunary inversion theorems

40E20 Tauberian constants

40E99 None of the above, but in this section

- Tali, A. Some examples of convex and zero-convex families of summability methods. (Russian. English summary) **84i:40003**

secondary classifications:

- Rath, D. Tauberian theorems for discrete Riesz methods. (**84h:40005**)

40F05 Absolute and strong summability

- Balci, Mustafa Absolute q -summability factors. (Turkish summary) **84h:40008**
 Bhatt, Shri Nivas Absolute summability of Laplace series. **84h:40004**
 Das, Gokulananda (with Mahapatra, P. C.) Generalised harmonic Cesàro method of summation and its modified mean. **84m:40012**
 Fridy, J. A. Abel transformations into I' . **84d:40009**
 Jena, S. C. See Kishore, Nand, **84f:40007**
 Kishore, Nand (with Jena, S. C.) Absolute matrix summability of an associated conjugate series. **84f:40007**
 Mahapatra, P. C. See Das, Gokulananda, **84m:40012**
 Pallas, L. Absolute summability almost everywhere of function series. (Russian. English summary) **84g:40004**
 Rath, D. Tauberian theorems for discrete Riesz methods. **84h:40005**
 Singh, Vijendra On the summability $[C, \alpha]_p$ of a power series. **84h:40009**
 Slepencuk, K. M. Conditions of absolute and strong summability in degree p of series. (Russian) **84m:40013**
 Tripathi, L. M. (with Tripathi, V. N.) On $[\bar{N}, P_n]$ -summability factors of an infinite series. **84c:40004**
 Tripathi, V. N. See Tripathi, L. M., **84c:40004**
 Yoneda, Kaoru A generalization of the strong summability. **84h:40009**

secondary classifications:

- Chandra, Prem (with Sharma, M. M.) Absolute Riesz summability of series associated with Legendre series. (**84h:42020**)
 Kumar, Pramod See Sinha, Rajiv, (**84j:40012**)
 Leindler, L. On the strong and very strong summability and approximation of orthogonal series by generalized Abel method. (**84k:42024**)
 Mishra, K. N. On the absolute Nörlund summability factors of infinite series. (**84h:40003**)
 Öztürk, Ekrem On summability methods. (**84k:40001**)
 Rempulska, Lucyna On the λ -summability almost everywhere of orthonormal series. (**84c:42031**)
 Sharma, M. M. See Chandra, Prem, (**84h:42020**)
 Sharma, Sushil On the absolute harmonic summability of a Legendre series. (**84g:42023**)
 Siddiqi, Rafat N. Absolute convergence of Fourier series of a function of Wiener's class V_p . (**84d:42011**)
 Sinha, Rajiv (with Kumar, Pramod) On generalized (N, p_n, q_n) summability. (**84j:40012**)
 Zakharov, A. A. Strong summability of Fourier series. (Russian) (**84c:42012**)

40Gxx Special methods of summability

40G05 Cesàro, Euler, Nörlund and Hausdorff methods

- Borwein, David (with Jakimovski, Amnon) Transformations of certain sequences of random variables by generalized Hausdorff matrices. **84i:40005**
 See also Schaper, Ralf, **84c:40008**
 Cybertowicz, Zofia Some properties of Nörlund-Voronoi methods for double sequences. **84h:40010**
 Dawson, David F. Cesàro summability factors and a comparison of convergence rates. **84g:40005**
 Faulstich, Karin The intersection of Jakimovski methods with Riesz and Nörlund methods. **84m:40014**
 Ishiguro, Kazuo (with Tietz, Hubert) Hausdorff-Matrizen mit verkürzter Diagonale. [Hausdorff matrices with truncated diagonal] **84g:40006**
 Jakimovski, Amnon See Borwein, David, **84i:40005**
 Kumar, Pramod See Sinha, Rajiv, **84j:40012**
 Kuttner, B. (with Rhoades, B. E.) Comments on a paper: "Some properties of the Leininger generalized Hausdorff matrix" [Houston J. Math. **6** (1980), no. 2, 287-299; MR **82c:40005**] by V. Mayes and Rhoades. **84i:40006**
 (with Maddox, I. J.) Lacunary theorems for Cesàro means. **84f:40008**
 Kuz'mich, V. I. Favard's method for summation of series. (Russian) **84h:40011**
 Maddox, I. J. See Kuttner, B., **84f:40008**
 Mishra, K. K. See Sharma, Krishna Gopal, **84a:40003**
 Pandey, B. N. Nörlund summability of Jacobi series. **84c:40007**
 Pych-Taberska, Paulina Contributions to Rogosinski's results. **84f:40009**
 Rhoades, B. E. See Kuttner, B., **84i:40006**
 Schaper, Ralf Some remarks on D. Borwein's note on: "Nörlund methods of summability associated with polynomials" [Proc. Edinburgh Math. Soc. (2) **12** (1960/61), 7-15; MR **23** #A2666]. **84c:40008**
 Sharma, Krishna Gopal (with Mishra, K. K.) Cesàro summability of Laplace series. (Hindi. English summary) **84c:40003**
 Sinha, Rajiv (with Kumar, Pramod) On generalized (N, p_n, q_n) summability. **84j:40012**
 Sinha, Sushil Kumar On the summability and absolute summability of a generalized Laplace-Stieltjes integral. **84k:40010**
 Tietz, Hubert See Ishiguro, Kazuo, **84g:40006**
 Tripathy, B. K. A note on generalized Nörlund means. **84m:40015**

secondary classifications:

- Ahmad, Z. U. (with Varshney, K. C.) A note on an inclusion relation between (N, p) and (C, α) -methods. (84f:40006)
 Absolute summability factors of infinite series. (84j:40007)
 Baron, S. On a generalization of a theorem of B. Tyler. (84h:40006)
 Barve, S. See Chandra, Prem, (84c:40006)
 Bhatt, Shri Nivas Absolute summability of Legendre series. (84c:33010)
 Absolute summability of Laplace series. (84b:40004)
 Chandra, Prem (with Barve, S.) Factors for the absolute Nörlund summability. (84c:40006)
 Das, Gokulananda (with Mahapatra, P. C.) Generalised harmonic Cesàro method of summation and its modified mean. (84m:40012)
 (Haber, S.) See Mercer, A. McD., (84j:26023)
 Krishnan, V. K. A converse theorem for the infinite summability of sequences. (84c:40005)
 Kuttner, B. (with Thorpe, B.) Series of terms of given moduli. (84j:40005)
 Kwee, B. An improvement on a theorem of Hardy and Littlewood. (84m:40011)
 Lototskii, V. A. Conditions for the coincidence of kernels of Cesàro and Poisson-Abel means. (Russian) (84h:40007)
 Mahapatra, P. C. See Das, Gokulananda, (84m:40012)
 Mercer, A. McD. A note on a paper: "An elementary inequality" [Internat. J. Math. Math. Sci. 2 (1979), no. 3, 531-535; MR 81b:26013] by S. Haber. (84j:26023)
 Mishra, K. N. On the absolute Nörlund summability factors of infinite series. (84h:40003)
 (with Srivastava, R. S. L.) The A -summability of Jacobi series by a class of regular matrix methods. (84m:40009)
 Mohapatra, Premalata Generalised quasi-Nörlund summability factors. (84f:40005)
 Qureshi, Kutbuddin On the degree of approximation of functions belonging to the class $Lip(\alpha, p)$ by means of a conjugate series. (84h:42005)
 Rhoades, B. E. (with Sharma, Nand Kishore) Spectral results for some Hausdorff matrices. (84f:40010)
 Sharma, Nand Kishore See Rhoades, B. E., (84f:40010)
 Singh, Vijendra On the summability $[C, \alpha]_k$ of a power series. (84h:40009)
 Singh, Vikramaditya On the absolute Euler summability of a series associated with Fourier series. (Russian summary) (84h:42010)
 Sinha, Sushil Kumar Comparison of the order property of a generalized Laplace-Stieltjes integral. (84d:40002)
 Srivastava, R. S. L. See Mishra, K. N., (84m:40009)
 Sulaiman, W. T. On absolute Cesàro summability of Laplace series. (84c:42042)
 Szalay, I. On the generalized absolute Cesàro-summability and the strong approximation of orthogonal series. (84m:42037)
 Tali, A. Some examples of convex and zero-convex families of summability methods. (Russian. English summary) (84f:40003)
 Tandori, Károly Über die Cesàrosche Summierbarkeit der Funktionenreihen. [On Cesàro summability of function series] (84h:42043)
 Thorpe, B. See Kuttner, B., (84j:40005)
 Totik, Vilmos On the strong approximation by the (C, α) -means of Fourier series. I. (Russian summary) (84h:42011)
 On the strong approximation by the (C, α) -means of Fourier series. II. (Russian summary) (84h:42012)
 Tripathi, L. M. (with Tripathi, V. N.) On $[N, P]_k$ -summability factors of an infinite series. (84i:40004)
 Tripathi, V. N. See Tripathi, L. M., (84i:40004)
 Varshney, K. C. See Ahmad, Z. U., (84f:40006)
 Veske, N. Some applications of the equisummability of series. (Russian. German summary) (84g:42011)

40G10 Abel, Borel and power series methods

- Arfin, Khurshidul (with Prasad, Rajendra; Saxena, Ashok) On the (A_s) summability of Legendre series. (84c:40004)
 Faulstich, Karin (with Luh, Wolfgang; Tomm, Ludwig) Universelle Approximation durch Riesz-Transformierte der geometrischen Reihe. (English summary) [Universal approximation by using the Riesz transform of the geometric series] (84a:40005)
 Luh, Wolfgang See Faulstich, Karin; et al., (84a:40005)
 Prasad, Rajendra See Arfin, Khurshidul; et al., (84c:40004)
 Saxena, Ashok See Arfin, Khurshidul; et al., (84c:40004)
 Sridhar, S. On a generalized Abel summability method. (84c:40009)
 Tomm, Ludwig See Faulstich, Karin; et al., (84a:40005)

secondary classifications:

- Auberson, G. Borel summability for a nonpolynomial potential. (84d:81005)
 Kwee, B. An improvement on a theorem of Hardy and Littlewood. (84m:40011)
 Lototskii, V. A. Conditions for the coincidence of kernels of Cesàro and Poisson-Abel means. (Russian) (84h:40007)
 Marziani, M. F. A connection between Borel and Padé summation techniques. (84h:41036)
 40G99 None of the above, but in this section
 Jamićauskas, Algimantas Summation of double Dirichlet series. (Russian. English and Lithuanian summaries) (84c:40011)
 Raphael, Louise A. The Stieltjes summability method and summing Sturm-Liouville expansions. (84a:40006)
 Tomm, Ludwig A regular summability method which sums the geometric series to its proper value in the whole complex plane. (84c:40009)

secondary classifications:

- Marlewski, Adam Uniform convergence of Gronwall-like generalized Bernstein operator on $C_{[0,1]^2}$. (84k:41011)
 Mishra, Babban Prasad (with Srivastava, Anand Prakash) Some Tauberian theorems of functions. (84c:40008)
 Rath, D. Tauberian theorems for discrete Riesz methods. (84b:40005)
 Srivastava, Anand Prakash See Mishra, Babban Prasad, (84c:40008)
 Tripathi, L. M. (with Tripathi, V. N.) On K^h -summability of Fourier series. (Arabic summary) (84m:42010)
 Tripathi, V. N. See Tripathi, L. M., (84m:42010)

40H05 Functional analytic methods in summability

- Ahmad, Z. U. (with Saraswat, S. K.) Matrix transformations between sequence spaces. (84j:40013)
 Jürimäe, E. The Wilansky-Zeller theorem for summability with speed. (Russian. English summary) (84h:40012)
 Klott, Axel Radon measures on βN associated with simple Riesz-means. (84c:40010)
 Maddox, I. J. FK spaces which include strongly summable sequences. (84d:40010)
 Rhoades, B. E. (with Sharma, Nand Kishore) Spectral results for some Hausdorff matrices. (84f:40010)
 Saraswat, S. K. See Ahmad, Z. U., (84j:40013)
 Sharma, Nand Kishore See Rhoades, B. E., (84f:40010)

secondary classifications:

- Atalla, Robert E. Generalized almost-convergence vs. matrix summability. (84c:40004)
 Schaefer, Paul Mappings of positive integers and subspaces of m . (84d:40007)

40J05 Summability in abstract structures [See also 43A55, 46A35, 46B15.]

- Bulut, E. Almost summability in certain linear topological spaces. (84b:40006)
 Butković, Davor (with Sarapa, Nikola) Two examples of summability methods. (84m:40016)
 Kolk, E. On the summability of subsequences and permutations. II. (Russian. German summary) (84g:40007)
 Peet, J. See Tönno, M., (84i:40008)
 Sarapa, Nikola See Butković, Davor, (84m:40016)
 Soomer, V. Summability, defined by a sequence of matrices, and almost summability in a Banach space. (Russian. English summary) (84c:40010)
 Sulk, Ingolf On convergence in spaces of matrix summations. (84m:40017)
 Tönno, M. (with Peet, J.) Imbedding theorems for matrix transformations. (Russian. German summary) (84i:40008)

secondary classifications:

- Antosik, Piotr On convergences in spaces of sequences. (84b:46009)
 Bhatia, S. See Choudhary, B.; et al., (84d:46008)
 Choudhary, B. (with Somasundaram, D.; Bhatia, S.) A note on FK -spaces containing T . (84d:46008)
 Kamthan, P. K. The behaviour of transformations on sequence spaces. (84g:46014)
 Orsepyan, R. I. Addendum: "Unconditional summability in linear spaces" [Comment. Math. Special Issue 2 (1979), 259-276; MR 80j:46012]. (Russian) (84f:46008)
 Sirajudeen, S. M. Matrix transformations of some generalized sequence spaces into semiperiodic sequence space. (Turkish summary) (84b:46012)
 Somasundaram, D. See Choudhary, B.; et al., (84d:46008)

41-XX APPROXIMATIONS AND EXPANSIONS (For all approximation theory in the complex domain, see 30E05 and 30E10; for all trigonometric approximation and interpolation, see 42A10 and 42A15; for numerical approximation, see 65Dxx.)

41-01 Elementary exposition, textbooks

41-02 Advanced exposition (research surveys, monographs, etc.)

- Dickmeis, Werner (with Nessel, Rolf Joachim) ★Quantitative Prinzipien gleichmäßiger Beschränktheit und Schärfe von Fehlerabschätzungen. (German) [Quantitative principles of uniform boundedness and sharpness of error estimates] (84c:41001)
 Doronin, V. G. See Korničuk, M. P.; et al., (84j:41001)
 Korničuk, M. P. (with Ligon, A. A.; Doronin, V. G.) ★Аппроксимация с ограничениями. (Russian) [Approximation with constraints] (84j:41001)
 Ligon, A. A. See Korničuk, M. P.; et al., (84j:41001)
 Nessel, Rolf Joachim See Dickmeis, Werner, (84c:41001)
 Potapov, M. K. Approximation by polynomials on a finite interval of the real axis. (Russian) (84m:41001)
 Shen, Xie Chang Best approximation by rational functions with free poles. I. (Chinese) (84f:41001a)
 Best approximation by rational functions with free poles. II. (Chinese) (84f:41001b)
 A survey of recent results on approximation theory in China. (84c:41001)
 Approximation and expansion using rational functions with preassigned poles. I. (Chinese) (84f:41002)
 Tikhomirov, V. M. Approximation characteristics of smooth functions of several variables. (Russian) (84c:41001)

secondary classifications:

- Jetter, Kurt. See Lorentz, George G.; et al., (84g:41002)
 (Kiro, S. N.) See Paszkowski, Stefan, (84i:65005)
 (Lebedev, V. I.) See Paszkowski, Stefan, (84i:65005)
 Lorentz, George G. (with Jetter, Kurt; Riemenschneider, Sherman D.) ★ Birkhoff interpolation. (84g:41002)
 Păltineanu, Gavril ★ Elemente de teoria aproximării funcțiilor continue. (Romanian) [Elements of approximation theory of continuous functions] (84i:46038)
 Paszkowski, Stefan ★ Вычислительные применения многочленов и рядов Чебышева. (Russian) [Numerical applications of Chebyshev polynomials and series] (84i:65005)
 Popov, B. A. (with Tesler, G. S.) ★ Приближение функций для технических приложений. (Russian) [Approximation of functions for technical applications] (84d:65009)
 Riemenschneider, Sherman D. See Lorentz, George G.; et al., (84g:41002)
 Tesler, G. S. See Popov, B. A., (84d:65009)
 Wong, Roderick Applications of some recent results in asymptotic expansions. (84f:41031)
 Zhuk, V. V. ★ Аппроксимация периодических функций. (Russian) [Approximation of periodic functions] (84j:42001)

41-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Dimito, Salvatore Series expansions from Mengoli to Newton. (Italian) (84c:01023)
 Fréchet, Maurice See Taylor, Angus E., (84j:01077)
 Gautschi, Walter Recognition of Christoffel's work on quadrature during and after his lifetime. (84j:01046)
 Murai, Takafumi Theory of lacunary functions. (Japanese) (84i:42001)
 Shen, Xie Chang A historical introduction to approximation theory. I. (Chinese) (84d:01039)
 Taylor, Angus E. A study of Maurice Fréchet. I. His early work on point set theory and the theory of functionals. (84j:01077)
 Wynn, P. Remark upon developments in the theories of the moment problem and of quadrature, subsequent to the work of Christoffel. (84j:01053)
 Bibliography:
 Fréchet, Maurice René See Taylor, Angus E., (84j:01077)
 Biography:
 Fréchet, Maurice René See Taylor, Angus E., (84j:01077)

41-04 Explicit machine computation and programs (not the theory of computation or programming)

- Kozak, Jernej From the power method to an error in a program. (Slovenian. English summary) 84g:41001

41-06 Proceedings, conferences, etc.

- (Ditzian, Zeev) See Conference: Edmonton, approximation theory, 84k:41002
 (Dzyadyk, V. K.) See Methods of approximation theory and their applications, 84h:41001
 (Meir, Amram) See Conference: Edmonton, approximation theory, 84k:41002
 (Nikol'skii, V. N.) See Application of functional analysis in approximation theory, 84j:41002
 (Riemenschneider, Sherman D.) See Conference: Edmonton, approximation theory, 84k:41002
 (Schempp, Walter) See Multivariate approximation theory, 84j:41003
 (Sharma, Ambikeshwar) See Conference: Edmonton, approximation theory, 84k:41002
 (Uspenskii, S. V.) See Theory of cubature formulas and the application of functional analysis to problems of mathematical physics, 84a:41001
 (Zeller, Karl) See Multivariate approximation theory, 84j:41003
 Application of functional analysis in approximation theory ★ Применение функционального анализа в теории приближений. (Russian) [Application of functional analysis in approximation theory] 84j:41002
 Conference:
 Constructive function theory ★ Конструктивная теория функций 1981. [Constructive function theory 1981] 84k:41003
 Edmonton, approximation theory ★ Second Edmonton conference on approximation theory, 84k:41002
 Multivariate approximation theory ★ Multivariate approximation theory. II. 84j:41003
 Constructive function theory ★ Конструктивная теория функций 1981. [Constructive function theory 1981] 84k:41003
 Edmonton, Alta. ★ Second Edmonton conference on approximation theory, 84k:41002
 Methods of approximation theory and their applications ★ Методы теории приближения и их приложения. (Russian) [Methods of approximation theory and their applications] 84h:41001
 Multivariate approximation theory ★ Multivariate approximation theory. II. 84j:41003
 Oberwolfach ★ Multivariate approximation theory. II. 84j:41003
 Proceedings of the S. L. Sobolev Seminar, No. 1 ★ Теория кубатурных формул и приложения функционального анализа к задачам математической физики. (Russian) [Theory of cubature formulas and the application of functional analysis to problems of mathematical physics] 84a:41001
 Theory of cubature formulas and the application of functional analysis to problems of mathematical physics ★ Теория кубатурных формул и приложения функционального анализа к задачам математической физики. (Russian) [Theory of cubature formulas and the application of functional analysis to problems of mathematical physics] 84a:41001
 Varga ★ Конструктивная теория функций 1981. [Constructive function theory 1981] 84k:41003

secondary classifications:

- Approximation of continuous periodic functions by linear methods ★ Approximation of continuous periodic functions by linear methods. (Russian) (84m:42001)

41A05 Interpolation [See also 42A15 and 65D05.]

- Baszenski, G. (with Delves, F. J.; Hackenberg, K.) Remarks on reduced Hermite interpolation. 84k:41004
 Berezovskii, A. I. Optimally accurate reconstruction of functions. (Russian) 84h:41002
 Calogero, Francesco Lagrangian interpolation and differentiation. 84d:41001
 Chak, A. M. (with Sharma, Ambikeshwar; Szabados, J.) On a problem of P. Turán. 84f:41003
 Chauhan, B. P. S. A proof of Telyakovskii-Gopengauz's theorem through an interpolation process of S. N. Bernstein. 84h:41003
 Chisăliță, Florica-Elena Interpolation d'Hermite-Fejér sur des nœuds quadruples—racines des polynômes d'Hermite. (Romanian summary) [Hermite-Fejér interpolation on nodes which are quadruple roots of Hermite polynomials] 84h:41001
 Delves, F. J. (with Posdorf, Horst) Generalized Biermann interpolation. 84j:41004
 See also Baszenski, G.; et al., 84k:41004
 Dem'yanovich, Yu. K. Approximation and interpolation by local functions on a nonuniform grid. (Russian. English summary) 84a:41002
 Erdős, Paul (with Vértési, P.) On the almost everywhere divergence of Lagrange interpolation. 84d:41002
 Fed'ko, V. V. Generalized piecewise-Taylor interpolation. (Russian. English summary) 84a:41003
 Gaponenko, V. N. Lagrange interpolation formula for a class of entire functions of exponential type that are integrable with a weight. (Russian) 84j:41005
 Gasca González, Mariano (with López-Carmona, A.; Ramírez, V.) A generalized Sylvester's identity on determinants and its applications to interpolation problems. 84k:41005
 Gonska, Heinz H. On quasi-Hermite-Fejér interpolation: pointwise estimates. 84m:41002
 Greville, T. N. E. (with Vaughan, Hubert) Smoothest local interpolation formulas for equally spaced data. 84h:41004
 Hackenberg, K. See Baszenski, G.; et al., 84k:41004
 Hakopian, Hakop A. Multivariate divided differences and multivariate interpolation of Lagrange and Hermite type. 84a:41004
 Häy, Barbara (with Vértési, P.) Interpolation in spaces of weighted maximum norm. 84d:41003
 Huang, Hong Ci On the stability of interpolation. (Chinese. English summary) 84h:41002
 Hwang, Jun Shung On a problem of Turán about the optimal (0,2)-interpolation. 84c:41001
 Biev, G. L. (with Talev, S. P.) Monotone interpolation. 84m:41003
 Jetter, Kurt See Lorentz, George G.; et al., 84g:41002
 Jirina, Miloslav Interpolation of completely monotone functions. 84c:41002
 Klippert, John A refinement of the Kis-Szabados interpolation theorems. 84h:41003
 Krochuk, V. V. Solvability of approximating equations of an approximation method, constructed on the basis of interpolation polynomials. (Russian) 84j:41006
 Li, Mu Hua The convergence at the interval end points of the Hermite-Fejér interpolation operator with Jacobi node. (Chinese. English summary) 84d:41004
 López-Carmona, A. See Gasca González, Mariano; et al., 84k:41005
 Lorentz, George G. (with Jetter, Kurt; Riemenschneider, Sherman D.) ★ Birkhoff interpolation. 84g:41002
 Lorentz, R. A. Probabilistic regularity of Birkhoff matrices with all active knots. 84m:41004
 Lubinsky, Doron S. See Sidi, Avram, 84e:41005
 Maezu, J. I. Divided differences associated with reversible systems in \mathbb{R}^2 . 84g:41003
 Micchelli, Charles A. A constructive approach to Kergin interpolation in \mathbb{R}^2 : multivariate B-splines and Lagrange interpolation. 84i:41002
 Popoviciu, Elena Sur une allure de quasi-convexité d'ordre supérieur. [The behavior of higher-order quasicontinuity] 84m:41005
 Posdorf, Horst See Delves, F. J., 84j:41004
 Postnikov, B. M. Approximating interpolation processes for arbitrary matrices of nodes. (Russian. Kazakh summary) 84k:41005a
 Uniform approximation of continuous functions by polynomials with interpolation in an arbitrary matrix of nodes. (Russian. Kazakh summary) 84h:41005b
 Precup, Radu Estimates of the degree of comonotone interpolating polynomials. 84i:41003
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 Saff, E. B. See Sharma, Ambikeshwar; et al., (See 84a:47002)
 Schmidt, Rita Eine Methode zur Konstruktion von C^1 -Flächen zur Interpolation unregelmäßig verteilter Daten. (English summary) [A method of constructing C^1 -surfaces for the interpolation of not uniformly distributed data] 84k:41006
 Sharma, Ambikeshwar (with Saff, E. B.; Varga, Richard S.) Extension of a theorem of J. L. Walsh on differences of interpolating polynomials. (See 84a:47002)
 See also Chak, A. M.; et al., 84f:41003
 Shashkin, Yu. A. Interpolation systems of functions of the second kind and their topology. (Russian) 84j:41007
 Shevaldin, V. T. Some problems of extremal interpolation in the mean. (Russian) 84e:41003
 Shi, Ying Guang On a problem of Rivlin in L_1 approximation. 84d:41005
 Shiu, Elias S. W. Proofs of central-difference interpolation formulas. 84i:41004
 Sidi, Avram (with Lubinsky, Doron S.) Convergence of exponential interpolation for completely bounded functions. 84i:41005
 Sivasubramanian, K. See Unni, K. R.; et al., 84e:41004
 Sloan, Ian H. Nonpolynomial interpolation. 84j:41008

- Spletstösser, Wolfgang** (with Stens, R. L.; Wilmes, Gerhard) On approximation by the interpolating series of G. Valiron. **84f:41004**
- Stănişila, Octavian** Multidimensional interpolation. (Romanian. English summary) **84m:41006**
- Stens, R. L.** See **Spletstösser, Wolfgang**; et al., **84f:41004**
- Sun, Xie Hua** On the second kind of interpolation processes of Bernstein type. (Chinese) **84m:41007**
- Szabados, J.** See **Chak, A. M.**; et al., **84f:41003**
- Tasev, S. P.** See **Iliev, G. L.**, **84m:41003**
- Unni, K. R.** (with Rahman, Qazi Ibadur; Sivasubramaniam, K.) Lacunary interpolation for entire functions. **84e:41004**
- Varga, Richard S.** See **Sharma, Ambikeshwar**; et al., (See **84a:47002**)
- Varma, A. K.** On some open problems of P. Turán concerning Birkhoff interpolation. **84a:41005**
- Vaughan, Hubert** See **Greville, T. N. E.**, **84c:41004**
- Vétes, P.** Remarks on the Lagrange interpolation. **84d:41006**
On sums of Lebesgue function type. **84d:41007**
New estimation for the Lebesgue function of Lagrange interpolation. **84e:41005**
See also **Erdős, Paul**, **84d:41002** and **Hay, Barbara**, **84d:41003**
- Videnskii, V. S.** Approximation of functions by polynomials from an arbitrary complete system. (Russian. Armenian summary) **84h:41006**
- Wang, Jian Zhong** On optimal error bounds for interpolating splines. **84c:41007**
- Wilmes, Gerhard** See **Spletstösser, Wolfgang**; et al., **84f:41004**
- Yu, Ding Guo** On the approximation of functions and their derivatives by Hermite interpolation. (Chinese. English summary) **84e:41006**

secondary classifications:

- Baishanski, Bogdan M.** Equiconvergence of interpolating processes. **(84k:30039)**
- Bozzini, M.** (with Lenarduzzi, L.) One-step formula based on polynomials of optimal approximation according to Sard. **(84h:65070)**
- Chistov, E. K.** Variational-grid approximation on a regular triangular grid. (Russian) **(84c:65119)**
- Delahaye, J.-P.** Choix automatique entre suites de paramètres dans l'extrapolation de Richardson. [Automatic selection among parameter sequences in the Richardson extrapolation] **(84j:65007)**
- Diaconu, Adrian** Interpolation dans les espaces abstraits. Méthodes itératives pour la résolution des équations opérationnelles obtenues par l'interpolation inverse. I. [Interpolation in abstract spaces. Iterative methods for the solution of operational equations obtained by the inverse interpolation method. I.] **(84m:41048)**
- Filimonova, V. A.** Asymptotic estimates for approximating conjugate functions by conjugate interpolation sums. (Russian) **(84h:41009)**
- Găncă, I.** Blending interpolation in curved triangles. (Romanian summary) **(84f:65007)**
- Gferrer, H.** Uniform convergence of interpolation by cubic splines. (German summary) **(84h:41011)**
- Güntner, R.** Über ein Interpolationsverfahren von S. N. Bernstein. [On an interpolation procedure of S. N. Bernstein] **(84h:42006)**
- Iancu, Crăciun** (with Păvăloiu, Ion) La résolution des équations par interpolation inverse de type Hermite. [Solution of equations by inverse interpolation of Hermite type] **(84f:65040)**
- Klunuk, A. A.** (with Kopystya, N. P.; Makarov, Vladimir Leonidovich) On the existence and uniqueness of an x^{2k} -analytic interpolation function of a complex variable. (Russian) **(84f:30057)**
- Kopystya, N. P.** See **Klunuk, A. A.**; et al., **(84f:30057)**
- Lee, Seng Luan** (with Micchelli, Charles A.; Sharma, Ambikeshwar; Smith, Philip W.) Some properties of periodic B-spline collocation matrices. **(84h:41018)**
- Lenarduzzi, L.** See **Bozzini, M.**, **(84h:65070)**
- Makarov, Vladimir Leonidovich** See **Klunuk, A. A.**; et al., **(84f:30057)**
- Micchelli, Charles A.** See **Lee, Seng Luan**; et al., **(84h:41018)**
- ter Morsche, Henricus Gerhardus** ★ Interpolation and extremal properties of \mathcal{L} -spline functions. **(84e:41011)**
- Opfer, Gerhard** (with Puri, Madan L.) Complex Chebyshev polynomials and generalizations with an application to the optimal choice of interpolating knots in complex planar splines. **(84c:30054)**
- Păvăloiu, Ion** See **Iancu, Crăciun**, **(84f:65040)**
- Philippon, Patrice** Interpolation dans les espaces affines. [Interpolation in affine spaces] **(84k:10031)**
- Puri, Madan L.** See **Opfer, Gerhard**, **(84c:30054)**
- Rukasov, V. I.** Estimates of deviations of interpolation trigonometric polynomials with equidistant nodes on classes of continuous periodic functions of several variables. (Russian) **(84g:42002)**
- Sakai, Ryozi** See **Shibata, Rokuzi**, **(84g:42007)**
- Sha, Zhen** (with Weng, Zu Yin) On seventh degree lacunary interpolation splines. (Chinese. English summary) **(84j:41020)**
- Sharma, Ambikeshwar** (with Varma, A. K.) Lacunary trigonometric interpolation on equidistant nodes (convergence). **(84g:42006)**
See also **Lee, Seng Luan**; et al., **(84h:41018)**
- Shibata, Rokuzi** (with Sakai, Ryozi) Hermite-Fejér interpolation by trigonometric polynomials. **(84g:42007)**
- Sibson, R.** A brief description of natural neighbour interpolation. (See **84k:62005**)
- Smith, Philip W.** See **Lee, Seng Luan**; et al., **(84h:41018)**
- Surina, I. I.** A method of interpolation of a class of functions of several variables. (Russian) **(84g:65019)**
- Tasche, M.** Eine einheitliche Herleitung verschiedener Interpolationsformeln mittels der Taylorsche Formel der Operatorenrechnung. (English and Russian summaries) [A uniform approach of several interpolation formulas by means of Taylor's formula of operational calculus] **(84d:41055)**
- Varma, A. K.** See **Sharma, Ambikeshwar**, **(84g:42006)**
- Vétes, P.** Linear operators on the roots of unity. **(84c:30052)**
- Weng, Zu Yin** See **Sha, Zhen**, **(84j:41020)**
- 41A10** Approximation by polynomials (For approximation by trigonometric polynomials, see **42A10**.)
- Baishanski, Bogdan M.** Approximation by polynomials of given length. **84f:41005**
- Barrar, R. B.** (with Loeb, H. L.) Oscillating Tchebycheff systems. **84c:41002**
- Becker, Michael** (with Lautner, K. J.; Nessel, Rolf Joachim; Worms, G. J.) On global approximation by Kantorovich polynomials in L^p . **84m:41008**
- Bos, L. P.** Bounding the Lebesgue function for Lagrange interpolation in a simplex. **84c:41007**
- Boyanov, Borislav D.** L_1 -approximation by Hermite interpolating polynomials with free nodes. **84d:41008**
- Boyanov, Todor P.** Approximation of Γ by algebraic polynomial curves. (Russian) **84j:41009**
- Braß, Helmut** Ein Beispiel zur Theorie der besten Approximation. [An example for the theory of best approximation] **84k:41008**
- Bruss, F. Thomas** A probabilistic approach to an approximation problem. **84b:41004**
- Butzer, Paul L.** (with Wehrens, M.) Bernstein-type polynomials having $\mathcal{O}(n^{-2})$ as saturation order. **84a:41006**
- Chang, Rosemary E.** The generalized inverse and interpolation theory. **84e:41008**
- Dénéva, Ganka St.** Sur l'approximation des fonctions continues par des polynômes à coefficients entiers. [Approximation of continuous functions by polynomials with integral coefficients] **84j:41010**
- Fiedler, Heinz** (with Jurkat, W. B.) Best L^1 -approximation by polynomials. **84f:41006**
- Filimonova, V. A.** Asymptotic estimates for approximating conjugate functions by conjugate interpolation sums. (Russian) **84k:41009**
- Freedman, David A.** (with Passow, Eli) Degenerate Bernstein polynomials. **84j:41011**
- Hollenhorst, Manfred** Improved lower and upper bounds in polynomial Chebyshev approximation based on a pre-iteration formula. **84c:41006**
- Iliev, G. L.** (with Trifonova, Mariana T.) Partially monotone approximation of differentiable functions. **84g:41004**
- Ioakimidis, Nikolaos I.** An improvement of Kalandiya's theorem. **84h:41007**
- Ivanov, Kamen G.** On Bernstein polynomials. **84h:41005**
- Jurkat, W. B.** See **Fiedler, Heinz**, **84f:41006**
- Lautner, K. J.** See **Becker, Michael**; et al., **84m:41008**
- Lehnhoff, Heinz-Gerd** A simple proof of A. F. Timan's theorem. **84h:41008**
- Leindler, L.** Some additional results on the strong approximation of orthogonal series. **84g:41005**
- Light, William A.** Extremal points for some sets of projections on $C(I)$. **84h:41009**
- Lindvall, Torngny** Bernstein polynomials and the law of large numbers. **84d:41009**
- Liu, Fan** A probabilistic proof of the Weierstrass approximation theorem. (Chinese. English summary) **84k:41010**
- Loeb, H. L.** See **Barrar, R. B.**, **84c:41002**
- Lupaş, A.** (with Manole, C.) A property of the S. N. Bernstein polynomials. (Romanian. English and French summaries) **84j:41012**
- Manole, C.** See **Lupaş, A.**, **84j:41012**
- Marlewski, Adam** Uniform convergence of Gronwall-like generalized Bernstein operator on $C_{[0,1]^2}$. **84k:41011**
- Mironov, S. V.** Some questions of approximation of a superposition of power series. (Russian) **84h:41007**
- Nessel, Rolf Joachim** See **Becker, Michael**; et al., **84m:41008**
- Passow, Eli** See **Freedman, David A.**, **84j:41011**
- Phillips, G. M.** (with Taylor, P. J.) Polynomial approximation using equioscillation on the extreme points of Chebyshev polynomials. **84a:41007**
- Potapov, M. K.** Approximation by algebraic polynomials in an integral metric with Jacobi weight. (Russian. English summary) **84d:41008**
- Saxena, R. B.** See **Srivastava, K. B.**, **84g:41007**
- Sendov, Bl. H.** On the constants of H. Whitney. **84d:41010**
A new proof of the H. Whitney's theorem. **84d:41011**
- Srivastava, K. B.** (with Saxena, R. B.) On interpolation operators. III. A proof of Telyakovskii-Gopengauz's theorem for differentiable functions. **84f:41007**
- Taylor, P. J.** See **Phillips, G. M.**, **84g:41007**
- Totik, Vilmos** Problems and solutions concerning Kantorovich operators. **84c:41003**
- Trifonova, Mariana T.** See **Iliev, G. L.**, **84g:41004**
- Varma, A. K.** (with Vétes, P.) Some Erdős-Feldheim type theorems on mean convergence of Lagrange interpolation. **84d:41012**
- Vétes, P.** See **Varma, A. K.**, **84d:41012**
- Wehrens, M.** See **Butzer, Paul L.**, **84a:41006**
- Worms, G. J.** See **Becker, Michael**; et al., **84m:41008**
- Wu, Quan Jun** The Bernstein polynomials for discontinuous functions of two variables. (Chinese. English summary) **84f:41008**

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- Abilov, V. A.** Approximation of continuous functions of two variables by Fourier-Hermite sums. (Russian) **(84i:41029)**
- Babaev, A.** Estimation of the laboriousness of the method of "extracting the principal part" using Bernstein polynomials for certain classes of functions. (Russian) **(84a:65007)**
- Barnett, William A.** (with Jonas, Andrew B.) The Müntz-Szász demand system. An application of a globally well behaved series expansion. **(84k:90011)**
- Berger, Gerd** Eine neue Koeffizienten- und Restglieddarstellung für die Entwicklung einer Funktion nach Potenzen eines gegebenen Polynoms. [A new coefficient- and remainder-representation for the expansion of a function in powers of a given polynomial] **(84a:41038)**
- Borodin, V. A.** Zeros of the characteristic function in polynomial approximation of a function $[\lambda]$. (Russian) **(84j:42003)**
- Byrne, Charles L.** (with Fitzgerald, Raymond M.) Reconstruction from partial information with applications to tomography. **(84a:92009)**
- Chauhan, B. P. S.** A proof of Telyakovskii-Gopengauz's theorem through an interpolation process of S. N. Bernstein. **(84h:41003)**

- Chui, Charles K. (with Hasson, Maurice) Degree of uniform approximation on disjoint intervals. **84f:41020**
- Ellacott, S. W. Computation of Faber series with application to numerical polynomial approximation in the complex plane. **84c:65021**
- Fitzgerald, Raymond M. See Byrne, Charles L. **84a:92009**
- Flatto, Leopold A geometric problem in approximation theory. **84f:41032**
- Gal, Sorin Gh. Sur le théorème d'approximation de Stone-Weierstrass. (Romanian summary) [The Stone-Weierstrass approximation theorem] **84b:41029**
Sur l'approximation par des polynômes, dans $C_{[0,1]}^r$. (Romanian summary)
[Approximation by polynomials in $C_{[0,1]}^r$] **84f:41034**
- Gómez Gil, Javier (with Llavona, José G.) Polynomial approximation of weakly differentiable functions on Banach spaces. **84g:46065**
- Hasson, Maurice See Chui, Charles K., **84f:41020**
- Hay, Barbara (with Vertesi, P.) Interpolation in spaces of weighted maximum norm. **84d:41003**
- Jonas, Andrew B. See Barnett, William A., **84c:90011**
- Llavona, José G. See Gómez Gil, Javier, **84g:46065**
- Mhaskar, H. N. Weighted polynomial approximation of entire functions. II. **84d:30071b**
Weighted polynomial approximation of entire functions. I. **84d:30071a**
- Nersisyan, A. A. An inverse theorem of the theory of best polynomial approximation in a complex domain in a class of summable functions. (Russian. English and Azerbaijani summaries) **84b:30044**
- Newman, Donald J. (with Rivlin, T. J.) On polynomials with curved majorants. **84b:41011**
- Osilenker, B. P. Weighted polynomial approximation of functions of several variables. (Russian) **84m:41046**
- Potapov, M. K. Approximation by polynomials on a finite interval of the real axis. (Russian) **84m:41001**
- Rivlin, T. J. See Newman, Donald J., **84b:41011**
- Totik, Vilmos Uniform approximation by Szász-Mirakjan type operators. **84j:41033**
- Vertesi, P. See Hay, Barbara, **84d:41003**
- Zaderej, P. V. Approximation of differentiable functions of two variables by de la Vallée-Poussin sums in the mean. (Russian) **84m:41047**
- 41A15 Spline approximation**
- Andreev, Andrei St. Interpolation by quadratic and cubic splines in L_p . **84m:41009**
- Apprato, Dominique (with Arcangeli, Rémi; Gaches, Jean) Fonctions spline par moyennes locales sur un ouvert borné de \mathbb{R}^n . (English summary) [Mean value spline functions on an open bounded subset in \mathbb{R}^n] **84c:41009**
- Arcangeli, Rémi See Apprato, Dominique; et al., **84c:41009**
- Barnhill, Robert E. (with Dube, R. P.; Little, Frank F.) Properties of Shepard's surfaces. **84f:41009**
- Bhattacharyya, P. (with Kala, V.) On lacunary spline interpolation. **84d:41013**
- Blatter, Jörg (with Schumaker, Larry) Continuous selections and maximal alternators for spline approximation. **84j:41013**
- de Boor, C. On a max-norm bound for the least-squares spline approximant. **84c:41012**
(with Höllig, Klaus) Approximation order from bivariate C^1 -cubics: a counterexample. **84j:41014**
(with DeVore, R.) Approximation by smooth multivariate splines. **84j:41015**
- Braess, Dietrich (with Richter-Dyn, Nira) On the uniqueness of monosplines and perfect splines of least L_1 - and L_2 -norm. **84c:41004**
- Chen, Tian Ping On some lacunary interpolation splines. (Chinese. English summary) **84b:41010**
- Chui, Charles K. (with Schumaker, Larry L.) On spaces of piecewise polynomials with boundary conditions. I. Rectangles. **84m:41010a**
(with Schumaker, Larry L.; Wang, Ren Hong) On spaces of piecewise polynomials with boundary conditions. II. Type-1 triangulations. **84m:41010b**
(with Schumaker, Larry L.; Wang, Ren Hong) On spaces of piecewise polynomials with boundary conditions. III. Type-2 triangulations. **84m:41010c**
(with Wang, Ren Hong) Multivariate B -splines on triangulated rectangles. **84c:41009**
(with Wang, Ren Hong) Multivariate spline spaces. **84f:41010**
(with Wang, Ren Hong) On smooth multivariate spline functions. **84f:41011**
- Dahmen, Wolfgang A. Adaptive approximation by multivariate smooth splines. **84i:41010**
- DeVore, R. See de Boor, C., **84j:41015**
- Dube, R. P. See Barnhill, Robert E.; et al., **84f:41009**
- Dubau, François (with Savoie, Jean) Periodic quadratic spline interpolation. **84i:41011**
- Gaches, Jean See Apprato, Dominique; et al., **84c:41009**
- Gfrerer, H. Uniform convergence of interpolation by cubic splines. (German summary) **84b:41011**
- Goodman, T. N. T. The Lebesgue constants for some cardinal spline interpolation operators. **84b:41012**
(with Micchelli, Charles A.) Limits of spline functions with periodic knots. **84i:41012**
- Grebennikov, A. I. Isogeometric approximation of functions of one variable. (Russian) **84b:41013**
- Guan, Lü Tai Splines on convex sets. (Chinese) **84b:41014**
- Guo, Zhu Rui On some problems in spline approximation. (Chinese. English summary) **84j:41016**
(with Sha, Zhen) Some problems concerning interpolating splines. (Chinese) **84a:41008**
- Hang, H. M. See Yu, S. Y.; et al., **84a:41010**
- He, Tian Xiao See Zhu, Gong Qin, **84b:41010**
- Höllig, Klaus A remark on multivariate B -splines. **84b:41015**
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- Hu, Ying Sheng Some results on the VD approximation of tensor products and convex interpolation. (Chinese) **84a:41009**
- Huang, Da Ren A sufficient condition of monotone cubic splines. (Chinese. English summary) **84c:41014**
See also Wang, Jian Zhong, **84c:41014**
- Iancu, Crăciun On the cubic spline of interpolation. **84f:41012**
- Iliev, L. G. Ausgewählte Splinefunktionen. [Selected spline functions] **84m:41011**
- Irodova, I. P. Properties of functions defined by the rate of decrease of a piecewise-polynomial approximation. (Russian) **84m:41012**
- Jia, Rong Qing B -splines associated with a linear differential operator. (Chinese. English summary) **84c:41005**
 L_∞ -upper bound of L_2 -projections onto splines at a geometric mesh. **84d:41014**
Total positivity of the discrete spline collocation matrix. **84b:41016**
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- Jin, De An See Jin, Tong Guang; et al., **84m:41014**
- Jin, Tong Guang (with Shen, Yan; Jin, De An) A spline of biarcs. (Chinese. English summary) **84m:41014**
- Kala, V. See Bhattacharyya, P., **84d:41013**
- Kim, Ha-Jine Une caractérisation de la fonction spline de lissage. [A characterization of the smoothing spline function] **84f:41013**
- Kornichuk, M. P. Approximation of functions and their derivatives by interpolation splines. (Russian) **84b:41017**
Approximation by local splines of minimum defect. (Russian) **84f:41014**
- Kuzhil, L. I. See Vorob'el', R. A.; et al., **84c:41007**
- Kvasov, B. I. Boundary conditions in parabolic spline interpolation. (Russian) **84d:41015**
- Lane, Jeffrey M. (with Riesenfeld, Richard F.) A geometric proof for the variation diminishing property of B -spline approximation. **84c:41006**
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- Sharma, Ambikeshwar See Lee, Seng Luan; et al., **84b:41018** and Mathur, K. K., **84j:41018**
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- Shen, Yan See Jin, Tong Guang; et al., **84m:41014**
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- Györfvári, J. Spline-funktion und das Cauchy-problem. [Spline function and the Cauchy problem] (See **84c:41003**)
- Hering, Leonhard Darstellung von Bézier-Kurven als B-Spline-Kurven. (English summary) [Representation of Bézier curves as B-spline curves] **(84m:65022)**
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- Kolesnikova, E. N. (with Yuferev, V. S.) Difference approximations of derivatives, and polynomial splines. (Russian) **(84g:65023)**
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- Marinescu, Elvira (with Marinescu, Constantin) Les fonctions spline comme solutions des équations à impulsions. [Spline functions as solutions of equations with pulses] **(84c:34029)**
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- See also Zhanlav, T., **(84c:65008)** and Zav'yalov, Yu. S.; et al., **(84c:65103)**
- Oswald, Peter On spline bases in periodic Hardy spaces ($0 < p < 1$). **(84c:42032)**
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- Shevaldin, V. T. Some problems of extremal interpolation in the mean. (Russian) **(84c:41003)**
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- Zav'yalov, Yu. S. (with Miroshnichenko, V. L.; Romenskii, V. P.) Convergence of the spline-collocation method for an equation of elliptic type in a rectangular domain. (Russian) (84c:65103)
- Zhanlav, T. (with Miroshnichenko, V. L.) The spline-collocation method for parabolic equations with continuous and discontinuous coefficients. (Russian) (84i:65088)
- Zhao, Guo Qing The second-degree exponential splines. (Chinese) (84b:65016)

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- Boyano, Borislav D. An extremal problem for polynomials. 84m:41020
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- Tikhomirov, V. M. See Buslaev, A. P.; et al., 84c:41014
- Varma, A. K. Some inequalities of algebraic polynomials having all zeros inside $[-1, 1]$. 84d:41024
- Wronicz, Zygmunt The Bernstein type inequality for splines. (Russian summary) 84c:41011

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- Andrievskii, V. V. On integral estimates for the derivatives of rational functions. (Russian summary) (84f:30002)
- Konovalov, V. N. Estimates of uniform approximations on unbounded sets of functions of several variables by entire functions of exponential type. (Russian. English summary) (84j:41029)
- Ligun, A. A. Inequalities between norms of derivatives of periodic functions. (Russian) (84f:46041)
- Mironov, S. V. Some questions of approximation of a superposition of power series. (Russian) (84i:41007)
- Pierre, R. (with Rahman, Qazi Ibadur) On a problem of Turán about polynomials. III. (84b:26017)
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- Sato, Masae The Landau inequality for bounded intervals with $\|f^{(3)}\|$ finite. (84k:26020)
- Shi, Xian Liang On approximation to periodic functions by linear means of subsequences of Fourier partial sums. (Chinese) (84m:42004)

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- Self, N. Ph. (with Taylor, G. D.) Copositive rational approximation. 84c:41013
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- Taylor, G. D. See Self, N. Ph., 84c:41013 and Kaufman, E. H., Jr., 84b:41014
- Thiran, J.-P. (with Defert, P.; Panier, E.) On H -sets in bivariate rational approximation. 84c:41017
- Zagirov, N. Sh. Approximation of functions of generalized finite variation by rational functions. (Russian) 84c:41014

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- Chudnovsky, Gregory V. See Chudnovsky, D. V., (84i:10026)
- Cuyt, Annie A. M. A comparison of some multivariate Padé-approximants. (84i:41023)
- Dunham, Charles B. Rational approximation on subsets. II. (84i:41037)
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- Gutknecht, Martin H. (with Trefethen, Lloyd N.) Real and complex Chebyshev approximation on the unit disk and interval. (84d:30068)
- Īvanyuk, M. V. (with Sheremeta, M. M.) Rational approximation on $[0, 1]$ of entire functions of arbitrary growth. (Ukrainian. Russian summary) (84b:30043)
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- Peller, V. V. Rational approximation and smoothness of functions. (Russian. English summary) (84g:30043)
- Shen, Xie Chang Best approximation by rational functions with free poles. I. (Chinese) (84f:41001a)
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- Borwein, Peter B. On Padé and best rational approximation. 84c:41015
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- (Cai, Xie Yong) See Apresyan, L. A., 84c:41009
- Chisholm, J. S. R. Generalisations of Padé approximants. 84m:41027
- Cordellier, F. Démonstration algébrique de l'extension de l'identité de Wynn aux tables de Padé non normales. [Algebraic proof of the extension of the Wynn identity to nonnormal Padé tables] 84b:41016
- Cuyt, Annie A. M. Regularity and normality of abstract Padé approximants: projection-property and product-property. 84i:41017
 Multivariate Padé-approximants. 84j:41025
 The ϵ -algorithm and Padé-approximants in operator theory. 84b:41034
 A comparison of some multivariate Padé-approximants. 84i:41023

- Della Dora, J. Padé-Hermite approximants. **84j:41026**
 Gonchar, A. A. (with Rakhmanov, E. A.) On the convergence of simultaneous Padé approximants for systems of functions of Markov type. (Russian) **84d:41028**
 Kovacheva, R. K. Convergence of generalized Padé approximants in the interior of the domain of holomorphy of a defining function. (Russian) **84d:41029**
 Liverani, C. (with Turchetti, G.) Existence and asymptotic behavior of Padé approximants to the Korteweg-de Vries multisoliton solutions. **84h:41035**
 Lubinsky, Doron S. Divergence of complex rational approximations. **84i:41024** (with Sidi, Avram) Convergence of linear and nonlinear Padé approximants from series of orthogonal polynomials. **84d:41030**
 Marziani, M. F. A connection between Borel and Padé summation techniques. **84h:41036**
 Rakhmanov, E. A. See Gonchar, A. A., **84d:41028**
 Sidi, Avram See Lubinsky, Doron S., **84d:41030**
 Sorokin, V. N. Simultaneous approximation of several linear forms. (Russian. English summary) **84i:41025**
 Turchetti, G. See Liverani, C., **84h:41035**

secondary classifications:

- Arya, J. P. See Joshi, C. M., **(84c:33002)**
 Baker, George A., Jr. (with Graves-Morris, P. R.) The convergence of sequences of Padé approximants. **(84g:30038)**
 See also Gubernatis, J. E., **(84d:73024)**
 Basu, Sankar (with Bose, N. K.) Matrix Stieltjes series and network models. **(84i:94048)**
 Bose, N. K. See Basu, Sankar, **(84i:94048)**
 Braess, Dietrich On the conjecture of Meinardus on rational approximation of e^x . **(84b:41012)**
 Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Multidimensional Hermite interpolation and Padé approximation. **(84h:41013)**
 Chudnovsky, Gregory V. Recurrences defining rational approximations to irrational numbers. **(84i:10051)**
 See also Chudnovsky, D. V., **(84h:41013)**
 Chyp, M. N. Padé approximation of a probability integral by means of the solution of the generalized moment problem. (Russian) **(84i:65025)**
 Dryadlyk, V. K. The generalized moment problem and Padé approximation. (Russian) **(84c:44020)**
 Fisher, Michael Ellis (with Styer, Daniel F.) Partial differential approximants for multivariable power series. I. Definitions and faithfulness. **(84a:41040)**
 Garibotti, C. R. (with Grinstein, F. F.) Recent results relevant to the evaluation of infinite series. **(84c:65006)**
 Gonchar, A. A. Poles of lines of a Padé table and a meromorphic continuation of functions. (Russian) **(84a:30069)**
 Uniform convergence of diagonal Padé approximants. (Russian) **(84d:30067)**
 Graves-Morris, P. R. See Baker, George A., Jr., **(84g:30038)**
 Grinstein, F. F. See Garibotti, C. R., **(84c:65006)**
 Gubernatis, J. E. (with Baker, George A., Jr.) Elastic wave scattering calculations, the Born series and the matrix variational Padé approximant method. **(84d:73024)**
 Heiss, W. D. Padé approximants for the solvent of selfadjoint operators. **(84m:47032)**
 Iserles, Arieh (with Strang, Gilbert) The optimal accuracy of difference schemes. **(84f:65070)**
 Joshi, C. M. (with Arya, J. P.) Inequalities for certain triple hypergeometric functions. **(84c:33002)**
 Lambert, F. J. (with Musette, M.) Stieltjes series and soliton interaction. **(84k:35129)**
 López Lagomasino, Guillermo On the moment problem and the convergence of Padé approximants for meromorphic functions of Stieltjes type. **(84m:30063)**
 Magnus, Arne On the structure of the two-point Padé table. **(84c:30058)**
 McCabe, J. H. The quotient-difference algorithm and the Padé table: an alternative form and a general continued fraction. **(84c:30008)**
 Moussa, Pierre Subdominant critical singularities in the bcc Ising model. **(84h:82016)**
 Musette, M. See Lambert, F. J., **(84k:35129)**
 Pascual, Pedro Nonlinear differential equations and Padé approximants. (Spanish. English summary) **(84c:34024)**
 Pindor, M. (with Turchetti, G.) Padé approximants and variational methods for operator series. (Italian and Russian summaries) **(84h:81021)**
 Sidi, Avram Interpolation at equidistant points by a sum of exponential functions. **(84d:41037)**
 Strang, Gilbert See Iserles, Arieh, **(84f:65070)**
 Styer, Daniel F. See Fisher, Michael Ellis, **(84a:41040)**
 Tucker, W. T. On the Padé table and its relationship to the R and S arrays and ARMA modeling. **(84f:62127)**
 Turchetti, G. See Pindor, M., **(84h:81021)**
 Vyatchin, A. V. Convergence of Padé approximations. (Russian. English summary) **(84h:30046)**
 Wallin, Hans Interpolation by rational functions with free poles in the complex plane. **(84g:30037)**

41A25 Rate of convergence, degree of approximation

- Bloom, Walter R. (with Elliott, David) The modulus of continuity of the remainder in the approximation of Lipschitz functions. **84i:41016**
 Chalmers, B. L. (with Egger, A. G.; Taylor, G. D.) Convex L^p approximation. **84g:41011**
 Chandra, Prem See Mohapatra, Ram Narayan, **84i:41027**
 Chui, Charles K. (with Holland, Anthony Stanley Bassett) On the order of approximation by Euler and Taylor means. **84i:41026** (with Hasson, Maurice) Degree of uniform approximation on disjoint intervals. **84i:41020**
 Egger, A. G. See Chalmers, B. L.; et al., **84g:41011**
 Elliott, David See Bloom, Walter R., **84i:41016**

- Freud, G. (with Mhaskar, H. N.) K -functionals and moduli of continuity in weighted polynomial approximation. **84h:41037**
 Ganzburg, M. I. Multidimensional limit theorems of the theory of best polynomial approximations. (Russian) **84c:41010**
 Ghizzetti, Aldo A question concerning approximation in the spaces $L^2_{\omega}[a, b]$. (Italian) **84g:41012**
 Gonska, Heinz H. On almost-Hermite-Fejér-interpolation: pointwise estimates. **84d:41031**
 Guo, Zhu Rui On approximation constant for typical means. **84d:41032**
 Hasson, Maurice The sharpness of Timan's theorem on differentiable functions. **84c:41011**
 See also Chui, Charles K., **84i:41020**
 Holland, Anthony Stanley Bassett See Chui, Charles K., **84i:41026**
 Junggeburth, J. J. (with Stark, E. L.) Improved approximation via shrinking. **84f:41021**
 Khatoun, Naushaba See Wafi, Abdul, **84d:41033**
 Khromov, V. V. See Miroshin, N. V., **84c:41012**
 Kröb, Andrius Error estimations for deviation of best uniform, discrete and L_p -approximations. **84c:41017**
 Mhaskar, H. N. See Freud, G., **84h:41037**
 Miroshin, N. V. (with Khromov, V. V.) A problem of best approximation of functions of several variables. (Russian) **84c:41012**
 Mohapatra, Ram Narayan (with Chandra, Prem) Degree of approximation of functions in the Hölder metric. **84i:41027**
 Qureshi, Kutbuddin On the degree of approximation of functions belonging to the class of $Lip\alpha$. **84c:41013**
 Singh, Suresh Prasad An estimate on the M_n -operators. (Italian summary) **84c:41018**
 Stark, E. L. See Junggeburth, J. J., **84f:41021**
 Swettis, John J. (with Wood, B.) Quantitative estimates for L_p approximation with positive linear operators. **84j:41027**
 Taylor, G. D. See Chalmers, B. L.; et al., **84g:41011**
 Totik, Vilmos Approximation by Meyer-König and Zeller type operators. **84g:41013**
 Wafi, Abdul (with Khatoun, Naushaba) On the degree of approximation of Rogosinski singular integral. (French summary) **84d:41033**
 Wood, B. See Swettis, John J., **84j:41027**
 Zaderej, P. V. Approximation in the mean of differentiable functions of two variables by Fourier sums. (Russian) **84c:41018**

secondary classifications:

- Andrienko, V. A. (with G'rnevska, L. V.) The rate of approximation of functions by their orthogonal series in convergence systems. (Russian) **(84d:42028)**
 Basu, A. K. On rates of convergence to infinitely divisible laws for dependent random variables. (French summary) **(84c:60033)**
 Becker, Michael (with Lautner, K. J.; Nessel, Rolf Joachim; Worms, G. J.) On global approximation by Kantorovich polynomials in L^p . **(84m:41008)**
 de Boor, C. (with Höllig, Klaus) Approximation order from bivariate C^1 -cubics: a counterexample. **(84j:41014)**
 (with DeVore, R.) Approximation by smooth multivariate splines. **(84j:41015)**
 DeVore, R. See de Boor, C., **(84j:41015)**
 Fiedler, Heinz (with Jurkat, W. B.) Best L^1 -approximation by polynomials. **(84f:41006)**
 Gonska, Heinz H. On approximation of continuously differentiable functions by positive linear operators. **(84d:41040)**
 G'rnevska, L. V. See Andrienko, V. A., **(84d:42028)**
 Höllig, Klaus See de Boor, C., **(84j:41014)**
 Jiménez Pozo, Miguel A. Quantitative theorems of Korovkin type in bounded function spaces. **(84m:41036)**
 Jurkat, W. B. See Fiedler, Heinz, **(84f:41006)**
 Khan, Arman (with Umar, Sarfaraz) On the order of approximation to a function by generalized Gauss Weierstrass singular integrals. (Turkish summary) **(84c:41023)**
 (with Umar, Sarfaraz) On the order of approximation to a function by generalized Gauss-Weierstrass singular integrals. **(84i:41032)**
 Khan, Huzoor H. (with Umar, Sarfaraz) Rapidity of approximation. **(84c:42002)**
 Lautner, K. J. See Becker, Michael; et al., **(84m:41008)**
 Lehnhoff, Heinz-Gerd A simple proof of A. F. Timan's theorem. **(84h:41008)**
 Leindler, L. Generalizations of Prösdorf's theorems. **(84h:42002)**
 Some additional results on the strong approximation of orthogonal series. **(84g:41005)**
 Leviatan, D. The degree of copositive approximation by polynomials. **(84d:41034)**
 Lubinsky, Doron S. See Sidi, Avram, **(84i:41005)**
 Mazhar, S. M. On the degree of approximation of a class of functions by means of Fourier series. **(84g:42004)**
 Mhaskar, H. N. Weighted polynomial approximation of entire functions. II. **(84d:30071b)**
 Weighted polynomial approximation of entire functions. I. **(84d:30071a)**
 Mohapatra, Ram Narayan (with Sahney, B. N.) Approximation of continuous functions by their Fourier series. **(84a:42002)**
 Nessel, Rolf Joachim See Becker, Michael; et al., **(84m:41008)**
 Qureshi, Kutbuddin See Sharma, P. L., **(84c:42010)**
 Rahman, Qazi Ibadur (with Schmeisser, G.) Rational approximation to e^{-x} . II. **(84c:41012)**
 Sahney, B. N. See Mohapatra, Ram Narayan, **(84a:42002)**
 Saxena, R. B. See Srivastava, K. B., **(84f:41007)**
 Schmeisser, G. See Rahman, Qazi Ibadur, **(84a:41012)**
 Sharma, P. L. (with Qureshi, Kutbuddin) On the degree of approximation of a periodic function f by almost Riesz means. **(84c:42010)**
 Shi, Xian Liang On approximation to periodic functions by linear means of subsequences of Fourier partial sums. (Chinese) **(84m:42004)**
 Sidi, Avram (with Lubinsky, Doron S.) Convergence of exponential interpolation for completely bounded functions. **(84i:41005)**

- Srivastava, K. B. (with Saxena, R. B.) On interpolation operators. III. A proof of Telyakovskii-Gopengauz's theorem for differentiable functions. (84f:41007)
- Totik, Vilmos Uniform approximation by Szász-Mirakjan type operators. (84j:41033)
- Umar, Sarfaraz See Khan, Arman, (84e:41023); Khan, Huzoor H., (84e:42002) and Khan, Arman, (84i:41032)
- Utreras Diaz, Florencio I. Convergence rates for monotone cubic spline interpolation. (84h:41021)
- Volkov, Yu. I. Multidimensional approximation operators generated by Lebesgue-Stieltjes measures. (Russian) (84j:41036)
- Worms, G. J. See Becker, Michael; et al., (84m:41008)
- Zagirov, N. Sh. Approximation of functions of generalized finite variation by rational functions. (Russian) (84a:41014)

41A27 Inverse theorems

secondary classifications:

- Irodova, I. P. Properties of functions defined by the rate of decrease of a piecewise-polynomial approximation. (Russian) (84m:41012)

41A28 Simultaneous approximation

- Freilich, J. H. (with McLaughlin, H. W.) Approximation of bounded sets. 84c:41021
- Keener, Lee L. Characterizing local best SAIN approximations. 84h:41038
- Khamma, Swaran See Narang, Tuls Das, 84a:41019
- Lorentz, R. A. Simultaneous approximation, interpolation and Birkhoff systems. 84g:41014
- McLaughlin, H. W. See Freilich, J. H., 84c:41021
- Narang, Tuls Das (with Khanna, Swaran) On best and best simultaneous approximation. 84a:41019
- Shi, Ying Guang Minimization and best approximation. II. (Chinese. English summary) 84c:41019
- Certain methods of minimization of the functional $\Phi(P) = \sup_{x \in X} F(x, P(x))$. (Chinese. English summary) 84e:41020
- Xie, Ting Fan On approximation by piecewise polynomials. (Chinese) 84g:41015

secondary classifications:

- Shi, Ying Guang Simultaneous Chebyshev approximation. (Chinese. English summary) (84i:41042)
- Sorokin, V. N. Simultaneous approximation of several linear forms. (Russian. English summary) (84i:41025)

41A29 Approximation with constraints

- Beatson, R. K. (with Leviatan, D.) On comonotone approximation. 84f:41022
- Borwein, Peter B. Rational approximations with real poles to e^{-x} and x^n . 84i:41028
- Chalmers, B. L. (with Taylor, G. D.) A unified theory of strong uniqueness in uniform approximation with constraints. 84h:41018
- Dunham, Charles B. Chebyshev approximation by rationals with constrained denominators. 84a:41020
- Huang, Ling (with Yu, Shi Wen) The least squares problem with norm constraints. (Chinese. English summary) 84g:41016
- Keener, Lee L. The best interpolating approximation is a limit of best weighted approximations. 84a:41021
- Lachance, Michael A. Two extremal problems for polynomials with an interior constraint. 84f:41023
- Levasseur, Kenneth M. (with Lewis, James T.) Least-squares approximation with restricted range. 84a:41022
- Leviatan, D. The degree of copositive approximation by polynomials. 84d:41034
- See also Beatson, R. K., 84f:41022
- Lewis, James T. See Levasseur, Kenneth M., 84a:41022
- Taylor, G. D. See Chalmers, B. L., 84h:41018
- Yu, Shi Wen See Huang, Ling, 84g:41016

secondary classifications:

- Byrnes, J. S. (with Shisha, Oved) On the order of magnitude of functions at infinity. (84f:41025)
- Chalmers, B. L. (with Metcalf, F. T.; Taylor, G. D.) Strong unicity of arbitrary rate. (84j:41049)
- Dietze, S. On control-approximation problems in Hilbert spaces and related dual problems: subdifferentiability properties and estimates. (German and Russian summaries) (84g:49009)
- Doronin, V. G. See Kornichuk, M. P.; et al., (84j:41001)
- Kornichuk, M. P. (with Ligon, A. A.; Doronin, V. G.) ★Аппроксимация с ограничениями. (Russian) [Approximation with constraints] (84j:41001)
- Kovtunets, V. V. Parametric differentiation of a family of k -splines. (Russian. English summary) (84i:41040)
- Ligon, A. A. See Kornichuk, M. P.; et al., (84j:41001)
- Metcalf, F. T. See Chalmers, B. L.; et al., (84j:41049)
- Precup, Radu Estimates of the degree of comonotone interpolating polynomials. (84i:41003)
- Shisha, Oved See Byrnes, J. S., (84f:41025)
- Taylor, G. D. See Chalmers, B. L.; et al., (84j:41049)

41A30 Approximation by other special function classes

- Abilov, V. A. Approximation of continuous functions of two variables by Fourier-Hermite sums. (Russian) 84i:41029

- Babaev, M.-B. A. Approximation to functions of several variables by functions of a smaller number of variables. 84f:41024

Extremal elements and the value of best approximation of a monotone function in \mathbb{R}^r by sums of functions of the least number of variables. (Russian) 84d:41035

- Byrnes, J. S. (with Shisha, Oved) On the order of magnitude of functions at infinity. 84f:41025

- Cromme, Ludwig J. Regular C^1 -parametrizations for exponential sums and splines. 84a:41023

A unified approach to differential characterizations of local best approximations for exponential sums and splines. 84e:41021

- Dadu, Adrian Sur un théorème de Tiberiu Popoviciu. [On a theorem of Tiberiu Popoviciu] 84f:41026

- Darst, Richard B. (with Sahab, Salem) Approximation of continuous and quasicontinuous functions by monotone functions. 84m:41028

- Dzhafarov, A. S. (with Mamazhonov, B.) The order of approximation of functions on the exterior of an interval by entire functions of finite degree. (Russian) 84d:41036

- Ghizzetti, Aldo On approximation in the spaces $L^2_{\mu}[a, b]$. (Italian) 84j:41028

- He, Ze Lin Notes on approximations of Walsh functions. (Chinese. English summary) 84a:41024

- Konovalov, V. N. Estimates of uniform approximations on unbounded sets of functions of several variables by entire functions of exponential type. (Russian. English summary) 84j:41029

- Light, William A. Jacobi projections. 84j:41030

- Malugin, S. A. Sharp estimates for the norm in C of an orthoprojector into a subspace of polygonal lines. (Russian) 84m:41029

- Mamazhonov, B. See Dzhafarov, A. S., 84d:41036

- Popov, V. Yu. Sharp inequalities for best mean square approximations in a space of Bessel potentials. (Russian) 84e:41022

- Sahab, Salem See Darst, Richard B., 84m:41028

- Shisha, Oved See Byrnes, J. S., 84f:41025

- Sidi, Avram Interpolation at equidistant points by a sum of exponential functions. 84d:41037

secondary classifications:

- Bojarsky, Abraham Approximating the absolutely continuous measures invariant under general maps of the interval. (84b:28015)
- Buck, R. Creighton Nomographic functions are nowhere dense. (84k:41033)
- Chistov, E. K. Variational-grid approximation on a regular triangular grid. (Russian) (84e:65119)
- Gauthier, P. M. (with Goldstein, Myron; Ow, W. H.) Uniform approximation on closed sets by harmonic functions with Newtonian singularities. (84j:31009)
- Goldstein, Myron See Gauthier, P. M.; et al., (84j:31009)
- Grona, V. L. (with Stepanets, A. I.) Distribution of zeros of special functions generated by trigonometric integrals. (Russian) (See 84m:42001)
- Approximation of periodic differentiable functions by normal Zygmund means. (Russian) (See 84m:42001)
- Kamzolov, A. I. Approximation of classes of functions $W^r_p(S^n)$ by the Fejér method in the metric $C(S^n)$. (Russian. English summary) (84e:46028)
- Khan, Huzoor H. On the degree of approximation. IV. (84d:42003)
- Levy, Ronnie (with Rice, Michael O.) The approximation and extension of uniformly continuous Banach space valued mappings. (84k:26003)
- Li, Bang Rong On eigenfunction polynomial approximation. (Chinese. English summary) (84j:42016)
- Light, William A. The Diliberto-Straus algorithm in $L_1(X \times Y)$. (84h:41048)
- Ow, W. H. See Gauthier, P. M.; et al., (84j:31009)
- Rice, Michael O. See Levy, Ronnie, (84k:26003)
- Savić, Vladimir N. Approximation of continuous periodic functions of three variables by Favard sums. (Serbo-Croatian. English summary) (84j:42004)
- An extremal problem in a space of continuous functions of three variables. (Serbo-Croatian. French summary) (84j:42005)
- Sloan, Ian H. Nonpolynomial interpolation. (84j:41008)
- Sommer, Manfred Weak Chebyshev spaces and best L_1 -approximation. (84j:41021)
- Stepanets, A. I. See Grona, V. L., (See 84m:42001)
- Telyakovskii, S. A. Approximation of functions by second-order Cesàro means. (Russian. English summary) (84h:42005)
- Wanka, Gert Gleichmäßige Approximation durch Lösungen von Randwertproblemen elliptischer Differentialgleichungen zweiter Ordnung. [Uniform approximation by solutions of boundary value problems of second-order elliptic differential equations] (84j:35060)
- Yu, Jia Rong Uniqueness of analytic functions of several complex variables, weighted approximation of functions of several real variables, and moment problems in higher dimensions. (Chinese. English summary) (84k:32006)

41A35 Approximation by operators (in particular, by integral operators)

- Abdulofizov, Sh. (with Videnskii, V. S.) Approximation operators that satisfy a certain condition. (Russian. Tajiki summary) 84i:41030
- Agrawal, Purshottam Narain See Rathore, R. K. S., 84a:41026
- Aksenov, V. V. The order of the approximation of functions by linear operators. (Russian) 84d:41038
- Altomare, Francesco Erratum: "Approximation theorems of Korovkin type in function spaces" [Rend. Mat. (6) 13 (1980), no. 3, 409-429 (1981); MR 82h:41029]. (Italian. English summary) 84a:41025
- Cismasiu, C. On two estimation theorems. (Romanian. English summary) 84m:41030
- Djukanova, Teodora A. Approximation of functions by means of linear summation Baskakov's operators in L_p . 84m:41031
- Fernández Muñoz, José Luis Qualitative theorems of Korovkin type for sequences of operators of class \tilde{R} . (Spanish. English summary) 84m:41032

Gavrea, Ioan Sur quelques opérateurs linéaires obtenus à l'aide des formules de quadrature. [Some linear operators obtained by means of quadrature formulas] **84d:41039**

Gröf, J. Konstruktion einer Folge linearer Operatoren zur Approximation auf der ganzen reellen Achse. [Construction of sequence of linear operators for the approximation on the entire real axis] **84m:41033**

Huang, Da Ren The precise constant of approximation by de la Vallée-Poussin integrals to functions of the class C_{2n}^* . (Chinese. English summary) **84j:41031**

Ibragimov, E. Dzh. A family of linear positive operators on a sphere. (Russian) **84g:41017**
Approximation of classes of functions on a sphere by linear means of ultraspherical series. (Russian) **84d:41031**

Jia, Rong Qing The precise constant of approximation of continuous functions by de la Vallée-Poussin integrals. (Chinese. English summary) **84j:41032**

Khan, Arman (with Umar, Sarfaraz) On the order of approximation to a function by generalized Gauss Weierstrass singular integrals. (Turkish summary) **84e:41023**
(with Umar, Sarfaraz) On the order of approximation to a function by generalized Gauss-Weierstrass singular integrals. **84e:41032**

Nagel, Josef Asymptotic properties of powers of Kantorovič operators. **84g:41018**

Rasa, Ion Fonctionnelles P_n -exactes et fonctionnelles P_n -simples. [P_n -exact and P_n -simple functionals] **84d:41039**
Determining sets for finitely defined operators. **84d:41033**

Rathore, R. K. S. (with Agrawal, Parshotam Narain) Inverse and saturation theorems for derivatives of exponential type operators. **84e:41026**

Totik, Vilmos Approximation by convolution operators. (Russian summary) **84e:41027**
Uniform approximation by Szász-Mirakjan type operators. **84j:41033**

Umar, Sarfaraz See Khan, Arman, **84e:41023** and **84e:41032**

Videnskii, V. S. See Abdulofizov, Sh., **84d:41030**

secondary classifications:

Boyanov, Borislav D. L_1 -approximation by Hermite interpolating polynomials with free nodes. **(84d:41008)**

He, Ze Lin Notes on approximations of Walsh functions. (Chinese. English summary) **(84e:41024)**

Khatoun, Naushaba See Wafi, Abdul, **(84d:41033)**

Kushpel', A. K. Deviation of summator analogues of integral operators on Hölder classes. (Russian) (See **84m:42001**)

Nagel, Josef Kantorovič operators of second order. **(84d:41043)**

Sun, Yong Sheng On the approximation of periodic functions in the mean by linear operators. (Chinese) **(84d:41017)**

Wafi, Abdul (with Khatoun, Naushaba) On the degree of approximation of Rogosinski singular integral. (French summary) **(84d:41033)**

41A36 Approximation by positive operators

Alkemade, J. A. H. A sequence of linear positive operators equivalent to the Baskakov operators. **84b:41019**

A generalization of a sequence of linear positive operators. **84m:41034**

Altomare, Francesco On the Korovkin approximation theory in commutative Banach algebras. (Italian summary) **84g:41019**

Baile Baldet, M. See Jiménez Pozo, Miguel A., **84e:41024**

(Cao, Jia Ding) See Chen, Tian Ping, **84j:41034**

Chen, Tian Ping Comment: "On the generalized polynomials of L. V. Kantorovich and their asymptotic behavior" [Chinese Ann. Math. 2 (1981), no. 2, 243-256; MR 83a:41027] by J. D. Cao. (Chinese) **84j:41034**

Ėlendieva, S. Kh. Some generalizations of the Laplace operator and their applications. (Russian) **84e:41022**

Flösser, H.-O. Korovkinsche Approximation stetiger Funktionen. [Korovkin approximation of continuous functions] **84m:41035**

Gawronski, Wolfgang (with Stadtmüller, U.) Approximation of continuous functions by generalized Favard operators. **84d:41023**

Gonska, Heinz H. On approximation of continuously differentiable functions by positive linear operators. **84d:41040**

Hahn, Lothar A note on stochastic methods in connection with approximation theorems for positive linear operators. **84d:41041**

Horová, Ivana A note on the sequence formed by the first order derivatives of the Szász-Mirakjan operators. **84e:41034**

Jiménez Pozo, Miguel A. (with Baile Baldet, M.) Estimates of the order of convergence of a sequence of linear operators in weighted function spaces. (Spanish. English summary) **84e:41024**

Quantitative theorems of Korovkin type in bounded function spaces. **84m:41036**

Khatoun, Naushaba See Wafi, Abdul, **84j:41037**

Kirkorov, I. Weight approximations by linear operators. (Bulgarian. English and Russian summaries) **84f:41027**

Komornik, V. A Korovkin-type theorem for locally compact spaces. **84e:41014**

Kütz, Martin On the positivity of certain Cotes numbers. **84d:41042**

Leinhoff, Heinz-Gerd Local Nikol'skii constants for positive linear operators. **84e:41025a**

Local Nikol'skii constants for a special class of Baskakov operators. **84e:41025b**

Nagel, Josef Kantorovič operators of second order. **84d:41043**

Nishishiraho, Toshihiko Quantitative theorems on approximation processes of positive linear operators. **84d:41024**

Pette, S. On linear positive operators. **84d:41044**

Popov, Vasil Atanasov On the quantitative Korovkin theorems in L_p . **84g:41020**

Rathore, R. K. S. The structure of variation preserving operators. **84e:41026**

Singh, Suresh Prasad (with Varshney, O. P.) On positive linear operators. **84j:41035**
(with Varshney, O. P.) On Szász type operators. **84e:41027**

Stadtmüller, U. See Gawronski, Wolfgang, **84d:41023**

Varshney, O. P. See Singh, Suresh Prasad, **84e:41027** and **84j:41035**

Vinogradov, O. M. Some classes of Korovkin systems. (Russian) **84e:41028**

Volkov, Yu. I. Multidimensional approximation operators generated by Lebesgue-Stieltjes measures. (Russian) **84j:41036**

Wafi, Abdul (with Khatoun, Naushaba) A note on linear positive operators in approximation theory. **84j:41037**

secondary classifications:

Arov, D. Z. (with Krein, M. G.) The problem of finding the minimum of entropy in indeterminate problems of continuation. (Russian) **(84m:47027)**

Bloom, Walter R. (with Sussich, Joseph F.) The degree of approximation by positive linear operators on compact connected abelian groups. **(84g:41030)**

Krein, M. G. See Arov, D. Z., **(84m:47027)**

Limaye, Balmohan Vishnu (with Nambodiri, M. N. N.) Approximation by positive functionals. **(84e:46059)**

Lupaş, A. (with Manole, C.) A property of the S. N. Bernstein polynomials. (Romanian. English and French summaries) **(84j:41012)**

Manole, C. See Lupaş, A., **(84j:41012)**

Marlewski, Adam Uniform convergence of Gronwall-like generalized Bernstein operator on $C_{[0,1]^p}$. **(84d:41011)**

Nambodiri, M. N. N. See Limaye, Balmohan Vishnu, **(84e:46059)**

Sun, Yong Sheng On Jackson's inequalities. (Chinese. English summary) **(84d:42004)**

Sussich, Joseph F. See Bloom, Walter R., **(84g:41030)**

Swettis, John J. (with Wood, B.) Quantitative estimates for L_p approximation with positive linear operators. **(84j:41027)**

Videnskii, V. S. Approximation of functions by polynomials from an arbitrary complete system. (Russian. Armenian summary) **(84b:41006)**

Wood, B. See Swettis, John J., **(84j:41027)**

41A40 Saturation

Ditzian, Zeev Saturation of approximation of n -dimensional functions. **84m:41037**

Fraguela Collar, Andrés On the characteristic structures and the constructive characteristics of certain classes of functions Lebesgue integrable with respect to the weight function $(1+x)^b$ in the interval $[-1, 1]$. (Spanish) **84d:41045**

Nishishiraho, Toshihiko Saturation of multiplier operators in Banach spaces. **84f:41028**

secondary classifications:

Becker, Michael (with Lautner, K. J.; Nessel, Rolf Joachim; Worms, G. J.) On global approximation by Kantorovich polynomials in L^p . **(84m:41008)**

Kuttner, B. (with Mohapatra, Ram Narayan; Sahney, B. N.) Saturation results for a class of linear operators. **(84b:42001)**

Lautner, K. J. See Becker, Michael; et al., **(84m:41008)**

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Nessel, Rolf Joachim See Becker, Michael; et al., **(84m:41008)**

Sahney, B. N. See Kuttner, B.; et al., **(84b:42001)**

Worms, G. J. See Becker, Michael; et al., **(84m:41008)**

41A44 Best constants

Kormichuk, M. P. The exact constant in the Jackson inequality for continuous periodic functions. (Russian) **84e:41015**

secondary classifications:

Holland, S. M. (with Light, William A.; Sulley, L. J.) On proximality in $L_1(T \times S)$. **(84j:41050)**

Leinhoff, Heinz-Gerd Local Nikol'skii constants for positive linear operators. **(84e:41025a)**

Local Nikol'skii constants for a special class of Baskakov operators. **(84e:41025b)**

Light, William A. See Holland, S. M.; et al., **(84j:41050)**

Sulley, L. J. See Holland, S. M.; et al., **(84j:41050)**

41A45 Approximation by arbitrary linear expressions

Al-Rashed, Abdallah M. L_∞ -approximation in probability spaces. **84b:41040**

Galeev, E. M. Some estimates of the diameters of an intersection of classes of functions. (Russian) **84b:41020**

Ghizzetti, Aldo A problem regarding the approximation of the functions $f(x)$ of a space $L_{\infty}[a, b]$ by means of linear combinations of given functions. (Italian. English summary) **84d:41035**

Grotzinger, Stephen J. On characterizing L_1 -supports, natural and Chebyshev approximates. **84b:41041**

Shevaldin, V. T. \mathcal{E} -splines and diameters. (Russian) **84j:41038**

secondary classifications:

Cheney, E. W. See Respass, J. R., Jr., **(84b:41030)**

Rassias, John Michael On approximation of approximately linear mappings by linear mappings. **(84e:47027)**

Respass, J. R., Jr. (with Cheney, E. W.) Best approximation problems in tensor-product spaces. **(84b:41030)**

Temlyakov, V. N. Diameters of some classes of functions of several variables. (Russian) **(84g:41029)**

Thron, W. J. (with Waadeland, Haakon) Truncation error bounds for limit periodic continued fractions. **(84f:30009)**

Waadeland, Haakon See Thron, W. J., **(84f:30009)**

41A46 Approximation by arbitrary nonlinear expressions; widths and entropy

- Dzhumagulov, A. K. Diameters of classes of differentiable functions representable as trigonometric series with "small" gaps. (Russian) **84h:41042**
- Gluskin, E. D. Norms of random matrices and diameters of finite-dimensional sets. (Russian) **84g:41021**
- Kashin, B. S. Widths of Sobolev classes of small-order smoothness. (Russian. English summary) **84j:41039**
- Kornichuk, M. P. (with Ligon, A. A.) On approximation of a class by another class and extremal subspaces in L_1 . (Russian summary) **84j:41040**
- Kulanin, E. D. Estimates for diameters of Sobolev classes of small-order smoothness. (Russian. English summary) **84c:41025**
- Ligon, A. A. Certain extremal problems in approximation theory. **84c:41016**
- See also Kornichuk, M. P., **84j:41040**
- Majorov, V. E. Letter to the editors: "Linear diameters of Sobolev classes and chains of extremal subspaces" [Mat. Sb. (N.S.) **113**(155) (1980), no. 3(11), 437-463; MR **82j:41022**]. (Russian) **84b:41021**
- Makovoz, V. On n -widths of certain functional classes defined by linear differential operators. **84j:41029**
- Sun, Yong Sheng On the Kolmogorov width of some classes of differentiable functions. (Chinese. English summary) **84c:41026**

Duality theorems for the width numbers of some functional classes. **84c:41028**

secondary classifications:

- Amir, Dan (with Mach, Jaroslav; Saatkamp, Klaus) Existence of Chebyshev centers, best n -nets and best compact approximants. (**84h:46022**)
- Dunham, Charles B. Discrete nonlinear L_p approximation, $0 < p \leq 1$. (**84a:41030**)
- Korenev, N. K. Estimates of diameters of the unit ball $L_p(\Omega, r)$ in $L_p(\Omega, \mu)$. (Russian. English summary) (**84j:46056**)
- Mach, Jaroslav See Amir, Dan; et al., (**84h:46022**)
- Reemtsen, Rembert On the convergence of a class of nonlinear approximation methods. (**84g:65083**)
- Saatkamp, Klaus See Amir, Dan; et al., (**84h:46022**)

41A50 Best approximation, including Chebyshev systems

- Amiya, Masanobu The strong unicity in the best approximation. **84c:41029**
- Brannigan, M. A geometric characterization of H -sets. **84c:41027**
- Brosowski, Bruno A refinement of the Kolmogorov-criterion. **84m:41038**
- Darst, R. B. (with Legg, D. A.; Townsend, D. W.) The Pólya algorithm in L_∞ approximation. **84c:41036**
- Deutsch, Frank Linear selections for the metric projection. **84a:41029**
- Dinh Quang Lu'u Best approximations in the space of closed convex valued multifunctions. **84c:41028**
- Dubuc, Serge (with Savoie, Jean) Résolution d'équations associées à un système de Tchebycheff. [Solution of equations associated with a Chebyshev system] **84j:41041**
- Duf'skaya, V. A. Optimally close approximation of functions of n variables in the class $L_{2,h,m,q,p}^*$. (Russian) **84d:41046**
- Dunham, Charles B. Rational approximation on subsets. II. **84i:41037**
- Existence and continuity of the Chebyshev operator. II. (See **84a:47002**)
- Choice of basis for Chebyshev approximation. **84c:41038**
- Minimax approximation with Lagrange interpolation. **84g:41023**
- Discrete nonlinear L_p approximation, $0 < p \leq 1$. **84a:41030**
- The one-sided Remez algorithm. (German summary) **84g:41022**
- Henry, Myron S. (with Swettis, John J.) Lebesgue and strong unicity constants for Zolotareff polynomials. **84d:41047**
- (with Swettis, John J.; Weinstein, Stanley E.) On extremal sets and strong unicity constants for certain C^∞ functions. **84i:41039**
- Huang, You Qun A note on Williams' algorithm for interpolating rationals. (Chinese summary) **84d:41048**
- Jahn, Johannes Zur vektoriiellen linearen Tchebyscheff-Approximation. (English and Russian summaries) [On vectorial linear Chebyshev approximation] **84j:41042**
- Koshcheev, V. A. Systems of continuous vector-valued functions of a given Chebyshev rank. (Russian) **84c:41030**
- Chebyshev systems of continuous functions with values in a two-dimensional strictly convex normed space. (Russian) **84h:41043**
- Kortumets, V. V. Parametric differentiation of a family of k -splines. (Russian. English summary) **84i:41040**
- Kozłowska, Grażyna Direct and indirect Jackson type theorems in some Fréchet functions spaces. (Russian and Polish summaries) **84g:41024**
- Kroó, András On strong unicity of best approximation in $C(\mathbb{R})$. **84d:41049**
- Legg, D. A. See Darst, R. B.; et al., **84i:41036**
- Lewis, James T. (with Streit, Roy L.) Concertina-like movement in the absence of a Chebyshev system. **84c:41031**
- Ospenko, K. Yu. Best methods of approximation of analytic functions given with error. (Russian) **84d:41050**
- Pehersdorfer, Franz On an L^1 -approximation problem. (Russian summary) **84b:41022**
- Pinkus, A. (with Shisha, Oved) A variation on the Chebyshev theory of best approximation. **84m:41039**
- Poroshenko, V. N. On approximation of discontinuous functions in L -metric. (Russian summary) **84c:41017**
- Reemtsen, Rembert Characterizations of local best Chebyshev approximations. **84f:41030**
- Sahney, B. N. (with Singh, Sankatha Prasad) On best simultaneous Chebyshev approximation with additive weight function and related results. **84b:41023**
- Savoie, Jean See Dubuc, Serge. **84j:41041**
- Schwartz, Bernd See Tichatschke, R., (See **84c:49002**)
- Shi, Ying Guang Weighted simultaneous Chebyshev approximation. **84c:41018**
- Uniform approximation by generalized polynomials having bounded coefficients. (Chinese. English summary) **84c:41041**
- Chebyshev approximation by linear alternating families with fixed values at nodes. **84c:41029**
- Simultaneous Chebyshev approximation. (Chinese. English summary) **84i:41042**
- Shisha, Oved See Pinkus, A., **84m:41039**
- Singh, Sankatha Prasad See Sahney, B. N., **84b:41023**
- Smazewski, Ryszard Expansions of determinant quotients with application to approximation. **84m:41040**
- Strauß, Hans Unicity of best one-sided L_1 -approximations. **84b:41024**
- Streit, Roy L. See Lewis, James T., **84c:41031**
- Su, Wei Yi See Zheng, Wei Xing. **84m:41041**
- Swettis, John J. See Henry, Myron S., **84d:41047** and **84c:41039**
- Tichatschke, R. (with Schwartz, Bernd) Ein Verfahren der zulässigen Richtungen für das lineare kontinuierliche Tchebyscheff-Problem. (English and Russian summaries) [A method of feasible directions for the linear continuous Chebyshev problem] (See **84c:49002**)
- Townsend, D. W. See Darst, R. B.; et al., **84i:41036**
- Weinstein, Stanley E. See Henry, Myron S.; et al., **84i:41039**
- Yudin, V. A. The multidimensional Jackson theorem in L_1 . (Russian) **84d:41051**
- Yüksel, Ş. Chebyshev approximation with two null points. (Turkish summary) **84d:41052**
- Zarnadze, D. N. Duality theorems in metric locally convex spaces. (Russian) **84j:41043**
- Zencke, Peter ★ Theorie und Numerik der Tchebyscheff-Approximation mit reell-erweiterten Exponentialsummen. (German) [Theory and numerics of the Chebyshev approximation with real-extended exponential sums] **84b:41044**
- Zheng, Wei Xing (with Su, Wei Yi) Best approximation on a Walsh system. (Chinese. English summary) **84m:41041**
- Zielke, Roland Erratum: "Some characteristics of weak Chebyshev systems" [J. Approx. Theory **25** (1979), no. 4, 384-392; MR **80f:41020**]. (German) **84a:41032**

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- Babenko, V. F. Nonsymmetric extremal problems of approximation theory. (Russian) (**84j:41048**)
- Blatter, Jörg (with Schumaker, Larry) Continuous selections and maximal alternators for spline approximation. (**84j:41013**)
- Brannigan, M. The strict Chebyshev solution of overdetermined systems of linear equations with rank deficient matrix. (**84f:65031**)
- Bräb, Helmut Ein Beispiel zur Theorie der besten Approximation. [An example for the theory of best approximation] (**84c:41008**)
- Deutsch, Frank Which closed convex subsets of an inner product space are Chebyshev? (**84c:41035**)
- Dunham, Charles B. Continuous dependence in rational Chebyshev approximation. (**84c:41018**)
- Flores de Chela, Delia Approximations in the l_∞ norm and the generalized inverse. (**84f:15008**)
- Gnatyuk, V. O. (with Shchirba, V. S.) General properties of best approximation with respect to a convex continuous function. (Russian) (**84f:41035**)
- Godini, G. Best approximation in certain classes of normed linear spaces. (**84i:41048**)
- Hamideh, Hassan See Young, Andrew. (**84c:33015**)
- Hettich, Rainer (with Zencke, Peter) ★ Numerische Methoden der Approximation und semi-infiniter Optimierung. (German) [Numerical methods of approximation and semi-infinite optimization] (**84c:90069**)
- Holland, S. M. (with Light, William A.; Sulley, L. J.) On proximality in $L_1(T \times S)$. (**84j:41050**)
- Hollenhorst, Manfred Improved lower and upper bounds in polynomial Chebyshev approximation based on a pre-iteration formula. (**84c:41006**)
- Indumathi, V. Proximal subspaces of finite codimension in general normed linear spaces. (**84g:41032**)
- Janc, Mirko On a sufficient condition for good approximation in some spaces of continuous functions. (Serbo-Croatian. English summary) (**84c:41034**)
- Kenderov, Pet'ar S. Polygonal approximation of plane convex compacta. (**84i:52005**)
- Khromov, V. V. See Miroshin, N. V., (**84c:41012**)
- Khrushchëv, S. V. See Peller, V. V., (**84c:47036**)
- Kornichuk, M. P. The exact constant in the Jackson inequality for continuous periodic functions. (Russian) (**84c:41015**)
- Kroó, András On the distribution of points of maximal deviation in complex Čebyšev approximation. (Russian summary) (**84j:30058**)
- Some theorems on unicity of multivariate L_1 -approximation. (**84c:41019**)
- On unicity and strong unicity of best approximation in the L_1 -norm. (**84m:41054**)
- Light, William A. See Holland, S. M.; et al., (**84j:41050**)
- Lomontseva, I. V. Best uniform approximation of functions by continued fractions. (Russian) (**84m:65032**)
- Maruşciac, I. Generalized Chebyshev polynomials and reversed geometric programming. (Romanian summary) (**84c:90063**)
- Miroshin, N. V. (with Khromov, V. V.) A problem of best approximation of functions of several variables. (Russian) (**84c:41012**)
- Pal, D. V. (with Veeramani, P.) Applications of fixed point theorems to problems in optimization and best approximation. (**84b:47074**)
- Peller, V. V. (with Khrushchëv, S. V.) Hankel operators, best approximations and stationary Gaussian processes. (Russian) (**84c:47036**)
- Rall, L. B. Representations of intervals and optimal error bounds. (**84g:65057**)
- Ramazanov, A.-R. K. Rational functions of best approximation in integral metrics. (Russian. English summary) (**84b:41015**)
- Schumaker, Larry See Blatter, Jörg. (**84j:41013**)
- Shashkin, Yu. A. Interpolation systems of functions of the second kind and their topology. (Russian) (**84j:41007**)
- Shchirba, V. S. See Gnatyuk, V. O., (**84f:41035**)

- Shvedov, A. S. Approximation of functions of several variables by polynomials, and diameters of certain function classes. (Russian. English summary) (84d:41058)
- Sulley, L. J. See Holland, S. M.; et al. (84j:41050)
- Veeramani, P. See Pal, D. V., (84b:47074)
- Watson, G. A. Some characterizations of best mixed-norm approximations. (84e:41033)
- Wolfe, Jerry M. Critical points in nonlinear L_1 approximation. (84e:41043)
- Young, Andrew (with Hamideh, Hassan) The zeros of certain Jacobi polynomials. (84c:33015)
- Zencke, Peter See Hettich, Rainer, (84a:90069)

41A52 Uniqueness of best approximation

- Deutsch, Frank Representers of linear functionals, norm-attaining functionals, and best approximation by cones and linear varieties in inner product spaces. (84a:41033)
- (with Nürnberger, Günther) Weakly interpolating subspaces. (84b:41045)
- Kroó, Andriás Some theorems on unicity of multivariate L_1 -approximation. (84c:41019)
- On unicity of complex polynomial L_1 -approximation along curves. (84d:41053)
- Nürnberger, Günther See Deutsch, Frank, (84b:41045)
- Shi, Ying Guang The minimal problem on a finite set. (Chinese. English summary) (84b:41046)
- Wolfe, Jerry M. Critical points in nonlinear L_1 approximation. (84i:41043)

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- Amiya, Masanobu The strong unicity in the best approximation. (84c:41029)
- Chalmers, B. L. (with Taylor, G. D.) A unified theory of strong uniqueness in uniform approximation with constraints. (84b:41018)
- Dunham, Charles B. Minimax approximation with Lagrange interpolation. (84g:41023)
- Gnatyuk, V. O. (with Shchirba, V. S.) General properties of best approximation with respect to a convex continuous function. (Russian) (84f:41035)
- Henry, Myron S. (with Swetits, John J.) Lebesgue and strong unicity constants for Zolotareff polynomials. (84d:41047)
- (with Swetits, John J.; Weinstein, Stanley E.) On extremal sets and strong unicity constants for certain C^∞ functions. (84i:41039)
- Kroó, Andriás On strong unicity of best approximation in $C(R)$. (84d:41049)
- Lorentz, R. A. Simultaneous approximation, interpolation and Birkhoff systems. (84g:41014)
- Narang, Tulsi Das Corrigendum: "Unicity theorem and strict convexity of metric linear spaces" [Tamkang J. Math. 11 (1980), no. 1, 49-51; MR 82g:46012]. (84e:46005)
- Shchirba, V. S. See Gnatyuk, V. O., (84f:41035)
- Shi, Ying Guang A minimax problem using generalized rational functions. (84d:41027)
- Sommer, Manfred Weak Chebyshev spaces and best L_1 -approximation. (84j:41021)
- Strauß, Hans Unicity of best one-sided L_1 -approximations. (84b:41024)
- Swetits, John J. See Henry, Myron S., (84d:41047) and (84i:41039)
- Taylor, G. D. See Chalmers, B. L., (84b:41018)
- Weinstein, Stanley E. See Henry, Myron S.; et al., (84i:41039)

41A55 Approximate quadratures

- Acu, Dumitru Combined optimal quadrature formulas. (Romanian. French summary) (84a:41034)
- Bastien, Richard (with Dubuc, Serge) Monospline à oscillation minimale. [Monosplines with minimal oscillation] (84c:41030)
- Blinov, N. I. Optimal convergence with respect to order of piecewise-lattice cubature formulas for some classes of functions with singularities. (Russian) (84a:41035)
- Burlacu, E. (with Năslău, Pavel) On a cubature formula. (Romanian. English summary) (84c:41020)
- Chakhkhev, M. A. Exponential polynomials which deviate least from zero and optimal quadrature formulas. (Russian) (84g:41025)
- Chen, T. H. Charles An upper bound for the Gauss-Legendre quadrature error for analytic functions. (84c:41021)
- Didur, L. I. Weighted Hermite cubature formulas on periodic functions. (Russian) (84g:41026)
- Dubuc, Serge (with Todor, Fabian) La règle du trapèze appliquée à quelques fonctions sans dérivées. [The trapezoid rule applied to some functions without derivatives] (84m:41042)
- See also Bastien, Richard, (84c:41030)
- Gegel', G. N. Some cubature formulas for domains with symmetry. (Russian) (84c:41022)
- He, Tian Xiao See Xu, Li Zhi, (84m:41043)
- Illán González, J. See López Lagomasino, Guillermo, (84j:41045)
- Jetter, Kurt A new class of Gaussian quadrature formulas based on Birkhoff type data. (84d:41054)
- Ligun, A. A. (with Storchai, V. F.) Asymptotically best quadrature formulas on classes of differentiable functions. (Russian) (84j:41044)
- López Lagomasino, Guillermo (with Illán González, J.) Quadrature formulas for unbounded intervals. (Spanish. English summary) (84j:41045)
- van de Lune, J. (with Temme, N. M.) ★Log-convex trapezoidal approximation of an elementary integral. (84g:41027)
- Marshak, A. L. Approximation of an integral exponential curve by means of quadrature formulas. (Russian) (84a:41036)
- Möller, H. M. The construction of cubature formulae and ideals of principal classes. (84c:41044)
- Năslău, Pavel See Burlacu, E., (84c:41020)
- Polovinkin, V. I. Sequences of quadrature formulas with a boundary layer. (Russian) (84a:41037)
- Proinov, P. D. Upper bound for the error of a general quadrature process with positive weights. (Russian) (84c:41023)
- Qin, Zeng Fu Romberg quadrature by the midpoint rule and the Fibonacci sequence. (Chinese) (84b:41025)
- Sakai, Makoto ★Quadrature domains. (84b:41047)

- Sharipov, R. N. Calculation of multidimensional singular integrals with Cauchy kernels. (Russian) (84c:41024)
- Storchai, V. F. See Ligun, A. A., (84j:41044)
- Temme, N. M. See van de Lune, J., (84g:41027)
- Todor, Fabian See Dubuc, Serge, (84m:41042)
- Xu, Li Zhi (with He, Tian Xiao) On the minimum estimation of the remainders in dimensionality-lowering expansions with algebraic precision. (Chinese. English summary) (84m:41043)

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- Bellen, A. (with Guerra, S.) Some possible extensions of the Gaussian quadrature formulas. (Italian. English summary) (84d:65015)
- Braess, Dietrich (with Richter-Dyn, Nira) On the uniqueness of monosplines and perfect splines of least L_1 - and L_2 -norm. (84c:41004)
- Civan, Faruk (with Slepcevic, C. M.) Application of differential quadrature to transport processes. (84j:82103)
- Ermakov, S. M. (with Tokareva, N. A.) A multidimensional analogue of Runge's rule. (Russian. English summary) (84j:65021)
- Felolo, I. Verna Complements to a calculation method for defect and excess of integrals. (Italian) (84c:65040)
- Gavrea, Ioan Sur quelques opérateurs linéaires obtenus à l'aide des formules de quadrature. [Some linear operators obtained by means of quadrature formulas] (84h:41039)
- Genz, A. C. (with Malik, A. A.) An imbedded family of fully symmetric numerical integration rules. (84g:65035)
- Glinkin, I. A. Optimal algorithms for integration of convex functions. (Russian) (84c:65025)
- Guerra, S. See Bellen, A., (84d:65015)
- Hasegawa, Takemitsu (with Torii, Tatsuo; Ninomiya, Ichizo) Generalized Chebyshev interpolation and its application to automatic quadrature. (84m:65037)
- Hausmann, Werner (with Luik, Eberhard; Zeller, Karl) Cubature remainder and biorthogonal systems. (84m:65038)
- Karaseva, N. V. Cubature formulas for calculating integrals over a sphere. (Russian. English summary) (84g:65038)
- Kaul, N. See Raina, B. L., (84m:65035)
- Korobov, N. M. On the calculation of optimal coefficients. (Russian) (84g:65039)
- Levin, Moshe On the evaluation of double integrals. (See 84k:41003)
- On the approximate calculation of double integrals. (84c:65051)
- Lewis, James T. (with Shisha, Oved) The generalized Riemann, simple, dominated and improper integrals. (84h:26014)
- Lichtenstein, Woody Quadrature, scattering, and representations. (84h:43009)
- Luik, Eberhard See Hausmann, Werner; et al., (84m:65038)
- Malik, A. A. See Genz, A. C., (84g:65035)
- Neumann, Gerd ★Boolesche interpolatorische Kubatur. (German) [Boolean interpolating cubature] (84f:65023)
- Ninomiya, Ichizo See Hasegawa, Takemitsu; et al., (84m:65037)
- Peherstorfer, Franz Weight functions which admit Tchebycheff quadrature. (84k:65025)
- Rabinowitz, Philip On an osculatory quadrature formula. (84d:65017)
- Raina, B. L. (with Kaul, N.) A class of optimal quadrature formulae. (84m:65035)
- Rasputin, G. G. Construction of cubature formulas containing prespecified knots. (Russian) (84m:65040)
- Richter-Dyn, Nira See Braess, Dietrich, (84c:41004)
- Sabirov, S. A. See Zhamalov, Z. Zh., (84a:65021)
- Shisha, Oved See Lewis, James T., (84h:26014)
- Sikorski, K. Optimal quadrature algorithms in H_s spaces. (84c:65045)
- Slepcevic, C. M. See Civan, Faruk, (84j:82103)
- Tokareva, N. A. See Ermakov, S. M., (84j:65021)
- Torii, Tatsuo See Hasegawa, Takemitsu; et al., (84m:65037)
- (Uspenski, S. V.) See Theory of cubature formulas and the application of functional analysis to problems of mathematical physics. (84d:41001)
- Volokhin, V. A. Approximate calculation of multidimensional integrals with a moving singularity on a sphere. (Russian) (84j:65027)
- Wong, Roderick Quadrature formulas for oscillatory integral transforms. (84a:65102)
- Yanovich, L. A. Chebyshev's quadrature formulas for a class of Wiener double integrals. (Russian. English summary) (84c:65053)
- Zarubin, M. M. Construction of a function that has a given domain of existence of a weight norm. (Russian) (84a:46081)
- Zeller, Karl See Hausmann, Werner; et al., (84m:65038)
- Zhamalov, Z. Zh. (with Sabirov, S. A.) A way of constructing optimal quadrature formulas with specification of derivatives. (Russian) (84a:65021)
- Zhenskybaev, A. A. Extremality of monosplines of minimum defect. (Russian) (84h:41026)
- Proceedings of the S. L. Sobolev Seminar, No. 1 ★Теория кубатурных формул и приложения функционального анализа к задачам математической физики. (Russian) [Theory of cubature formulas and the application of functional analysis to problems of mathematical physics] (84a:41001)
- Theory of cubature formulas and the application of functional analysis to problems of mathematical physics ★Теория кубатурных формул и приложения функционального анализа к задачам математической физики. (Russian) [Theory of cubature formulas and the application of functional analysis to problems of mathematical physics] (84a:41001)

41A58 Series expansions (e.g. Taylor, Lidstone series, but not Fourier series)

- Berger, Gerd Eine neue Koeffizienten- und Restglieddarstellung für die Entwicklung einer Funktion nach Potenzen eines gegebenen Polynoms. [A new coefficient- and remainder-representation for the expansion of a function in powers of a given polynomial] (84a:41038)

Dimovski, I. H. Lidstone-type formulas and nonharmonic sine expansions. **84m:41044**
 Luppi, Jussi (with Pajunen, Petri) Evaluation of higher-order semiclassical phase integrals: application of Chebyshev series approximation and Taylor series expansion. **84c:41025**

Pajunen, Petri See Luppi, Jussi, **84c:41025**

Tasche, M. Eine einheitliche Herleitung verschiedener Interpolationsformeln mittels der Taylorschen Formel der Operatorenrechnung. (English and Russian summaries) [A uniform approach of several interpolation formulas by means of Taylor's formula of operational calculus] **84d:41055**

Tokuda, Naoyuki A new application of Lagrange-Bürmann expansions. I. General principle. (German summary) **84m:41045**

secondary classifications:

Adikesaran, A. S. Taylor series method for the error term. **(84b:65045)**

Jain, Pawan Kumar (with Singh, Balbir) Characterisations of bounded sets in the space of entire Dirichlet transforms of several complex variables having finite growth. **(84b:46035)**

Schnabl, R. Über Bruwiersche Reihen mit nicht negativen Koeffizienten. (English summary) [Bruwier series with nonnegative coefficients] **(84d:30089)**

Sidi, Avram Euler-Maclaurin expansions for integrals over triangles and squares of functions having algebraic/logarithmic singularities along an edge. **(84j:65026)**

Singh, Balbir See Jain, Pawan Kumar, **(84b:46035)**

41A60 Asymptotic approximations, asymptotic expansions (steepest descent, etc.) [See also 30E15.]

Cooke, J. C. Stationary phase in two dimensions. **84d:41056**

Felgenhauer, Andreas Verbindungsregeln (matching rules) für Projektoren in linearen Räumen. (English and Russian summaries) [Matching rules for projectors in linear spaces] **84g:41028**

Grigoryan, M. Zh. Representation of measurable functions by double series. (Russian. English and Armenian summaries) **84c:41031**

Kilbas, A. A. Asymptotic expansions for power-logarithmic integrals containing logarithms. (Russian. English summary) **84b:41026**

Kryžienė, B. Asymptotic expansion of certain sums. (Russian. English and Lithuanian summaries) **84i:41045**

Mamedov, G. M. The asymptotic value of an approximation of generalized differentiable functions by singular integrals. (Russian) **84d:41057**

McClure, J. P. (with Wong, Roderick) Error bounds for multidimensional Laplace approximation. **84i:41046**

Riedel, Roland Asymptotische Darstellung verallgemeinerter Fourierintegrale. IV. (English and Russian summaries) [Asymptotic representation of generalized Fourier integrals. IV] **84c:41032**

Riekstina, V. Uniform asymptotic expansion of a class of integrals with a logarithmic singularity. (Russian) **84c:41039**

Uniform asymptotic expansion of a certain class of contour integrals. (Russian) **84c:41031**

Riekstins, E. Estimates of the minimal term and the minimal remainder in asymptotic expansions. (Russian) **84j:41046**

Asymptotic estimates of the minimal remainder in some enveloping asymptotic expansions. (Russian) **84j:41047**

Schell, H.-J. Gleichmäßige asymptotische Darstellungen für Parameterintegrale mit zwei reellen Parametern. (English and Russian summaries) [Uniform asymptotic representations for parameter integrals with two real parameters] **84c:41032**

Soni, K. On uniform asymptotic expansion of a class of integral transforms. **84c:41026**

Wong, Roderick Applications of some recent results in asymptotic expansions. **84i:41031**
 See also McClure, J. P., **84i:41046**

secondary classifications:

Ahluwalia, Daljit S. See Ting, Lu; et al., **(84b:35171)**

Al-Rashed, Abdallah M. L_∞ -approximation in probability spaces. **(84b:41040)**

Barlet, D. Développement asymptotique des fonctions obtenues par intégration sur les fibres. [Asymptotic expansion of functions obtained by integration on the fibers] **(84c:32021)**

Chillingworth, D. R. J. (with Romero-Fuster, Carmen) Remarks on the singularity indices of Arnol'd and Berry. **(84i:58021)**

Deutsch, Frank (with Nürnberger, Günther) Weakly interpolating subspaces. **(84b:41045)**

Dontchev, Asen L. (with Veliov, V. M.) Singular perturbation in Mayer's problem for linear systems. **(84b:49003)**

Drăgan, Vasile Asymptotic expansions for singularly perturbed differential matrix Riccati equations with applications to linear-quadratic optimization problems. **(84b:49054)**

Elbert, A. Asymptotic expansion and continued fraction for Mathieu's series. **(84b:33020)**

Gilbert, A. D. A geometric approach to two-timing. **(84j:34039)**

Goodman, T. N. T. (with Micchelli, Charles A.) Limits of spline functions with periodic knots. **(84b:41012)**

Kruse, Klaus-Dieter Asymptotic expansions for derivatives of Fourier transforms. (Russian. German and Lithuanian summaries) **(84b:42018)**

Lange, Charles G. On spurious solutions of singular perturbation problems. **(84c:34076)**

Luke, Yudell L. On the ratio of two gamma functions. **(84g:33001)**

Meyer, Richard E. (with Painter, J. F.) On the Schroedinger connection. **(84c:34079)**

Micchelli, Charles A. See Goodman, T. N. T., **(84i:41012)**

Miksis, Michael J. See Ting, Lu; et al., **(84b:35171)**

Nürnberger, Günther See Deutsch, Frank, **(84b:41045)**

Painter, J. F. See Meyer, Richard E., **(84c:34079)**

Riedel, Roland Asymptotische Entwicklung der Restsummen gewisser alternierender Reihen. I. [Asymptotic expansion of residual sums of certain alternating series. I] **(84b:65008)**

Romero-Fuster, Carmen See Chillingworth, D. R. J., **(84i:58021)**

Shinar, J. On applications of singular perturbation techniques in nonlinear optimal control. **(84b:49055)**

Stammes, Jakob J. Uniform asymptotic theory of diffraction by apertures. **(84c:78014)**

Ting, Lu (with Ahluwalia, Daljit S.; Miksis, Michael J.) Solutions of a class of mixed free boundary problems. **(84b:35171)**

Ursell, F. Integrals with a large parameter: Hilbert transforms. **(84b:44007)**

Veliov, V. M. See Dontchev, Asen L., **(84b:49003)**

Wong, Roderick Quadrature formulas for oscillatory integral transforms. **(84c:65102)**

Yanovich, L. A. The Laplace method for Riemann integrals of random processes.

(Russian. English summary) **(84d:65012)**

Zaderej, P. V. Approximation of differentiable functions of two variables by de la Vallée-Poussin sums in the mean. (Russian) **(84m:41047)**

41A63 Multidimensional problems (should also be assigned at least one other classification number in this section)

de Boor, C. Topics in multivariate approximation theory. **84c:41047**

Buck, R. Creighton Nomographic functions are nowhere dense. **84c:41033**

Fisher, Michael Ellis (with Styer, Daniel F.) Partial differential approximants for multivariable power series. I. Definitions and faithfulness. **84c:41040**

Flatto, Leopold A geometric problem in approximation theory. **84f:41032**

Light, William A. The Diliberto-Straus algorithm in $L_1(X \times Y)$. **84b:41048**

Ostlenker, B. P. Weighted polynomial approximation of functions of several variables. (Russian) **84m:41046**

Shvedov, A. S. Approximation of functions of several variables by polynomials, and diameters of certain function classes. (Russian. English summary) **84d:41058**

Styer, Daniel F. See Fisher, Michael Ellis, **84c:41040**

Temlyakov, V. N. Diameters of some classes of functions of several variables. (Russian) **84g:41029**

Watson, G. A. Some characterizations of best mixed-norm approximations. **84c:41033**

Zaderej, P. V. Approximation of differentiable functions of two variables by de la Vallée-Poussin sums in the mean. (Russian) **84m:41047**

secondary classifications:

Apprato, Dominique (with Arcangeli, Rémi; Gaches, Jean) Fonctions spline par moyennes locales sur un ouvert borné de \mathbb{R}^n . (English summary) [Mean value spline functions on an open bounded subset in \mathbb{R}^n] **(84i:41009)**

Arcangeli, Rémi See Apprato, Dominique; et al., **(84i:41009)**

Babaei, M.-B. A. Approximation to functions of several variables by functions of a smaller number of variables. **(84f:41024)**

Bacchelli Montefusco, Laura Reconstructing surfaces via local shape functions. (Italian. English summary) **(84b:65016)**

de Boor, C. (with Höllig, Klaus) Approximation order from bivariate C^1 -cubics: a counterexample. **(84j:41014)**

(with DeVore, R.) Approximation by smooth multivariate splines. **(84j:41015)**

Brammigan, M. A geometric characterization of H -sets. **(84c:41027)**

Chui, Charles K. (with Schumaker, Larry L.) On spaces of piecewise polynomials with boundary conditions. I. Rectangles. **(84m:41010a)**

(with Schumaker, Larry L.; Wang, Ren Hong) On spaces of piecewise

polynomials with boundary conditions. II. Type-1 triangulations. **(84m:41010b)**

(with Schumaker, Larry L.; Wang, Ren Hong) On spaces of piecewise

polynomials with boundary conditions. III. Type-2 triangulations. **(84m:41010c)**

(with Wang, Ren Hong) Multivariate spline spaces. **(84f:41010)**

(with Wang, Ren Hong) On smooth multivariate spline functions. **(84f:41011)**

Cuyt, Annie A. M. Multivariate Padé-approximants. **(84j:41025)**

A comparison of some multivariate Padé-approximants. **(84i:41023)**

Defert, P. See Thiran, J.-P.; et al., **(84c:41017)**

Delves, F. J. (with Posdorf, Horst) Generalized Biermann interpolation. **(84j:41004)**

DeVore, R. See de Boor, C., **(84j:41015)**

Fed'ko, V. V. Generalized piecewise-Taylor interpolation. (Russian. English summary) **(84c:41003)**

Gaches, Jean See Apprato, Dominique; et al., **(84i:41009)**

Galeev, É. M. Some estimates of the diameters of an intersection of classes of functions. (Russian) **(84b:41020)**

Ganzburg, M. I. Multidimensional limit theorems of the theory of best polynomial approximations. (Russian) **(84c:41010)**

Hakopian, Hakop A. Multivariate divided differences and multivariate interpolation of Lagrange and Hermite type. **(84c:41004)**

Höllig, Klaus See de Boor, C., **(84j:41014)**

Irodova, I. P. Properties of functions defined by the rate of decrease of a

piecewise-polynomial approximation. (Russian) **(84m:41012)**

Karaseva, N. V. Cubature formulas for calculating integrals over a sphere. (Russian. English summary) **(84g:65038)**

Khromov, V. V. See Miroshin, N. V., **(84c:41012)**

Kononov, V. N. Estimates of uniform approximations on unbounded sets of functions of several variables by entire functions of exponential type. (Russian. English summary) **(84j:41029)**

Kuptsov, L. P. Expansion of certain parabolic means. (Russian) **(84c:35056)**

Maetzti, J. I. Divided differences associated with reversible systems in \mathbb{R}^2 . **(84g:41003)**

McClure, J. P. (with Wong, Roderick) Error bounds for multidimensional Laplace approximation. **(84i:41046)**

Micchelli, Charles A. A constructive approach to Kergin interpolation in \mathbb{R}^2 : multivariate B -splines and Lagrange interpolation. **(84i:41002)**

Miroshin, N. V. (with Khromov, V. V.) A problem of best approximation of functions of several variables. (Russian) **(84c:41012)**

Panier, E. See Thiran, J.-P.; et al., **(84c:41017)**

Posdorf, Horst See Delves, F. J., **(84j:41004)**

- Schumaker, Larry L. See Chui, Charles K., (84m:41010a); (84m:41010b) and (84m:41010c)
- Stănişilă, Octavian Multidimensional interpolation. (Romanian. English summary) (84m:41006)
- Thiran, J.-P. (with Defert, P.; Panier, E.) On H -sets in bivariate rational approximation. (84c:41017)
- Volkov, Yu. I. Multidimensional approximation operators generated by Lebesgue-Stieltjes measures. (Russian) (84j:41036)
- Wang, Ren Hong See Chui, Charles K., (84f:41010); (84f:41011); (84m:41010b) and (84m:41010c)
- Wong, Roderick See McClure, J. P., (84c:41046)
- Zaderej, P. V. Approximation in the mean of differentiable functions of two variables by Fourier sums. (Russian) (84c:41018)
- 41A65 Abstract approximation theory (approximation in normed linear spaces and other abstract spaces)**
- Astaneh, Ali Ansari On uniquely remotal subsets of Hilbert spaces. (84c:41034)
- Babenko, V. F. Nonsymmetric approximations in spaces of summable functions. (Russian) (84c:41059)
- Nonsymmetric extremal problems of approximation theory. (Russian) (84j:41048)
- Balaganskii, V. S. Weak continuity of metric projection on bounded sets in Banach spaces. (Russian) (84f:41033)
- Berdyshev, V. I. Metric projection on the class $H(\Omega)$. (Russian) (84c:41027)
- Berens, Hubert Über die beste Approximation im \mathbb{R}^n . [On the best approximation in \mathbb{R}^n] (84c:41060)
- Bloom, Walter R. (with Sussich, Joseph F.) The degree of approximation by positive linear operators on compact connected abelian groups. (84g:41030)
- Bosznay, Adam P. A remark on remotal sets. (84c:41049)
- Brannigan, M. Uniform linear approximation in normed linear spaces. (84c:41028)
- Chalmers, B. L. (with Metcalf, F. T.; Taylor, G. D.) Strong unicity of arbitrary rate. (84j:41049)
- Cheney, E. W. See Respass, J. R., Jr., (84b:41030); (84g:41033) and Light, William A.; et al., (84c:41036)
- Chobanyan, S. A. See Vakhaniya, N. N., (84c:41064)
- Coimbra, Elvira ★ On best approximation in vectorially normed spaces. (84b:41027)
- Deutsch, Frank Which closed convex subsets of an inner product space are Chebyshev? (84c:41035)
- Diaconu, Adrian Interpolation dans les espaces abstraits. Méthodes itératives pour la résolution des équations opérationnelles obtenues par l'interpolation inverse. I. [Interpolation in abstract spaces. Iterative methods for the solution of operational equations obtained by the inverse interpolation method. I] (84m:41048)
- Dickmeis, Werner (with Nessel, Rolf Joachim) Condensation principles with rates. (84c:41041)
- Din' Zang Mean ϵ -dimension of the class of functions $B_{\epsilon, p}$. (Russian) (84d:41061)
- Dolidze, Z. O. Determination of the nearest points of two convex sets. (Russian) (84m:41049)
- Dunham, Charles B. Alternating approximation on shorter intervals. (84b:41028)
- Elumalai, S. See Rao, Geetha S., (84m:41056)
- Gal, Sorin Gh. Sur le théorème d'approximation de Stone-Weierstrass. (Romanian summary) [The Stone-Weierstrass approximation theorem] (84b:41029)
- Sur l'approximation par des polynômes, dans $C_{[0,1]}$. (Romanian summary) [Approximation by polynomials in $C_{[0,1]}$] (84f:41034)
- Gavrea, Ioan See Ivan, Mircea, (84j:41051)
- Gnatyuk, V. O. (with Shchirba, V. S.) General properties of best approximation with respect to a convex continuous function. (Russian) (84f:41035)
- Godini, G. Best approximation in certain classes of normed linear spaces. (84c:41048)
- On a problem of H. Berens. (84j:41031)
- Holland, S. M. (with Light, William A.; Sulley, L. J.) On proximality in $L_1(T \times S)$. (84j:41050)
- Indumathi, V. Proximinal subspaces of finite codimension in general normed linear spaces. (84g:41032)
- Ivan, Mircea (with Gavrea, Ioan) Sur une suite d'opérateurs d'interpolation et d'approximation. [On a sequence of interpolation and approximation operators] (84j:41051)
- Janc, Mirko On a sufficient condition for good approximation in some spaces of continuous functions. (Serbo-Croatian. English summary) (84c:41034)
- A descent algorithm for ϵ -approximation of continuous functions with values in unitary space. (84m:41050)
- On good approximation in metric spaces. (84m:41051)
- Kalik, Carol Sur deux problèmes de la meilleure approximation dans les espaces de Banach. [Two best approximation problems in Banach spaces] (84c:41035)
- Kapoor, O. P. (with Mathur, Saran Behari) Metric projection bound and the Lipschitz constant of the radial retraction. (84f:41036)
- Khan, Swaran See Narang, Tuls Das, (84c:41037)
- Klee, Victor Dispersed Chebyshev sets and coverings by balls. (84c:41036)
- Konyagin, S. V. Sets of points of nonemptiness and continuity of a metric projection. (Russian) (84m:41052)
- Kozłowska, Grażyna Direct and indirect Jackson's type theorems in some Fréchet functions spaces. (84m:41053)
- Kroó, András On unicity and strong unicity of best approximation in the L_1 -norm. (84m:41054)
- Larkin, F. M. The weak Gaussian distribution as a means of localization in Hilbert space. (84j:41052)
- Light, William A. Convergence of the Diliberto-Straus algorithm in $L_1(X \times Y)$. (84c:41042)
- (with McCabe, J. H.; Phillips, G. M.; Cheney, E. W.) The approximation of bivariate functions by sums of univariate ones using the L_1 -metric. (84c:41036)
- See also Holland, S. M.; et al., (84j:41050)
- Mathur, Saran Behari See Kapoor, O. P., (84f:41036)
- McCabe, J. H. See Light, William A.; et al., (84c:41036)
- Metcalf, F. T. See Chalmers, B. L.; et al., (84j:41049)
- Myjak, Józef Well posed problems in the theory of best approximation. (84c:41043)
- Narang, Tuls Das Best approximation and strict convexity of metric spaces. (84f:41037)
- (with Khanna, Swaran) On some approximation problems in metric linear spaces. (84c:41037)
- Nessel, Rolf Joachim See Dickmeis, Werner, (84c:41041)
- Nürnberg, Günther (with Singer, Ivan) Uniqueness and strong uniqueness of best approximations by spline subspaces and other subspaces. (84c:41029)
- Oshman, E. V. Continuity of the metric projection onto subspaces of finite codimension in $C(Q)$. (Russian) (84c:41038)
- Papini, Pier Luigi Approximation and norm derivatives in real normed spaces. (84c:41044)
- Phillips, G. M. See Light, William A.; et al., (84c:41036)
- Popov, V. A. Average moduli and their function spaces. (84m:41055)
- Rao, Geetha S. (with Elumalai, S.) Semicontinuity properties of the strong best coapproximation operator. (84m:41056)
- Respass, J. R., Jr. (with Cheney, E. W.) On Lipschitzian proximity maps. (84g:41033)
- (with Cheney, E. W.) Best approximation problems in tensor-product spaces. (84b:41030)
- Sendov, Bl. H. Convergence of numerical methods. (84m:41057)
- Serb, Ioan On the multivalued metric projection in normed vector spaces. (84d:41062)
- On the multivalued metric projection in normed vector spaces. II. (84b:41050)
- Shchirba, V. S. See Gnatyuk, V. O., (84f:41035)
- Shkhtman, Boris Why piecewise linear functions are dense in $C[0, 1]$. (84a:41045)
- Interpolation projections and Banach spaces. (84c:41049)
- Shi, Ying Guang A kind of best approximation using function pairs. (Chinese. English summary) (84c:41031)
- Shvedov, A. S. Existence of an element with given values of best approximations. (Russian) (84c:41051)
- Singer, Ivan See Nürnberg, Günther, (84c:41029)
- Smarzewski, Ryszard Determination of Chebyshev approximations by nonlinear admissible subsets. (84d:41063)
- Smoluk, Antoni Invariant approximations. (Polish) (84c:41039)
- Soni, D. C. Finding out points of best simultaneous approximation and best approximation (B) in a Hilbert space. (84c:41037)
- Sulley, L. J. See Holland, S. M.; et al., (84j:41050)
- Sussich, Joseph F. See Bloom, Walter R., (84g:41030)
- Taylor, G. D. See Chalmers, B. L.; et al., (84j:41049)
- Vakhaniya, N. N. (with Chobanyan, S. A.) On the problem of best approximation in a space of vector functions. (Russian) (84d:41064)
- Zhivkov, Nikolai V. Continuity and nonmultivaluedness properties of metric projections and antiprojections. (84d:41065)
- Zhuk, V. V. Some estimates for seminorms by means of moduli of continuity. (Russian. English summary) (84d:41066)
- secondary classifications:
- Ahmad, Khalil See Jain, Pawan Kumar, (84m:46017)
- Altomare, Francesco On the Korovkin approximation theory in commutative Banach algebras. (Italian summary) (84g:41019)
- Appling, William D. L. Constructive representations of certain closest approximations. (84m:28005)
- Beer, Gerald Cone lattices of upper semicontinuous functions. (84j:26004)
- On functions that approximate relations. (84m:54018)
- Beran, Z. See Tuzar, A., (84c:49069)
- Bos, L. P. Bounding the Lebesgue function for Lagrange interpolation in a simplex. (84c:41007)
- Brosowski, Bruno A refinement of the Kolmogorov-criterion. (84m:41038)
- Burenkov, V. I. Mollifying operators with variable step and their application to approximation by infinitely differentiable functions. (84c:46068)
- Cheney, E. W. (with Franchetti, C.) Minimal projections of finite rank in sequence spaces. (84b:46010)
- Coyette, Michel Caractérisations des espaces normés lisses. (English summary) [Characterizations of smooth normed spaces] (84g:46022)
- Cuyt, Annie A. M. Regularity and normality of abstract Padé approximants: projection-property and product-property. (84b:41017)
- Dem'yanovich, Yu. K. Error of approximation on a nonuniform grid. (Russian. English summary) (84f:65014)
- Deutsch, Frank (with Mach, Jaroslav; Saatkamp, Klaus) Approximation by finite rank operators. (84m:47058)
- Linear selections for the metric projection. (84c:41029)
- (with Kenderov, Pet'r S.) Continuous selections and approximate selection for set-valued mappings and applications to metric projections. (84c:54026)
- Engl, Heinz W. (with Kirsch, Andreas) On the continuity of the metric projection onto a convex set subject to an additional constraint. (Italian summary) (84c:52007)
- Franchetti, C. See Cheney, E. W., (84b:46010)
- Garg, S. K. See Narang, Tuls Das, (84c:46164)
- Gorokhov, E. V. A smoothing approximation process and interpolation theorems. (Russian) (84m:46092)
- Jain, Pawan Kumar (with Ahmad, Khalil) Best approximation in Banach spaces with Schauder decompositions. (84m:46017)
- Jameson, G. J. O. (with Pinkus, A.) Positive and minimal projections in function spaces. (84f:46031)
- Jiménez Pozo, Miguel A. Quantitative theorems of Korovkin type in bounded function spaces. (84m:41036)
- Karpenko, S. F. Some general properties of the approximation method. (Russian) (84j:47104)
- Kenderov, Pet'r S. See Deutsch, Frank, (84c:54026)
- Khan, Liaquat Ali On a Stone-Weierstrass theorem for vector-valued functions. (84c:46082)

- Khanna, Swarn. See Narang, Tulsi Das, (84c:41019)
- Khazān, M. I. Existence and approximation of solutions of nonlinear evolution equations. (Russian) (84c:34098)
- Kirsch, Andreas. See Engl, Heinz W., (84c:52007)
- Koshcheev, V. A. Systems of continuous vector-valued functions of a given Chebyshev rank. (Russian) (84c:41030)
- Landers, D. (with Rogge, L.) Continuity of best approximants. (84c:46063)
- Levy, Ronnie. (with Rice, M. D.) The approximation and extension of uniformly continuous mappings. (84c:54029)
- Mach, Jaroslav. See Deutsch, Frank; et al., (84m:47058)
- Machado, S. See Prolla, João B., (84g:46052)
- Narang, Tulsi Das. (with Khanna, Swarn) On best and best simultaneous approximation. (84c:41019)
- (with Garg, S. K.) An approximation problem in non-Archimedean quasinormed spaces. (84c:46164)
- Nishishiraho, Toshihiko. Saturation of multiplier operators in Banach spaces. (84f:41028)
- Oshman, E. V. Continuity of a metric projection onto convex closed sets. (Russian) (84j:46023)
- Philippe-Vaudene, Renée. Approximation régulière de certains espaces de Sobolev. [Regular approximation of certain Sobolev spaces] (84i:46046)
- Pietsch, Albrecht. Tensor products of sequences, functions, and operators. (84c:46075)
- Pinkus, A. See Jameson, G. J. O., (84f:46031)
- Ponomareva, A. I. On the generalization of the "2-sun" concept. (Russian) (84b:46020)
- Prolla, João B. (with Machado, S.) Weierstrass-Stone theorems for set-valued mappings. (84g:46052)
- Rice, M. D. See Levy, Ronnie, (84d:54029)
- Rogge, L. See Landers, D., (84c:46063)
- Saatkamp, Klaus. See Deutsch, Frank; et al., (84m:47058)
- Šerb, Ioan. A normed space admitting countable multivalued metric projections. (84f:46020a)
- Normed spaces with bounded or compact strongly proximal sets. (84f:46020b)
- Timmermans, C. A. Construction of semigroups of operators in $L^2(\Omega)$. (84m:47055)
- Tuzar, A. (with Beran, Z.) Optimization of the discrete description for continuous systems. (Russian summary) (84b:49069)
- Vlasov, L. P. Elements of the best approximation with respect to subspaces of finite codimension. (Russian) (84b:46022)
- Zapata, G. On the approximation of functions in inductive limits. (84d:46048)
- Zarnadze, D. N. Duality theorems in metric locally convex spaces. (Russian) (84j:41043)
- Zhivkov, Nikolai V. Plane polygonal approximation of bounded convex sets. (84g:52003)
- 41A80 Remainders in approximation formulas
- 41A99 Miscellaneous topics
- Brutman, L. A sharp estimate of the Landau constants. 84m:41058
- Eichenauer, W. (with Krabs, W.) On a constructive method for solving certain control-approximation-problems. 84c:41046
- Frenkel, Margareta. Sur un théorème de D. Jackson. (Romanian summary) [On a theorem of D. Jackson] 84b:41032
- Gashkov, S. B. On the complexity of approximate realization of analytic functions by schemes and formulas. (Russian, English summary) 84j:41053
- Ivanov, Kamen G. On the rates of convergence of two moduli of functions. 84c:41038
- Kaminskii, V. A. On the Lipschitz condition for the Steiner-Lamé operator. (Russian) 84c:41052
- Krabs, W. See Eichenauer, W., 84a:41046
- Liu, Ding Yuan. A theorem on the convexity of plane Bézier curves of degree n . (Chinese, English summary) 84c:41047
- Nikolcheva, Margarita G. Approximation of continuous curves on a plane by pieces of a circle. (Russian) 84j:41054
- Török, Tamás. Successive approximation of convex differentiable functions by determination of optimal measuring place. (Hungarian, English summary) 84j:41055
- Vétes, P. On approximation of hydrological functions. 84b:41033
- Wang, Guo Jin. The convergence of "Kurgla I" approximation. (Chinese, English summary) 84j:41056

secondary classifications:

- Deeba, E. Y. On the convergence of generalized Szász operator in the complex plane. (84c:30053)
- Wu, Xue Mou. Approximation transforming theory. I. (Chinese, English summary) (84j:00002)
- Zenkin, O. V. Approximate analytical description of planar curves. (Russian) (84d:51034)

42-XX FOURIER ANALYSIS

42-01 Elementary exposition, textbooks

secondary classifications:

- Il'in, V. A. (with Poznyak, E. G.) ★ Fundamentals of mathematical analysis. Part 2. (84b:26001b)
- Poznyak, E. G. See Il'in, V. A., (84b:26001b)
- (Shokurov, Vladimir) See Il'in, V. A.; et al., (84b:26001b)
- Zolesio, Jean-Luc. Analyse de quelques méthodes de calcul de transformées de Fourier discrètes. (English summary) [Analysis of some methods for calculating discrete Fourier transforms] (84j:65081)

42-02 Advanced exposition (research surveys, monographs, etc.)

- Golubov, B. I. Multiple series and Fourier integrals. (Russian) 84c:42001
- Znak, V. V. ★ Аппроксимация периодических функций. (Russian) [Approximation of periodic functions] 84j:42001

secondary classifications:

- Agae, G. N. (with Vilenkin, N. Ya.; Dzharali, G. M.; Rubinshtein, A. I.) ★ Мультипликативные системы функций и гармонический анализ на нульмерных группах. (Russian) [Multiplicative systems of functions and harmonic analysis on zero-dimensional groups] (84b:43001)
- Dzharali, G. M. See Agae, G. N.; et al., (84b:43001)
- Rubinshtein, A. I. See Agae, G. N.; et al., (84b:43001)
- Vilenkin, N. Ya. See Agae, G. N.; et al., (84b:43001)
- Wade, William R. Recent developments in the theory of Walsh series. (84d:42033)

42-03 Historical (must also be assigned at least one classification number from Section 01)

- Murai, Takafumi. Theory of lacunary functions. (Japanese) 84f:42001

secondary classifications:

- Cartwright, M. L. Manuscripts of Hardy, Littlewood, Marcel Riesz and Titchmarsh. (84c:01042)
- (Hardy, Godfrey Harold) See Cartwright, M. L., (84c:01042)
- (Littlewood, John Edensor) See Cartwright, M. L., (84c:01042)
- Onneweer, C. W. The Wilbraham-Gibbs phenomenon in Fourier analysis. (84c:42006)
- (Riesz, Marcel) See Cartwright, M. L., (84c:01042)
- (Titchmarsh, Edward Charles) See Cartwright, M. L., (84c:01042)

42-04 Explicit machine computation and programs (not the theory of computation or programming)

42-06 Proceedings, conferences, etc.

- (Beckner, William) See Conference: Harmonic analysis, 84m:42002
- (Calderón, Alberto P.) See Conference: Harmonic analysis, 84m:42002
- (Fefferman, Robert) See Conference: Harmonic analysis, 84m:42002
- (Jones, Peter Wilcox) See Conference: Harmonic analysis, 84m:42002
- (Mauceri, Giancarlo) See Harmonic analysis, 84c:42001
- (Ricci, Fulvio) See Harmonic analysis, 84c:42001
- (Weiss, Guido) See Harmonic analysis, 84c:42001
- (Zygmund, Antoni) See Conference: Harmonic analysis, 84m:42002
- Approximation of continuous periodic functions by linear methods ★ Approximation of continuous periodic functions by linear methods. (Russian) 84m:42001
- Chicago, Ill. ★ Conference on harmonic analysis in honor of Antoni Zygmund. Vol. I, II. 84m:42002
- Conference:

Harmonic analysis ★ Harmonic analysis. 84c:42001

★ Conference on harmonic analysis in honor of Antoni Zygmund. Vol. I, II. 84m:42002

Zygmund, Antoni ★ Conference on harmonic analysis in honor of Antoni Zygmund. Vol. I, II. 84m:42002

Cortona ★ Harmonic analysis. 84c:42001

Harmonic analysis ★ Harmonic analysis. 84c:42001

Seminar:

Harmonic Analysis ★ Séminaire d'Analyse Harmonique, 1981-1982. (French)

[Seminar on Harmonic Analysis, 1981-1982] 84g:42001

Spectral theory of functions and operators ★ Spectral theory of functions and operators. II. 84j:42002

secondary classifications:

- (Dzyadyk, V. K.) See Methods of approximation theory and their applications. (84b:41001)
- Fourier analysis on arithmetical sequences ★ Fourier analysis on arithmetical sequences. (84m:10002)
- Methods of approximation theory and their applications ★ Методы теории приближения и их приложения. (Russian) [Methods of approximation theory and their applications] (84b:41001)
- Recent development in martingale theory and its applications ★ Recent development in martingale theory and its applications. (Japanese) (84j:60006)
- Symposium:
- Fourier analysis on arithmetical sequences ★ Fourier analysis on arithmetical sequences. (84m:10002)
- Recent development in martingale theory and its applications ★ Recent development in martingale theory and its applications. (Japanese) (84j:60006)

42Axx Fourier analysis in one variable

42A05 Trigonometric polynomials, inequalities, extremal problems

- Baskakov, V. A. (with Telyakovskii, S. A.) Approximation of differentiable functions by Fejer sums. (Russian) 84c:42001
- Berman, D. L. Solution of an extremal problem of operator theory. (Russian) 84c:42001
- Borodin, V. A. Zeros of the characteristic function in polynomial approximation of a function $|x|$. (Russian) 84j:42003

- Odlyzko, Andrew M. Minima of cosine sums and maxima of polynomials on the unit circle. **84c:42001**
- Rukasov, V. I. Estimates of deviations of interpolation trigonometric polynomials with equidistant nodes on classes of continuous periodic functions of several variables. (Russian) **84g:42002**
- Telyakovskii, S. A. See Baskakov, V. A., **84c:42001**
- Yabuta, Kôzô A remark on the Littlewood conjecture. **84b:42001**

secondary classifications:

- Gyires, Béla Contribution to the Fourier analysis of matrix-valued functions. (**84c:60063**)
- Lebow, A. (with Schreiber, Morris) Polynomials over groups and a theorem of Fejér and Riesz. (**84c:43011**)
- Pichorides, S. Une inégalité de H. Montgomery sur les sommes d'exponentielles. [An inequality of H. Montgomery on sums of exponentials] (**84i:10037**)
- Rack, Heinz-Joachim Extreme Punkte in der Einheitskugel des Vektorraumes der trigonometrischen Polynome. [Extreme points of the unit ball of the vector space of trigonometric polynomials] (**84m:52005**)
- Schreiber, Morris See Lebow, A., (**84c:43011**)
- Silbermann, Bernd The strong Stegô limit theorem for a class of singular generating functions. I. (**84d:47037**)

42A10 Trigonometric approximation

- Baskakov, V. A. Methods of summing Fourier series, giving the least order of approximation on classes $C(\epsilon)$ and their norms. (Russian) **84c:42002**
- Berman, D. L. Solution of an extremal problem of operator theory and analogues of the M. Riesz identity. (Russian) **84d:42001**
- Drianov, D. P. Average modulus of smoothness of fractional index and applications. **84c:42002**
- Gavriluk, V. T. Approximation of continuous periodic functions of several variables by Fourier sums. (Russian. English summary) **84d:42002**
- Approximation of functions of the class C^1 by Fourier sums. (Russian) **84c:42003**
- Goetheluck, Pierre Approximation des fonctions périodiques de régularité variable. [Approximation of periodic functions of variable regularity] **84f:42002**
- Grona, V. L. (with Stepanets, A. I.) Distribution of zeros of special functions generated by trigonometric integrals. (Russian) (See **84m:42001**)
- Approximation of periodic differentiable functions by normal Zygmund means. (Russian) (See **84m:42001**)
- Holland, Anthony Stanley Bassett (with Mohapatra, Ram Narayan; Sahney, B. N.) Approximation of integrable functions by Borel means. **84b:42002**
- Ichim, Ion La formule de Taylor trigonométrique. [The trigonometric Taylor formula] **84m:42003**
- Khan, Huzoor H. (with Umar, Sarfaraz) Rapidity of approximation. **84c:42002**
- On the degree of approximation. IV. **84c:42003**
- (with Umar, Sarfaraz) On the degree of approximation. I. **84c:42004**
- Khrstov, V. Kh. The Fourier-Lagrange coefficients. (Russian) **84g:42003**
- Kushpel', A. K. Deviation of summator analogues of integral operators on Hölder classes. (Russian) (See **84m:42001**)
- Kuttner, B. (with Mohapatra, Ram Narayan; Sahney, B. N.) Saturation results for a class of linear operators. **84b:42001**
- Leindler, L. Generalizations of Prösdorf's theorems. **84b:42002**
- Derivative functions and strong approximation of Fourier series. II. **84b:42003**
- Liu, Rui Zhen (with Zhang, Shu Yuan) The approximation of periodic continuous functions of two variables by de la Vallée-Poussin sums in the uniform norm. (Chinese. English summary) **84c:42003**
- Mazhar, S. M. On the degree of approximation of a class of functions by means of Fourier series. **84g:42004**
- Mitske, G. See Wilmes, Gerhard; et al., **84c:42005**
- Mohapatra, Ram Narayan (with Sahney, B. N.) Approximation of continuous functions by their Fourier series. **84c:42002**
- (with Singh, Sankatha Prasad) Some results on L_p approximation of functions by their Fourier series. **84b:42004**
- See also Holland, Anthony Stanley Bassett; et al., **84b:42002** and Kuttner, B.; et al., **84b:42001**
- Németh, J. Imbedding theorems. (See **84i:41003**)
- Nessel, Rolf Joachim See Wilmes, Gerhard; et al., **84c:42005**
- Oberlin, Daniel M. An approximation problem in $L^p([0, 2\pi])$, $2 < p < \infty$. **84a:42003**
- Popov, Vasil Atanasov One-sided approximation of periodic functions of several variables. **84g:42005**
- Qureshi, Kutbuddin On the degree of approximation of functions belonging to the class $Lip(\alpha, p)$ by means of a conjugate series. **84b:42005**
- Rukasov, V. I. See Stepanets, A. I., **84c:42004**
- Sahney, B. N. See Mohapatra, Ram Narayan, **84c:42002**; Holland, Anthony Stanley Bassett; et al., **84b:42002** and Kuttner, B.; et al., **84b:42001**
- Savić, Vladimir N. Approximation of continuous periodic functions of three variables by Favard sums. (Serbo-Croatian. English summary) **84j:42004**
- An extremal problem in a space of continuous functions of three variables. (Serbo-Croatian. French summary) **84j:42005**
- Shalae, V. V. Sharp estimates for an approximation of periodic functions by linear polynomial methods of convolution type. (Russian) **84b:42003**
- Shi, Xian Liang On approximation to periodic functions by linear means of subsequences of Fourier partial sums. (Chinese) **84m:42004**
- Simonov, B. V. Some properties of transformed Fourier series. (Russian. English summary) **84c:42004**
- Singh, Sankatha Prasad See Mohapatra, Ram Narayan, **84b:42004**
- Stepanets, A. I. Asymptotic representations of deviations of Zygmund means from differentiable periodic functions. (Russian) **84c:42005**
- Classes of periodic functions and approximation of their elements by Fourier sums. (Russian) **84j:42006**

- (with Rukasov, V. I.) Approximation by Fourier sums of triangular type on classes of continuous periodic functions of two variables. (Russian) **84b:42004**
- See also Grona, V. L., (See **84m:42001**)
- Sun, Yong Sheng On Jackson's inequalities. (Chinese. English summary) **84c:42004**
- Errata: "Some results about $E_n(W_p^r)$ " [J. Math. Res. Exposition 1 (1981), no. 1, 55-58; MR 83j:42006] by M. D. Ye. (Chinese) **84j:42007**
- Taberski, Roman Approximation to functions of two variables in L_p -metrics, $0 < p < 1$. **84c:42002**
- On modified integral moduli of smoothness and one-sided approximation of periodic functions. **84c:42003**
- Telyakovskii, S. A. Approximation of functions by second-order Cesàro means. (Russian. English summary) **84b:42005**
- Umar, Sarfaraz See Khan, Huzoor H., **84c:42002** and **84c:42004**
- Varma, A. K. An interpolatory rational trigonometric approximation. **84c:42004**
- Volokhin, V. A. Approximation of functions represented by integrals with a singularity on a sphere. (Russian) **84c:42006**
- Wilmes, Gerhard (with Mitske, G.; Nessel, Rolf Joachim) On the behavior of the partial sums of lacunary Fourier series. (Russian) **84c:42005**
- Yang, Yi Qun The uniform approximation of the classes $Lip(\alpha, p)$ by (C, β) means of Fourier series and their conjugate series. (Chinese. English summary) **84j:42008**
- (Ye, Mao Dong) See Sun, Yong Sheng, **84j:42007**
- Zhang, Shu Yuan See Liu, Rui Zhen, **84c:42003**

secondary classifications:

- Andrienko, V. A. (with G'nevskaya, L. V.) The rate of approximation of functions by their orthogonal series in convergence systems. (Russian) (**84d:42028**)
- Chapront, Jean The Fourier-Chebyshev approximation for time series with a great many terms. (**84c:70005**)
- Doronin, V. G. See Kornichuk, M. P.; et al., (**84j:41001**)
- G'nevskaya, L. V. See Andrienko, V. A., (**84d:42028**)
- Güntner, R. Über ein Interpolationsverfahren von S. N. Bernstein. [On an interpolation procedure of S. N. Bernstein] (**84b:42006**)
- Kornichuk, M. P. (with Ligon, A. A.; Doronin, V. G.) ★ Аппроксимация с ограничениями. (Russian) [Approximation with constraints] (**84j:41001**)
- The exact constant in the Jackson inequality for continuous periodic functions. (Russian) (**84c:41015**)
- Kozłowska, Grażyna Direct and indirect Jackson's type theorems in some Fréchet functions spaces. (**84m:41053**)
- Li, Bang Rong On eigenfunction polynomial approximation. (Chinese. English summary) (**84j:42016**)
- Ligon, A. A. See Kornichuk, M. P.; et al., (**84j:41001**)
- Stepanets', O. I. Simultaneous approximation of conjugate functions and their derivatives by Fourier sums. (Russian) (**84c:42018**)
- Temlyakov, V. N. Diameters of some classes of functions of several variables. (Russian) (**84g:41029**)
- Totkov, G. A. Approximations of bounded periodic functions in the metric of L_p , $1 < p < \infty$. (Russian) (**84m:41018**)
- Yudin, V. A. The multidimensional Jackson theorem in L_2 . (Russian) (**84d:41051**)
- Zaderej, P. V. Approximation of periodic functions of several variables by trigonometric polynomials in the mean. (Russian) (**84j:42025**)
- Zhang, Yang Chun The saturation problem of strong approximation by double Fourier series. (Chinese. English summary) (**84c:42018**)

42A15 Trigonometric interpolation

- Güntner, R. Über ein Interpolationsverfahren von S. N. Bernstein. [On an interpolation procedure of S. N. Bernstein] **84b:42006**
- Khrstov, V. Kh. Mean convergence of interpolation polynomials of periodic functions. (Russian) **84f:42003**
- Rukasov, V. I. Approximation of continuous periodic functions of several variables by interpolation trigonometric polynomials with equidistant nodes. (Russian. English summary) **84b:42006**
- Sakai, Ryozi See Shibata, Rokuzi, **84g:42007**
- Sharma, Ambikeshwar (with Varma, A. K.) Lacunary trigonometric interpolation on equidistant nodes (convergence). **84g:42006**
- Shibata, Rokuzi (with Sakai, Ryozi) Hermite-Fejér interpolation by trigonometric polynomials. **84g:42007**
- Varma, A. K. See Sharma, Ambikeshwar, **84g:42006**

secondary classifications:

- Canuto, Claudio (with Maday, Y.; Quarteroni, Alfio) Analysis of the combined finite element and Fourier interpolation. (**84c:65089**)
- Filimonova, V. A. Asymptotic estimates for approximating conjugate functions by conjugate interpolation sums. (Russian) (**84c:41009**)
- Khrstov, V. Kh. The Fourier-Lagrange coefficients. (Russian) (**84g:42003**)
- Maday, Y. See Canuto, Claudio; et al., (**84c:65089**)
- Quarteroni, Alfio See Canuto, Claudio; et al., (**84c:65089**)
- Vétes, P. On the almost everywhere divergence of Lagrange interpolation (complex and trigonometric cases). (**84b:30041**)
- On sums of Lebesgue function type. (**84d:41007**)

42A16 Fourier coefficients, Fourier series of functions with special properties, special Fourier series

- Aishynbaeva, E. The Hardy transform of Fourier coefficients of functions from Marcinkiewicz spaces. (Russian) **84c:42005**
- Andersen, Kenneth F. On the transformation of Fourier coefficients of certain classes of functions. II. **84b:42007**

- Burkill, J. C. Corrigendum: "Integrals and trigonometric series" [Proc. London Math. Soc. (3) 1 (1951), 46-57; MR 13, 126]. **84d:42003**
- Chandra, Prem A note on Fourier coefficients. **84i:42007**
- Hasan, Sabir See Zaini, S. Zahid Ali. **84g:42008**
- Kotlyar, B. D. Fourier coefficients of smooth functions of several variables. (Russian) **84i:42008**
- Kudryavtsev, D. L. Fourier series of functions that have a fractional-logarithmic derivative. (Russian) **84d:42004**
- Miloradović, Slobodan Upper bounds for Fourier coefficients and some more general functionals. (Russian) **84a:42006**
- Omnewer, C. W. The Wilbraham-Gibbs phenomenon in Fourier analysis. **84e:42006**
- Ostrogorski, Tatjana Integrability theorems for trigonometric series with positive coefficients. **84c:42004**
- Ovchinnikov, V. I. (with Raspopova, V. D.; Rodin, V. A.) Sharp estimates of Fourier coefficients of summable functions and K -functionals. (Russian) **84d:42005**
- Ram, Babu Convergence of Rees-Stanojević sums in the metric space L . **84c:42005**
- Raspopova, V. D. See Ovchinnikov, V. I.; et al., **84d:42005**
- Rodin, V. A. See Ovchinnikov, V. I.; et al., **84d:42005**
- Shiba, Masaaki On the Fourier coefficients of a function of Λ -bounded variation. **84a:42007**
- Singh, A. P. See Tripathi, L. M., **84j:42009**
- Smith, Brent A strong convergence theorem for $H^1(T)$. **84m:42005**
- Stegeman, J. D. On the constant in the Littlewood problem. **84m:42006**
- Tripathi, L. M. (with Singh, A. P.) On the sequence of Fourier coefficients by $(N, p_n)_{C_1}$ method. **84j:42009**
- Zaini, S. Zahid Ali Integrability of trigonometric series. **84j:42010**
- (with Hasan, Sabir) A note on a bound for the integral modulus of continuity. **84g:42008**

secondary classifications:

- Bruggeman, Roelof W. ★ Fourier coefficients of automorphic forms. (**84h:10034**)
- Chandra, Prem On the generalised Fejér means in the metric of Hölder space. (**84m:42007**)
- Környei, I. See Zhileikin, Ya. M., (**84j:65080**)
- Loy, Richard J. Function spaces on the unit circle. (**84e:43005**)
- Massidda, Vittorio Analytical calculation of a class of integrals containing exponential and trigonometric functions. (**84k:33002**)
- Neuman, Edward Calculation of complex Fourier coefficients using natural splines. (German summary) (**84c:65159**)
- Orlov, E. V. On Fourier coefficients over Sidon sets. (Russian. English summary) (**84d:42009**)
- Ufyanov, P. L. An algebra of functions and Fourier coefficients. (Russian) (**84j:42039**)
- Zhileikin, Ya. M. (with Környei, I.) On the error of approximation of Fourier coefficients on a class of analytic functions. (Russian. English summary) (**84j:65080**)

42A20 Convergence of Fourier and trigonometric series

- Artemiadis, Nicolas K. Absolutely convergent Fourier series of distributions. **84i:42009**
- Chandra, Prem A generalisation of the Lebesgue-Gergen criterion for the convergence of a Fourier series. **84b:42007**
- Demenko, V. N. Convergence of Fourier series with respect to orthonormal systems of Franklin type. (Russian) **84j:42011**
- Lukashenko, S. Yu. Divergence sets of trigonometric Fourier series. (Russian. English summary) **84d:42006**
- Oberlin, Daniel M. Divergence of Fourier series. **84j:42012**
- Oswald, Peter Fourier series and the conjugate function in the classes $\Psi(L)$. (Russian summary) **84c:42006**
- Petrovich, A. Yu. Convergence of Fourier series for a class of A -integrable functions. (Russian) **84a:42008**
- Pogosyan, N. B. Universal Fourier series. (Russian) **84c:42007**
- Prestini, Elena On the two proofs of almost everywhere convergence of Fourier series for L^2 functions. **84a:42009**
- Queffelec, Hervé L'inégalité de Vinogradov et ses conséquences. [The Vinogradov inequality and its consequences] **84f:42004**
- Sato, Shuichi Entropy and almost everywhere convergence of Fourier series. **84i:42010**
- Tandori, Károly Über einen Zusammenhang zwischen der Größensordnung der Partialsummen der Fourierreihe und der Integrabilitätseigenschaft der Funktionen. [On a connection between the order of magnitude of partial sums of Fourier series and the integrability of functions] **84j:42013**
- Totik, Vilmos On the divergence of Fourier series. **84c:42008**
- Wang, Si Lei On the absolute convergence of lacunary Fourier series. (Chinese) **84c:42009**

secondary classifications:

- Barnsley, M. F. (with Geronimo, Jeffrey S.; Harrington, Andrew N.) Some tree-like Julia sets and Padé approximants. (**84m:41026**)
- Bray, William O. (with Stanojević, Časlav V.) Tauberian L^1 -convergence classes of Fourier series. I. (**84h:42015**)
- Geronimo, Jeffrey S. See Barnsley, M. F.; et al., (**84m:41026**)
- Hall, Peter The order of the approximation to a Wiener process by its Fourier series. (**84c:60115**)
- Harrington, Andrew N. See Barnsley, M. F.; et al., (**84m:41026**)
- Körner, T. W. The behavior of power series on their circle of convergence. (**84j:30005**)
- Oberlin, Daniel M. An approximation problem in $L^p([0, 2\pi])$, $2 < p < \infty$. (**84a:42003**)
- Pour-El, Marian Boykan (with Richards, Ian) Computability and noncomputability in classical analysis. (**84e:03056**)
- Ram, Babu Convergence of Rees-Stanojević sums in the metric space L . (**84c:42005**)
- Richards, Ian See Pour-El, Marian Boykan, (**84e:03056**)

- Simon, Péter On the divergence of Vilenkin-Fourier series. (**84i:43007**)
- Smith, Brent A strong convergence theorem for $H^1(T)$. (**84m:42005**)
- Stanojević, Časlav V. See Bray, William O., (**84h:42015**)

42A24 Summability of Fourier and trigonometric series

- Ahmad, S. S. (with Beghi, L.) On the regularization of the Fourier series of discontinuous functions by various summation methods. (Italian and Russian summaries) **84i:42008**
- Akhobadze, T. I. On convergence and summability of Fourier series. (Russian summary) **84a:42010**
- Baskakov, V. A. On certain properties of linear summation methods of Fourier series on the classes $C(r)$. (Russian summary) **84j:42014**
- Beghi, L. See Ahmad, S. S., **84i:42008**
- Bélines'kii, E. S. (with Trigub, R. M.) Some numerical inequalities and their application in the theory of summability of Fourier series. (Russian) **84f:42005**
- Chandra, Prem On the degree of approximation of continuous functions. **84a:42011**
- (with Dikshit, G. D.) On the $\|f\|$ and $|E_n|$ summability of a Fourier series, its conjugate series and their derived series. **84c:42010**
- On the generalised Fejér means in the metric of Hölder space. **84m:42007**
- A note on summable Fourier expansion. **84c:42007**
- See also Mohapatra, Ram Narayan, **84a:42014**
- Chang, Yang Chun On the saturation problem for strong approximation by double Fourier series. **84c:42011**
- Colzani, Leonardo (with Soardi, Paolo M.) L^p norms of certain kernels of the N -dimensional torus. **84c:42008**
- Dikshit, G. D. See Chandra, Prem, **84c:42010**
- Gautam, L. P. Nörlund summability of Fourier series. **84c:42012**
- Haq, Fazlul (with Saxena, Ashok) On the strong (L) summability of the derived series of a Fourier series by Nörlund means. **84c:42009**
- Hotta, G. C. On the (P) summability of a differentiated Fourier series. **84j:42015**
- Jadiva, B. L. (with Ranadive, V. S.) On the Nörlund summability of conjugate Fourier series. **84i:42011**
- Kaul, B. N. On $\|f, p_n\|$ summability of Fourier series. **84a:42012**
- Kudryavtsev, G. I. Once again on the singularity of an integral that is connected with the linear method of summing a Fourier series. (Russian) **84c:42013**
- Leindler, L. On very strong summability of orthogonal series by Euler method. **84c:42009**
- Li, Bang Rong On eigenfunction polynomial approximation. (Chinese. English summary) **84j:42016**
- Mohapatra, Ram Narayan (with Chandra, Prem) Hölder continuous functions and their Euler, Borel and Taylor means. **84a:42014**
- Pandey, G. S. On Nörlund summability of Fourier series in the L^p -norm. **84m:42008**
- Pandey, K. P. See Tripathi, L. M., **84m:42011**
- Qureshi, Kutbuddin On the degree of approximation of a periodic function f by almost Riesz means of its conjugate series. **84c:42013**
- On the degree of approximation to a function by triangular matrix of its conjugate series. **84d:42007**
- See also Sharma, P. L., **84c:42010**
- Ranadive, V. S. See Jadiva, B. L., **84i:42011**
- Sachan, M. P. Taylor summability of a class of Fourier series. (Hindi. English summary) **84g:42009**
- Saraswat, S. K. Matrix summability of trigonometric sequences. **84g:42010**
- Saxena, Ashok See Haq, Fazlul, **84c:42009**
- Schwinn, H. On strong summability of orthogonal series by Euler methods. **84m:42009**
- Sha, Zhen The Gibbs phenomenon in some summation processes. (Chinese. English summary) **84c:42005**
- Sharma, P. L. (with Qureshi, Kutbuddin) On the degree of approximation of a periodic function f by almost Riesz means. **84c:42010**
- Singh, Vikramaditya On the absolute Euler summability of a series associated with Fourier series. (Russian summary) **84h:42010**
- Soardi, Paolo M. See Colzani, Leonardo, **84c:42008**
- Tanović-Miller, N. On some generalizations of the Fejér-Lebesgue theorem. (Italian summary) **84a:42015**
- Totik, Vilmos On the strong approximation by the (C, α) -means of Fourier series. I. (Russian summary) **84h:42011**
- On the strong approximation by the (C, α) -means of Fourier series. II. (Russian summary) **84h:42012**
- Notes on Fourier series in homogeneous Banach spaces. (Russian summary) **84f:42006**
- Summability in classes H^p . (Russian) **84c:42011**
- Trigub, R. M. See Bélines'kii, E. S., **84f:42005**
- Tripathi, L. M. (with Tripathi, V. N.) On K^λ -summability of Fourier series. (Arabic summary) **84m:42010**
- (with Pandey, K. P.) On almost Nörlund summability of a Fourier series. (Hindi. English summary) **84m:42011**
- Tripathi, V. N. See Tripathi, L. M., **84m:42010**
- Verma, S. K. On the $[F, dn]$ summability of the derived Fourier series. (Hindi. English summary) **84m:42012**
- Veske, N. Some applications of the equisummability of series. (Russian. German summary) **84g:42011**
- Zakharov, A. A. Strong summability of Fourier series. (Russian) **84i:42012**

secondary classifications:

- Baskakov, V. A. (with Telyakovskii, S. A.) Approximation of differentiable functions by Fejér sums. (Russian) (**84c:42001**)
- Holder, L. I. The absolute summability of Fourier series by the Bosanquet-Linfoot method. (**84m:42014**)
- Khan, Huzoor H. On the degree of approximation. IV. (**84i:42003**)

- Leindler, L. On the strong and very strong summability and approximation of orthogonal series by generalized Abel method. (84c:42024)
 Derivative functions and strong approximation of Fourier series. II. (84b:42003)
 Lu, Shan Zhen Spherical summability of Fourier series of bounded variation functions in several variables. (84j:42021)
 Oswald, Peter Fourier series and the conjugate function in the classes $\varphi(L)$. (Russian summary) (84c:42006)
 Singh, A. P. See Tripathi, L. M., (84j:42009)
 Stepanets, A. I. Asymptotic representations of deviations of Zygmund means from differentiable periodic functions. (Russian) (84c:42005)
 Telyakovskii, S. A. See Beskakov, V. A., (84c:42001)
 Tripathi, L. M. (with Singh, A. P.) On the sequence of Fourier coefficients by $(N, p_n)C_1$ method. (84j:42009)
 Wang, Si Lei On the absolute convergence of lacunary Fourier series. (Chinese) (84c:42009)

42A28 Absolute convergence, absolute summability

- Asatiani, V. O. Absolute summability of Fourier series. (Russian. English and Georgian summaries) 84m:42013
 Bott, R. T. Singularity of generalised Riesz products. 84c:42015
 Chandra, Prem (with Dikshit, G. D.) On the absolute Riesz summability of a series related to a Fourier series. 84f:42007
 Chanturiya, Z. A. Errata: "On the absolute convergence of Fourier series of the classes $H^p \cap V[v]$ " [Pacific J. Math. 96 (1981), no. 1, 37-61; MR 83a:42009]. 84f:42008
 Absolute convergence of Fourier series with lacunae of class $V[v]$. (Russian. English and Georgian summaries) 84d:42008
 Dikshit, G. D. See Chandra, Prem, 84f:42007
 Edwards, R. E. (with Helson, H.) Absolute Fourier multipliers. 84b:42008
 Gautam, L. P. On the absolute harmonic summability of associated series. 84b:42013
 Helson, H. See Edwards, R. E., 84b:42008
 Holder, L. I. The absolute summability of Fourier series by the Bosanquet-Linfoot method. 84m:42014
 Hotta, G. C. (with Patel, T. N.) On $[N, p]_s$ -summability of a Fourier series and an associated series. 84m:42015
 Kishore, Nand (with Rath, S.) A note on the absolute Nörlund summability of a Fourier and allied series. 84c:42012
 (with Rath, S.) A note on the absolute matrix summability of a Fourier series. 84f:42009
 Orlov, E. V. On Fourier coefficients over Sidon sets. (Russian. English summary) 84d:42009
 Patadia, J. R. On the convergence and summability of a lacunary Fourier series. 84d:42010
 Patel, T. N. See Hotta, G. C., 84m:42015
 Patra, Brundaban See Ray, Brajakishore, 84f:42010
 Rath, S. See Kishore, Nand, 84c:42012 and 84f:42009
 Ray, Brajakishore (with Patra, Brundaban) On the absolute Euler summability of a factored Fourier series. 84f:42010
 Schramm, M. (with Waterman, Daniel) Absolute convergence of Fourier series of functions of $\Delta BV^{(p)}$ and $\varphi \Delta BV$. 84c:42013
 Sharma, Sushil The absolute Cesàro summability of Legendre series. (Hindi. English summary) 84m:42016
 Shiba, Masaaki On Zygmund's theorem for Λ -bounded variation of order P . (Russian summary) 84b:42009
 Shukla, Indulata On the absolute convergence of a series associated with a Fourier series. 84c:42014
 Sidiqi, Rafat N. Absolute convergence of Fourier series of a function of Wiener's class V_p . 84d:42011
 Szalay, I. On the absolute summability of trigonometric series. (Russian) 84b:42014
 Verma, S. K. On absolute Nörlund summability of Fourier series of functions of bounded variation. 84g:42012
 Waterman, Daniel See Schramm, M., 84c:42013

secondary classifications:

- Bhatt, Shri Nivas Absolute summability of Laplace series. (84b:40004)
 Jena, S. C. See Kishore, Nand, (84f:40007)
 Kishore, Nand (with Jena, S. C.) Absolute matrix summability of an associated conjugate series. (84f:40007)
 Mishkovets', U. A. Criterion for absolute convergence of generalized Fourier series in terms of convolution. (Ukrainian. Russian summary) (84d:42016)
 Pallas, L. Absolute summability almost everywhere of function series. (Russian. English summary) (84g:40004)

42A32 Trigonometric series of special types (positive coefficients, monotonic coefficients, etc.)

- Ahmad, Z. U. (with Zaini, S. Zahid Ali) Convergence of certain cosine sums in the metric space L^1 . 84c:42006
 Bray, William O. (with Stanojević, Časlav V.) Tauberian L^1 -convergence classes of Fourier series. I. 84b:42015
 Chen, Tian Ping On trigonometric series with coefficients of the same sign. (Chinese) 84b:42016
 D'yachenko, M. I. Fourier series with monotonically decreasing coefficients and some problems on the smoothness of conjugate functions. (Russian. English and Georgian summaries) 84c:42016
 Gaposhkin, V. F. Trigonometric Cesàro bases in the spaces of functions integrable with power weight. (Russian summary) 84c:42017
 Hasan, Sabir See Zaini, S. Zahid Ali, 84m:42017

- Khrushchëv, S. V. Determining sets of frequencies in spectra of measures with finite energy. (Russian. English summary) 84c:42014
 Stanojević, Časlav V. See Bray, William O., 84b:42015
 Wang, Zhong De Harmonic analysis with a real function of frequency. II. Periodic and bounded cases. 84c:42007a
 Harmonic analysis with a real frequency function. III. Data sequence. 84c:42007b
 Zaini, S. Zahid Ali (with Hasan, Sabir) Integrability of Rees-Stanojević's sums. 84m:42017

See also Ahmad, Z. U., 84c:42006

secondary classifications:

- Li, Ta Chung A function in $L^p(\mathbb{R}) \sim \mathcal{F}(L^p(\mathbb{R}))$. (84g:42013)
 Pushkin, L. N. The rate of convergence in the central limit theorem for sums with a polynomial of an exponential function. (Russian) (84c:60043)

42A38 Fourier and Fourier-Stieltjes transforms and other transforms of Fourier type

- Belins'kii, E. S. (with Liflyand, I. R.) Asymptotic behavior of the Lebesgue constants of radial summability methods. (Russian) 84m:42018
 Bieberich, Richard On the frequency with which bounded functions have spectral gaps. 84c:42013
 Brown, Gavin (with Glicksberg, Irving; Hewitt, Edwin) Indicator functions with large Fourier transforms. 84b:42017
 Glicksberg, Irving See Brown, Gavin; et al., 84b:42017
 Grünbaum, F. Alberto The eigenvectors of the discrete Fourier transform: a version of the Hermite functions. 84d:42012
 Hewitt, Edwin See Brown, Gavin; et al., 84b:42017
 Kaijser, Sten A uniform estimate for Fourier transforms of measures on polynomial curves in \mathbb{R}^n . 84j:42017
 Kruse, Klaus-Dieter Asymptotic expansions for derivatives of Fourier transforms. (Russian. German and Lithuanian summaries) 84b:42018
 Li, Ta Chung A function in $L^p(\mathbb{R}) \sim \mathcal{F}(L^p(\mathbb{R}))$. 84g:42013
 Liflyand, I. R. See Belins'kii, E. S., 84m:42018
 Muckenhoupt, Benjamin Weighted norm inequalities for the Fourier transform. 84m:42019
 Mukherjee, R. N. A note on the criteria for absolute integrability of Fourier transforms. 84c:42008
 Oberlin, Daniel M. Hausdorff dimension and interpolation by certain function spaces. 84d:42010
 Okikiolu, G. O. Representations of integrals involving homogeneous functions. 84c:42015
 Schroeder, Manfred R. A simple function ... and its Fourier transform. 84c:42016
 Stepanov, V. D. On a criterion of approximation to the identity in $L^p(E_n)$ by convolution transforms of dilation type. (Russian summary) 84c:42018
 Yang, Wen Shan Interpolation representation of the Fourier transform. (Chinese. English summary) 84c:42019

secondary classifications:

- Bott, R. T. Singularity of generalised Riesz products. (84c:42015)
 Boyd, Stephen (with Chua, Leon O.) On the passivity criterion for LTI N -ports. (84c:94020)
 Byrne, Charles L. (with Fitzgerald, Raymond M.) Reconstruction from partial information with applications to tomography. (84c:92009)
 Chakrabarti, Aloknath (with Manivachakan, K.) On the transform method of solution of an external crack problem. (German and Russian summaries) (84d:73060)
 Chua, Leon O. See Boyd, Stephen, (84c:94020)
 Ehrenpreis, Leon (with Kawai, Takahiro) Poisson's summation formula and Hamburger's theorem. (84b:46049)
 Fitzgerald, Raymond M. See Byrne, Charles L., (84c:92009)
 Frontini, Marco (with Gotusso, Laura) ★ Sul liscaggio di rappresentazioni approssimate di Fourier. (Italian) [Smoothing approximate Fourier representations] (84b:65017)
 Fujita, Hiroichi See Ueda, Yutaka; et al., (84b:68130)
 Gotusso, Laura See Frontini, Marco, (84b:65017)
 Jerri, A. J. On general transforms hill functions. (84d:65007)
 Jörjcke, Burglind (with Khavin, V. P.) The indeterminacy principle for operators that commute with a shift. II. (Russian. English summary) (84j:47050)
 Kaufman, Robert P. On the weak L^1 space and singular measures. (French summary) (84i:43006)
 Kawai, Takahiro See Ehrenpreis, Leon, (84b:46049)
 Khavin, V. P. See Jörjcke, Burglind, (84j:47050)
 Kuo, Hui Hsiung On Fourier transform of generalized Brownian functionals. (84d:60099)
 Manivachakan, K. See Chakrabarti, Aloknath, (84d:73060)
 Mishra, M. N. (with Nayak, N. N.; Pattanayak, S.) Some analytic properties of a random Fourier-Stieltjes series. (84c:60059)
 Nayak, N. N. See Mishra, M. N.; et al., (84c:60059)
 Okubo, Tadatoshi See Ueda, Yutaka; et al., (84b:68130)
 Pattanayak, S. See Mishra, M. N.; et al., (84c:60059)
 Riedel, Roland Asymptotische Darstellung verallgemeinerter Fourierintegrale. IV. (English and Russian summaries) [Asymptotic representation of generalized Fourier integrals. IV] (84c:41032)
 Ryavec, C. A nonlinear interpolation formula. (84c:10023)
 Slepian, David Some comments on Fourier analysis, uncertainty and modeling. (84i:94016)
 Squires, William A. Geometric condition for universal interpolation in \mathcal{S}' . (84b:30058)
 Stepanov, V. D. On a problem for integral convolution operators. (Russian) (84b:42014)
 Szász, Arpad Tempered generalized functions and their Fourier transforms. (84d:46055)

- Ueda, Yutaka (with Okubo, Tadatoshi; Fujita, Hiroichi) Extraction of phase difference in Fourier transformed space for boundary detection. (84b:68130)
 Wang, Zhong De Harmonic analysis with a real frequency function. I. Aperiodic case. (84i:44002)

42A45 Multipliers

- Bozhinov, Nikolai S. Representation formulas for the multiplier sequences of real Dirichlet expansions. (84a:42016)
 Muckenhoupt, Benjamin A note on two weight function conditions for a Fourier transform norm inequality. (84b:42011)
 (with Young, Wo Sang) L^p multipliers with weight $|x|^{p-1}$. (84c:42017)
 Rooney, P. G. Multipliers for the Mellin transformation. (84a:42017)
 Sledd, W. T. (with Stegenga, D. A.) An H^1 multiplier theorem. (84j:42018)
 Stegenga, D. A. See Sledd, W. T., (84j:42018)
 Young, Wo Sang See Muckenhoupt, Benjamin, (84c:42017)

secondary classifications:

- Benzinger, Harold (with Berkson, Earl; Gillespie, T. A.) Spectral families of projections, semigroups, and differential operators. (84b:47038)
 Berkson, Earl See Benzinger, Harold; et al., (84b:47038)
 Bourgain, Jean On trigonometric sums with prime frequencies. (84c:10031)
 Edwards, R. E. (with Helson, H.) Absolute Fourier multipliers. (84b:42008)
 Fournier, John J. F. On the Hausdorff-Young theorem for amalgams. (84m:43004)
 Gillespie, T. A. See Benzinger, Harold; et al., (84b:47038)
 Helson, H. See Edwards, R. E., (84b:42008)
 Koosis, Paul La plus petite majorante surharmonique et son rapport avec l'existence des fonctions entières de type exponentiel jouant le rôle de multiplicateurs. [The smallest superharmonic majorant and its relation to the existence of entire functions of exponential type playing the role of multipliers] (84c:30032)
 Lippus, Yu. Multipliers of uniform convergence of classes of analytic functions. (Russian. German summary) (84c:30047)
 Quek, T. S. (with Yap, Leonard Y. H.) Fourier multipliers of Lipschitz spaces. (84i:43004)
 Shukla, Indulata On the absolute convergence of a series associated with a Fourier series. (84c:42014)
 Yap, Leonard Y. H. See Quek, T. S., (84i:43004)

42A50 Conjugate functions, conjugate series, singular integrals

- Cotlar, Mischa (with Sadosky, Cora) Majorized Toeplitz forms and weighted inequalities with general norms. (84b:42019)
 Grushvskii, S. P. A generalization of the Kolmogorov inequality. (Russian. English and Georgian summaries) (84c:42020)
 Gundy, Richard F. (with Silverstein, Martin L.) On a probabilistic interpretation for the Riesz transforms. (84b:42012)
 Gutierrez, J. A. (with Lacey, H. E.) On the Hilbert transform for Banach space valued functions. (84a:42018)
 Khan, Arman (with Umar, Sarfaraz) On the degree of approximation to a function by Gauss-Weierstrass singular integral. (84a:42019)
 Lacey, H. E. See Gutierrez, J. A., (84a:42018)
 Lukashenko, T. P. On the A -integral representation of the Hilbert transform and conjugate function. (Russian summary) (84b:42021)
 Sadosky, Cora See Cotlar, Mischa, (84b:42019)
 Saxena, R. B. On the logarithmic (L) mean of the conjugate Fourier series and its differentiated series. (Hindi. English summary) (84d:42013)
 Silverstein, Martin L. See Gundy, Richard F., (84b:42012)
 Stepanets', O. I. Simultaneous approximation of conjugate functions and their derivatives by Fourier sums. (Russian) (84c:42018)
 Umar, Sarfaraz See Khan, Arman, (84a:42019)

secondary classifications:

- Arocena, Rodrigo (with Cotlar, Mischa) Dilation of generalized Toeplitz kernels and some vectorial moment and weighted problems. (84j:47006)
 Berkolaiko, M. Z. The conjugation operator in spaces of continuous functions. (Russian) (84m:47036)
 Cazzaniga, Franco Hardy's inequality for compact symmetric spaces of rank one. (Italian summary) (84c:43005)
 Cotlar, Mischa See Arocena, Rodrigo, (84j:47006)
 D'yachenko, M. I. Fourier series with monotonically decreasing coefficients and some problems on the smoothness of conjugate functions. (Russian. English and Georgian summaries) (84c:42016)
 Hewitt, Edwin (with Ritter, Gunter) Conjugate Fourier series on certain solenoids. (84b:43021)
 Lukashenko, T. P. Functions of generalized bounded variation. (Russian) (84m:26011)
 Muckenhoupt, Benjamin A note on two weight function conditions for a Fourier transform norm inequality. (84b:42011)
 Oswald, Peter Fourier series and the conjugate function in the classes $\varphi(L)$. (Russian summary) (84c:42006)
 Petersen, Karl Another proof of the existence of the ergodic Hilbert transform. (84i:28022)
 Ritter, Gunter See Hewitt, Edwin, (84b:43021)
 Strömberg, Jan-Olov (with Wheeden, Richard L.) Relations between H_n^p and L_n^p with polynomial weights. (84b:30048)
 Totik, Vilmos On the strong approximation by the (C, α) -means of Fourier series. II. (Russian summary) (84b:42012)
 Wheeden, Richard L. See Strömberg, Jan-Olov, (84b:30048)

42A55 Lacunary series of trigonometric and other functions; Riesz products

- Jörické, Burglind Uniqueness theorems for functions with a rare spectrum. II. (Russian) (84m:42020)

secondary classifications:

- Brown, Gavin (with Moran, William) Probability measures with trivial Stam groups. (84a:60015)
 Chanturiya, Z. A. Absolute convergence of Fourier series with lacunae of class $V[\rho]$. (Russian. English and Georgian summaries) (84d:42008)
 Dzhumagulov, A. K. Diameters of classes of differentiable functions representable as trigonometric series with "small" gaps. (Russian) (84b:41042)
 Méla, J.-F. Mesures ε -idempotentes de norme bornée. [ε -idempotent measures with bounded norm] (84a:43007)
 Mikhoev, I. M. Trigonometric series with gaps. (Russian summary) (84m:10054)
 Moran, William See Brown, Gavin, (84a:60015)
 Murai, Takafumi Lacunary series and ranges of nonsynthesis. (84b:43012)

42A61 Probabilistic methods

secondary classifications:

- Khrushchëv, S. V. Determining sets of frequencies in spectra of measures with finite energy. (Russian. English summary) (84c:42014)

42A63 Uniqueness of trigonometric expansions, uniqueness of Fourier expansions, Riemann theory, localization

secondary classifications:

- Bloshanskii, I. L. Generalized localization and convergence tests for double trigonometric Fourier series of functions from L_p , $p > 1$. (Russian summary) (84a:42023)
 Gorbachuk, V. I. Fourier series of periodic ultradistributions. (Russian) (84g:46063)

42A65 Completeness of sets of functions

- Abel, Ulrich Ein Approximationssatz für den Raum $L^1(-\infty, \infty)$. [An approximation theorem for the space $L^1(-\infty, \infty)$] (84c:42014)
 Atzmon, Aharon Uniform approximation by linear combinations of translations and dilations of a function. (84c:42014)
 Barmenkov, A. N. (with Kaz'min, Yu. A.) Completeness of systems of functions of a special type. (Russian) (84c:42009)
 Dzhrubashyan, M. M. The property of being a basis for biorthogonal systems that are generated by boundary value problems for fractional-order differential operators. (Russian) (84a:42020)
 Kaz'min, Yu. A. See Barmenkov, A. N., (84c:42009)
 Sedletskaia, A. M. Bases of exponentials in L^p spaces. (Russian. English summary) (84d:42015)
 Annulable subsystems of a trigonometric system. (Russian) (84j:42019)
 Volberg, A. L. Weighted completeness of polynomials on the line for a strongly nonsymmetric weight. (Russian. English summary) (84c:42015)

secondary classifications:

- Bakhshetsyan, A. V. (with Krotov, V. G.) On universal series in Schauder systems. (Russian. English and Armenian summaries) (84d:42035)
 Ghizzetti, Aldo (with Ossicini, A.) ★ Polinomi ortogonali e problema dei momenti. (Italian) [Orthogonal polynomials and the moment problem] (84c:42020)
 Krotov, V. G. See Bakhshetsyan, A. V., (84d:42035)
 Ossicini, A. See Ghizzetti, Aldo, (84c:42020)

42A70 Trigonometric moment problems

- Arocena, Rodrigo (with Cotlar, Mischa) Generalized Toeplitz kernels and Adamjan-Arov-Krein moment problems. (84a:42021)
 Cotlar, Mischa See Arocena, Rodrigo, (84a:42021)

secondary classifications:

- Delsarte, Philippe (with Genin, Yves; Kamp, Yves; Van Dooren, Paul) Speech modelling and the trigonometric moment problem. (84f:92016)
 Genin, Yves See Delsarte, Philippe; et al., (84f:92016)
 Kamp, Yves See Delsarte, Philippe; et al., (84f:92016)
 Van Dooren, Paul See Delsarte, Philippe; et al., (84f:92016)

42A75 Classical almost periodic functions, mean periodic functions [See also 43A60.]

- Blinov, I. N. A B -algebra of almost periodic functions. (Russian) (84a:42022)
 Braun, Amiram (with Weit, Yitzhak) On invariant subspaces of continuous vector valued functions. (84b:42022)
 Marchi, Silvana Necessary conditions for equi-asymptotically-almost periodicity. (Italian) (84i:42016)
 Mishkova, U. A. Criterion for absolute convergence of generalized Fourier series in terms of convolution. (Ukrainian. Russian summary) (84d:42016)
 Nasirli, N. B. Compactness of smooth families of almost-periodic Besicovitch functions. (Russian. English and Azerbaijani summaries) (84b:42023)
 Nguyễn Chân The class of generalized periodic functions. (84b:42024)

- Oganesyan, G. K. Periodic functions from the class B_2 . (Russian. English and Armenian summaries) **84d:42017**
 Pritula, Ya. G. (with Syutrik, I. S.) Conditions for almost periodic functions to belong to generalized Lipschitz and Zygmund classes. (Ukrainian. Russian summary) **84b:42013**
 Syutrik, I. S. See Pritula, Ya. G., **84b:42013**
 Weit, Yitzhak. See Braun, Amiram, **84b:42022**

secondary classifications:

- Brogini Bratti, Adriana. On the integral functions of almost-periodic random variables. (Italian. English summary) **84b:60076**
 Brown, Gavin. (with Glicksberg, Irving; Hewitt, Edwin) Indicator functions with large Fourier transforms. **84b:42017**
 Censù, G. On some random functions almost periodic in Bohr sense. (French and Russian summaries) **84c:60074**
 Deshpande, M. V. (with Padhye, S. M.) Collectively compact sets of operators and almost periodic functions. **84b:47056**
 Glicksberg, Irving. See Brown, Gavin; et al., **84b:42017**
 Hewitt, Edwin. See Brown, Gavin; et al., **84b:42017**
 Levitan, B. M. (with Zhikov, V. V.) \star Almost periodic functions and differential equations. **84g:34004**
 (Longdon, L. W.) See Levitan, B. M.; et al., **84g:34004**
 Miao, Lung Chi. Almost periodic solutions of linear partial differential equations. **84c:35012**
 Padhye, S. M. See Deshpande, M. V., **84b:47056**
 Piskarev, S. I. Periodic and almost-periodic cosine operator functions. (Russian) **84d:47053**
 Precupanu, Anca-Maria. On the almost periodic functions in probability. (French summary) **84f:60081**
 Venkataraman, Krishnaswamy. Boolean valued almost periodic functions: existence of the mean. **84f:43012**
 Zaidman, Samuel. Almost-periodicity for operator-valued functions. (French summary) **84g:47015**
 Zhikov, V. V. See Levitan, B. M., **84g:34004**

42A82 Positive definite functions

secondary classifications:

- Katsnel'son, V. È. Continual analogues of the Hamburger-Nevanlinna theorem and fundamental matrix inequalities of classical problems. I. (Russian) **84b:44016a**
 Continual analogues of the Hamburger-Nevanlinna theorem and fundamental matrix inequalities of classical problems. II. (Russian) **84b:44016b**
 Logan, B. F. Extremal problems for positive-definite bandlimited functions. I. Eventually positive functions with zero integral. **84i:30034a**
 Extremal problems for positive-definite bandlimited functions. II. Eventually negative functions. **84i:30034b**
 Extremal problems for positive-definite bandlimited functions. III. The maximum number of zeros in an interval $[0, T]$. **84i:30034c**

42A85 Convolution, factorization

- Bagby, R. J. Mixed-norm estimates for a class of integral operators. (Russian summary) **84d:42018**
 Gillis, J. (with Reznick, Bruce; Zeilberger, Doron) On elementary methods in positivity theory. **84d:42017**
 Reznick, Bruce. See Gillis, J.; et al., **84d:42017**
 Stepanov, V. D. On a problem for integral convolution operators. (Russian) **84b:42014**
 Zeilberger, Doron. See Gillis, J.; et al., **84d:42017**

secondary classifications:

- (Giurgiuțiu, Victor) See Kees, Wilhelm, **84g:46057**
 Inglis, Ian R. Weak and strong mapping properties of translation invariant operators. (Italian summary) **84c:42026**
 Kees, Wilhelm. \star The convolution product and some applications. **84g:46057**

42A99 None of the above, but in this section

- Garibotti, C. R. (with Massaro, P. A.) A regularization method for Fourier series of discontinuous functions. **84c:42020**
 Kirov, G. Kh. (with Totkov, G. A.) Distribution of zeros of derivatives of the function $\lambda(x)$. (Bulgarian. English and Russian summaries) **84m:42021**
 Massaro, P. A. See Garibotti, C. R., **84c:42020**
 Tevzadze, T. Sh. Some classes of functions and trigonometric Fourier series. (Russian. English and Georgian summaries) **84c:42021**
 Totkov, G. A. See Kirov, G. Kh., **84m:42021**

secondary classifications:

- Alfaro García, M.ª Pilar. An orthonormal basis of $\pi(e^{\theta})$ in the case C. (Spanish. English summary) **84j:46042**
 Bourgain, Jean. Quelques propriétés linéaires de l'espace des séries de Fourier uniformément convergentes. (English summary) [Some linear properties of the space of uniformly convergent Fourier series] **84b:46037**
 Ephron, Mark S. Indicators of products and surjective convolution maps. **84f:30037**
 Ivanov, Kamen G. On the rates of convergence of two moduli of functions. **84k:41038**
 Miles, Frank B. A note on Helson sets. **84g:43009**
 Wu, Xue Mou. Approximation transforming theory. I. (Chinese. English summary) **84j:00002**

42Bxx Fourier analysis in several variables

secondary classifications:

- Okikiolu, G. O. \star Special integral operators. Vol. II. **84m:44002**

42B05 Fourier series and coefficients

- Avetisyan, Ruben Avetisovich. The generalized D -property of functional sequences. (Russian. Armenian summary) **84b:42015**
 Baiborodov, S. P. Lebesgue constants and approximation of functions by rectangular Fourier sums in $L^p(T^m)$. (Russian) **84i:42018**
 Bloshanskii, I. L. Generalized localization and convergence tests for double trigonometric Fourier series of functions from L_p , $p > 1$. (Russian summary) **84c:42023**
 Generalized localization for multiple Fourier series and the geometry of measurable sets in N -dimensional space. (Russian) **84j:42020**
 The geometry of measurable sets in N -dimensional space on which generalized localization is valid for multiple trigonometric Fourier series of functions from L_p , $p > 1$. (Russian) **84f:42011**
 Carenini, Marco. (with Soardi, Paolo M.) Sharp estimates for Lebesgue constants. **84i:42019**
 Gajewski, Ryszard. On strong approximation with mixed powers of functions of two variables. **84d:42019**
 Grigoryan, M. Zh. Convergence in the metric L^p , $0 < p < 1$, of spherical partial sums of double Fourier series. (Russian) **84m:42022**
 Janušauskas, Algimantas. Double series of orthogonal polynomials. (Russian. English and Lithuanian summaries) **84b:42025**
 Lu, Shan Zhen. Spherical summability of Fourier series of bounded variation functions in several variables. **84j:42021**
 (with Taibleson, Mitchell H.; Weiss, Guido) On the almost everywhere convergence of Bochner-Riesz means of multiple Fourier series. **84d:42020a**
 A note on the almost everywhere convergence of Bochner-Riesz means of multiple conjugate Fourier series. **84d:42020b**
 Maravić, Manojlo. Complex-order Riesz summability of a multiple Fourier series. (Serbo-Croatian. English summary) **84j:42022**
 Nikolova, Ya. Estimation of the deviation of continuous periodic functions of two variables by de la Vallée-Poussin sums. (Bulgarian. English and Russian summaries) **84d:42021**
 Nosenko, Yu. L. Upper bound for the deviation of continuous functions of two variables from their rectangular Riesz means. (Russian) **84b:42016**
 Pandzhakidze, Sh. P. The absolute convergence of multiple trigonometric series. (Russian. English and Georgian summaries) **84a:42024**
 Prokhorov, V. I. Coefficients of double Fourier series. (Russian) **84k:42010**
 Roșculeț, Marcel N. Research on trigonometric series. IX. A double Fourier series associated with a nonintegrable function. (Romanian. French summary) **84c:42022**
 Soardi, Paolo M. See Carenini, Marco, **84i:42019**
 Stepanets', O. I. Upper bounds for Fourier coefficients on classes of continuous functions of several variables. (Russian) **84j:42023**
 Taibleson, Mitchell H. See Lu, Shan Zhen; et al., **84d:42020a**
 Vuković, Mirjana. General G_λ^* method of summation of multiple Fourier series. (Serbo-Croatian. English summary) **84j:42024**
 Weiss, Guido. See Lu, Shan Zhen; et al., **84d:42020a**
 Zaderer, N. N. Approximation of Fourier sums on classes of periodic functions of several variables, determined by means of the differential operators of even order. (Russian) **84c:42023**
 Zaderer, P. V. Approximation of periodic functions of several variables by trigonometric polynomials in the mean. (Russian) **84j:42025**
 Zhizhishvili, L. V. Some approximate properties of Cesàro means of Fourier series. (Russian) **84f:42012**

secondary classifications:

- Belinskii, E. S. (with Liflyand, I. R.) Asymptotic behavior of the Lebesgue constants of radial summability methods. (Russian) **84m:42018**
 Bozhinov, Nikolai S. (with Dimovski, Ivan Kh.) Convolutions, multipliers and commutants related to double complex Dirichlet expansions. **84b:30004**
 Dimovski, Ivan Kh. See Bozhinov, Nikolai S., **84b:30004**
 Gleizer, E. V. Estimation of the Fourier coefficients of subharmonic functions. (Russian) **84k:31002**
 Golubov, B. I. Multiple series and Fourier integrals. (Russian) **84c:42001**
 de Guzmán, Miguel. Some paradoxical sets with applications in the geometric theory of real variable. **84k:28008**
 Kothlyar, B. D. Fourier coefficients of smooth functions of several variables. (Russian) **84i:42008**
 Liflyand, I. R. See Belinskii, E. S., **84m:42018**
 Neuman, Edward. Calculation of complex Fourier coefficients using natural splines. (German summary) **84c:65159**
 Petrovich, A. Yu. Application of Abel's method to generalized multiple Fourier series. (Russian) **84a:42037**
 Rukasov, V. I. See Stepanets, A. I., **84b:42004**
 Sato, Shuichi. Entropy and almost everywhere convergence of Fourier series. **84i:42010**
 Stepanets, A. I. (with Rukasov, V. I.) Approximation by Fourier sums of triangular type on classes of continuous periodic functions of two variables. (Russian) **84b:42004**

42B10 Fourier and Fourier-Stieltjes transforms and other transforms of Fourier type

- Berenstein, Carlos A. (with Taylor, B. A.; Yger, Alain) Sur les systèmes d'équations différence-différentielles. [On systems of difference-differential equations] **84k:42011**
 Hu, Men Ch'ang. Note on restriction of Fourier transforms. **84c:42024**

- Kandil, M. A. Poisson summation formula for vector-valued functions of n variables. **84c:42019**
- Kohn, M. J. On formally differentiated Fourier integrals. **84b:42026**
- Lohoué, Noël (with Peyrière, Jacques) Majoration de la transformée de Fourier de certaines mesures. [Upper bound of the Fourier transform of certain measures] **84c:42023**
- Osmanov, G. I. Uniform Riesz summability of a Fourier integral on the plane. (Russian) **84i:42020**
- Pan, Wen Jie On the localization and convergence of multiple Fourier integrals by spherical means. **84a:42025**
- Peyrière, Jacques See Lohoué, Noël, **84c:42023**
- Sampson, Gary Fourier transform estimates for oscillating kernels. **84b:42027**
- Strichartz, Robert S. A Poisson summation formula for integrals over quadratic surfaces. **84a:42026**
- Taylor, B. A. See Berenstein, Carlos A.; et al., **84c:42011**
- Uchiyama, Akihito The construction of certain BMO functions and the corona problem. **84d:42022**
- Yger, Alain See Berenstein, Carlos A.; et al., **84c:42011**

secondary classifications:

- Iijima, Taizo A new theory of image reconstruction for computed tomography. (84i:92018)
- Muckenhoupt, Benjamin Weighted norm inequalities for the Fourier transform. (84m:42019)
- Osipov, V. F. On the pseudomeasures $\delta(a-f)\mu$ and $\delta(a-f)\mu$ for the algebra of absolutely convergent Fourier integrals. (Russian. English summary) **84d:42011**
- Fibration of a group of characters into level sets of a nonsynthesizable function. (Russian. English summary) **84c:43008**
- Price, John F. Littlewood's conjecture for Dirichlet kernels. (84g:43006)
- Strichartz, Robert S. Improved Sobolev inequalities. (84b:46044)

42B15 Multipliers

- Aguilera, N. E. (with Harboure, Eleonor) On multipliers in global Hölder spaces. (Spanish) **84b:42028**
- Baron, S. Multipliers of double Fourier series. (Russian. English summary) **84j:42026**
- Bourdau, Gérard Une extension du théorème des commutateurs de Calderón. [An extension of Calderón's commutator theorem] **84m:42024**
- Carbery, Anthony The boundedness of the maximal Bochner-Riesz operator on $L^p(\mathbb{R}^2)$. **84m:42025**
- Cowling, Michael G. A remark on twisted convolution. **84g:42015**
- Gasper, George (with Trebels, Walter) Hankel multipliers and extensions to radial and quasiradial Fourier multipliers. **84c:42025**
- Harboure, Eleonor See Aguilera, N. E., **84b:42028**
- Inglis, Ian R. An extension of the Mihlin-Hörmander theorem with applications to initial value problems. **84i:42021**
- Weak and strong mapping properties of translation invariant operators. (Italian summary) **84c:42026**
- Kaneko, Makoto Boundedness of some operators composed of Fourier multipliers. **84i:42022**
- Mauceri, Giancarlo (with Picardello, Massimo A.; Ricci, Fulvio) Twisted convolution, Hardy spaces and Hörmander multipliers. **84g:42014**
- Picardello, Massimo A. See Mauceri, Giancarlo; et al., **84g:42014**
- Ricci, Fulvio See Mauceri, Giancarlo; et al., **84g:42014**
- Ruiz, Alberto L^p -boundedness of a certain class of multipliers associated with curves on the plane. I. **84i:42023a**
- L^p -boundedness of a certain class of multipliers associated with curves on the plane. II. **84i:42023b**
- Trebels, Walter See Gasper, George, **84c:42025**

secondary classifications:

- Bagby, R. J. Mixed-norm estimates for a class of integral operators. (Russian summary) **84b:42018**
- Leptin, Horst Another remark on twisted convolution. (84m:46044)
- Schmeisser, Hans-Jürgen On spaces of functions and distributions with mixed smoothness properties of Besov-Triebel-Lizorkin type. II. Fourier multipliers and approximation representations. (84b:46035)
- Wang, Huai Ch'uan Growth of functions in H^p . (84i:42035)

42B20 Singular integrals (Calderón-Zygmund, etc.)

- Aimar, H. A. Truncations of singular integrals by families of rectangles. (Spanish) **84c:42012**
- Beals, Michael L^p boundedness of Fourier integral operators. **84m:42026**
- Calderón, Calixto P. On the existence of singular integrals near L^1 . **84c:42013**
- Chanillo, Sagun A note on commutators. **84j:42027**
- Cociarlan, Paul Intégrales ultrasingulières. [Ultrasingular integrals] **84i:42024**
- Cohen, Jonathan (with Gosselin, John A.) On multilinear singular integrals on \mathbb{R}^n . **84c:42027**
- Coifman, R. R. (with McIntosh, Alan G. R.; Meyer, Yves) L'intégrale de Cauchy définit un opérateur borné sur L^2 pour les courbes lipschitziennes. [The Cauchy integral defines a bounded operator on L^2 for Lipschitz curves] **84m:42027**
- (with David, Guy; Meyer, Yves) La solution des conjectures de Calderón. [Solution of Calderón's conjectures] **84i:42025**
- David, Guy (with Journé, Jean-Lin) Une caractérisation des opérateurs intégraux singuliers bornés sur $L^2(\mathbb{R}^n)$. (English summary) [A characterization of singular integral operators bounded on $L^2(\mathbb{R}^n)$] **84j:42028**
- See also Coifman, R. R.; et al., **84i:42025**

- Fefferman, Robert (with Stein, Erwin) Singular integrals on product spaces. **84d:42023**
- Gosselin, John A. See Cohen, Jonathan, **84c:42027**
- Gutiérrez, Cristian E. On singular integrals and Orlicz spaces. **84c:42014**
- Harboure, Eleonor On pointwise convergence of singular integrals. **84i:42026**
- Jiménez, Juan Francisco (with Segovia, C.) On the solution of $\Delta^m F = f$ for f in H^p . (See **84i:00011**)
- Journé, Jean-Lin See David, Guy, **84j:42028**
- Khanh, Bui Doan Sur les commutateurs de A. P. Calderón. (English summary) [On the commutators of A. P. Calderón] **84g:42016**
- Kryuchkov, V. S. On the smoothness of the symbol of a Calderón-Zygmund singular integral operator. (Russian) **84m:42028**
- McIntosh, Alan G. R. See Coifman, R. R.; et al., **84m:42027**
- Meyer, Yves See Coifman, R. R.; et al., **84i:42025** and **84m:42027**
- Murai, Takafumi Boundedness of singular integral operators of Calderón type. **84m:42029**
- Sampson, Gary On classes of real analytic families of singular integrals on H^1 and L^p . **84i:42027**
- Segovia, C. See Jiménez, Juan Francisco, (See **84i:00011**)
- Stein, Erwin See Fefferman, Robert, **84d:42023**
- Strichartz, Robert S. Compositions of singular integral operators. **84b:42017**
- Torchinsky, Alberto (with Wheeden, Richard L.) On the Marcinkiewicz integral and functions of bounded mean oscillation. **84j:42029**
- Volokhin, V. A. Exact method of calculation of a class of multidimensional singular integrals. (Russian) **84d:42024**
- Weinberg, David A. The Hilbert transform and maximal function for approximately homogeneous curves. **84c:42020**
- Wheeden, Richard L. See Torchinsky, Alberto, **84j:42029**
- Zhizhishvili, L. V. The validity of A. N. Kolmogorov's theorem for conjugate functions of several variables. (Russian) **84i:42028**
- Zinnmeister, Michel Transformation conforme et courbes presque lipschitziennes. (English summary) [Conformal mapping and almost Lipschitzian curves] **84m:42030**

secondary classifications:

- Cerdà, Joan L. (with Suiro, Joan M.) Approximate identities and convergence at Lebesgue points. (84j:31003)
- Cherkasov, A. I. (with Sadygov, Sh. M.) A type of completely continuous singular operator. (Russian) **84b:45022**
- Dzhvarshvili, A. G. A two-dimensional integral of Cauchy type. (Russian) **84c:31012**
- Jerison, David S. (with Kenig, Carlos E.) Hardy spaces, A_∞ , and singular integrals on chord-arc domains. (84c:30037)
- Kenig, Carlos E. See Jerison, David S., **84c:30037**
- Kurokawa, Takahide On the Riesz and Bessel kernels as approximations of the identity. (84c:31007)
- Neugebauer, C. J. Inserting A_∞ -weights. (84d:42026)
- Nogin, V. A. Weighted spaces of a type of Riesz potentials. (Russian) **84c:46031**
- Sadygov, Sh. M. See Cherkasov, A. I., **84b:45022**
- Selvaggi, Renata (with Sisto, Irene) An existence theorem for the Dirichlet problem with respect to the operator Δ^2 in certain domains of class C^1 . (Italian. English summary) **84f:35044**
- Sisto, Irene See Selvaggi, Renata, **84f:35044**
- Stein, Erwin Some results in harmonic analysis in \mathbb{R}^n , for $n \rightarrow \infty$. (84g:42019)
- Suiro, Joan M. See Cerdà, Joan L., **84j:31003**

42B25 Maximal functions, Littlewood-Paley theory

- Bennett, Colin Another characterization of BLO. **84b:42029**
- Carrillo, M. T. (with de Guzmán, Miguel) Maximal convolution operators and approximations. **84c:42027**
- Chanillo, Sagun (with Wheeden, Richard L.) Distribution function estimates for Marcinkiewicz integrals and differentiability. **84m:42031**
- Weighted norm inequalities for strongly singular convolution operators. **84m:42032**
- Christ, Michael (with Fefferman, Robert) A note on weighted norm inequalities for the Hardy-Littlewood maximal operator. **84g:42017**
- Córdoba, Antonio Geometric Fourier analysis. (French summary) **84i:42029**
- De Souza, Geraldo Soares The dyadic special atom space. **84b:42032**
- Fefferman, Robert See Christ, Michael, **84g:42017**
- García-Cuerva, José An extrapolation theorem in the theory of A_p weights. **84c:42028**
- Greenleaf, Allan Principal curvature and harmonic analysis. **84i:42030**
- Gulashvili, A. B. Classes with "cancellation" and the integrability of maximal operators. (Russian. English and Georgian summaries) **84m:42033**
- de Guzmán, Miguel See Carrillo, M. T., **84c:42027**
- Habibullah, G. M. On estimates for maximal operators with kernels involving radial functions. **84f:42013**
- Heinig, Hans P. (with Johnson, Raymond L.) Weighted norm inequalities for L^p -valued integral operators and applications. **84g:42018**
- Hunt, Richard A. (with Kurtz, Douglas S.) The Hardy-Littlewood maximal function on $L(p, 1)$. **84d:42025**
- Jodeit, Max, Jr. (with Shaw, Richard K.) Extension of Stein's $L \log L$ result to the closed interval. **84c:42030**
- Johnson, Raymond L. See Heinig, Hans P., **84g:42018**
- Kurtz, Douglas S. See Hunt, Richard A., **84d:42025**
- Leckband, M. A. (with Neugebauer, C. J.) A general maximal operator and the A_p -condition. **84c:42029**
- Migliacelo, Lucia Sur une condition de Hardy, Littlewood, Pólya. (English summary) [On a Hardy-Littlewood-Pólya condition] **84c:42015**
- Muckenhoupt, Benjamin Norm inequalities relating the Hilbert transform to the Hardy-Littlewood maximal function. **84b:42031**

Neugebauer, C. J. Inserting A_p -weights. **84d:42026**

See also Leckband, M. A., **84c:42029**

Okikiolu, G. O. Weighted inequalities for positive and maximal operators. **84i:42031**
"Conjugately weighted" maximal operators involving parameter-dependent functions. **84j:42030**

Palvianta, Lassi Equivalent quasinorms and Fourier multipliers in the Triebel spaces $F_{p,q}^s$. **84c:42021**

Rubio de Francia, José Luis Weighted norm inequalities for homogeneous families of operators. **84f:42014**

Sawyer, Eric T. A characterization of a two-weight norm inequality for maximal operators. **84i:42032**

Shaw, Richard K. See Jodeit, Max, Jr., **84h:42030**

Stein, Erwin Some results in harmonic analysis in \mathbb{R}^n , for $n \rightarrow \infty$. **84g:42019**

Wang, Si Lei A survey of developments in Littlewood-Paley theory. (Chinese) **84k:42016**

Wheeden, Richard L. See Chanillo, Sagun, **84m:42031**

Young, Wo Sang Weighted norm inequalities for the Hardy-Littlewood maximal function. **84h:42033**

secondary classifications:

Atencia, E. (with de la Torre, Alberto) A dominated ergodic estimate for L_p spaces with weights. **(84f:47005)**

Carbery, Anthony The boundedness of the maximal Bochner-Riesz operator on $L^4(\mathbb{R})$. **(84m:42025)**

Cowling, Michael G. Harmonic analysis on semigroups. **(84h:43004)**

Cox, David C. The best constant in Burkholder's weak- L^1 inequality for the martingale square function. **(84g:60079)**

Jerison, David S. (with Kenig, Carlos E.) Boundary behavior of harmonic functions in nontangentially accessible domains. **(84d:31005b)**

Jones, Peter Wilcox A geometric localization theorem. **(84d:31005a)**

Jones, Roger L. New proofs for the maximal ergodic theorem and the Hardy-Littlewood maximal theorem. **(84c:28019)**

Kaneko, Makoto Boundedness of some operators composed of Fourier multipliers. **(84i:42022)**

Kenig, Carlos E. See Jerison, David S., **(84d:31005b)**

de la Torre, Alberto See Atencia, E., **(84f:47005)**

Weinberg, David A. The Hilbert transform and maximal function for approximately homogeneous curves. **(84c:42020)**

42B30 H^p -spaces

Aleksandrov, A. B. Majorization property for multidimensional Hardy-Stein-Weiss classes. (Russian. English summary) **84c:42030**

Arushanyan, Z. A. A class of generalized Cauchy-Riemann systems. (Russian. English summary) **84g:42020**

Baernstein, Albert, II Analytic functions of bounded mean oscillation. **84g:42021**

Bonami, Aline Réarrangements décroissants des fonctions BMO. [Decreasing rearrangements of BMO functions] **84h:42034**

Chang, Sun-Yung Alice (with Fefferman, Robert) The Calderón-Zygmund decomposition on product domains. **84c:42028**

Coifman, R. R. (with Jones, Peter Wilcox; Rubio de Francia, José Luis) Constructive decomposition of BMO functions and factorization of A_p weights. **84c:42031**

Fabes, Eugene B. (with Kenig, Carlos E.) On the Hardy space H^1 of a C^1 domain. **84c:42029**

(with Kenig, Carlos E.; Neri, Umberto) Carleson measures, H^1 duality and weighted BMO in nonsmooth domains. **84h:42035**

Fefferman, Robert See Chang, Sun-Yung Alice, **84c:42028**

Jones, Peter Wilcox See Coifman, R. R.; et al., **84c:42031**

Jurkat, W. B. (with Sampson, Gary) The complete solution to the (L^p, L^q) mapping problem for a class of oscillating kernels. **84i:42033**

Kenig, Carlos E. See Fabes, Eugene B., **84c:42029** and **84h:42035**

Krantz, Steven G. Fractional integration on Hardy spaces. **84j:42031**

Mueller, Carl A characterization of BMO and BMO_p . **84j:42032**

Neri, Umberto See Fabes, Eugene B.; et al., **84h:42035**

Oswald, Peter On Schauder bases in Hardy spaces. **84c:42022**

Rubio de Francia, José Luis See Coifman, R. R.; et al., **84c:42031**

Sampson, Gary See Jurkat, W. B., **84i:42033**

Sjödin, Tord On properties of functions with conditions on their mean oscillation over cubes. **84h:42036**

Uchiyama, Akihito The factorization of H^p on the space of homogeneous type. **84i:42034**
A constructive proof of the Fefferman-Stein decomposition of BMO (\mathbb{R}^n) . **84h:42037**

(with Wilson, J. Michael) Approximate identities and $H^1(\mathbb{R})$. **84c:42032**

Wang, Hui Ch'uan Growth of functions in H^p . **84i:42035**

Wilson, J. Michael A simple proof of the atomic decomposition for $H^p(\mathbb{R}^n)$, $0 < p \leq 1$. **84i:42036**

See also Uchiyama, Akihito, **84c:42032**

Yabuta, Kōzō A multilinearization of Littlewood-Paley's g -function and Carleson measures. **84j:42033**

Yamashita, Shinji On the Hardy-Littlewood maximal theorem. **84c:42023**

secondary classifications:

Chang, Hong Jean On some algebraic properties of H^1 . **(84m:46061)**

Chanillo, Sagun A note on commutators. **(84j:42027)**

Colzani, Leonardo Fourier transform of distributions in Hardy spaces. (Italian summary) **(84c:46042)**

Folland, G. B. (with Stein, Erwin) \star Hardy spaces on homogeneous groups. **(84h:43027)**

Guadalupe Hernandez, Jose Javier Invariant subspaces and H^p spaces with respect to arbitrary measures. (Italian summary) **(84m:46028)**

Jerison, David S. (with Kenig, Carlos E.) Hardy spaces, A_∞ , and singular integrals on chord-arc domains. **(84k:30037)**

Kenig, Carlos E. See Jerison, David S., **(84k:30037)**

Kolaski, Clinton J. Isometries of weighted Bergman spaces. **(84c:46054)**

MacCluer, Barbara D. Interpolation between H^1 and L^∞ . **(84d:46030)**

Oswald, Peter On spline bases in periodic Hardy spaces $(0 < p \leq 1)$. **(84c:42032)**

Stein, Erwin See Folland, G. B., **(84h:43027)**

Vaughan, D. C. A weighted Hardy space variant of the Marcinkiewicz interpolation theorem. **(84c:46036)**

Wang, Hui Ch'uan Real Hardy spaces of an annulus. **(84d:30064)**

Zinsmeister, Michel Courbes de Jordan vérifiant une condition corde-arc. (English summary) [Jordan curves satisfying a chord-arc condition] **(84j:30052)**

42B99 None of the above, but in this section

El Kohen, A. On Fourier integral operators. **84a:42030**

Gandel', Yu. V. Double Fourier series of some mixed boundary value problems of mathematical physics. (Russian) **84c:42033**

Goffman, Casper (with Liu, Fon-Che; Waterman, Daniel) A differentiable function for which localization for double Fourier series fails. **84c:42034**

Kaul, B. N. (with Singh, Vijendra) Approximation of a class of functions by Nörlund means of double Fourier series. **84j:42034**

Liu, Fon-Che See Goffman, Casper; et al., **84c:42034**

Neri, Umberto On functions with bounded mixed variance. **84d:42027**

Singh, Vijendra See Kaul, B. N., **84j:42034**

Triebel, Hans Maximal inequalities: a useful tool in Fourier analysis. **84h:42038**

Wang, Kun Yang Some estimates for the strong approximation of continuous periodic functions of the two variables by their sums of Marcinkiewicz type. (Chinese. English summary) **84k:42017**

Waterman, Daniel See Goffman, Casper; et al., **84c:42034**

Zhang, Yang Chun The saturation problem of strong approximation by double Fourier series. (Chinese. English summary) **84k:42018**

secondary classifications:

Baiborodov, S. P. Lebesgue constants of polyhedra. (Russian) **(84j:52017)**

Din' Zang Mean ε -dimension of the class of functions $R_{G,p}$. (Russian) **(84d:41061)**

Fefferman, Charles (with Phong, D. H.) Lower bounds for Schrödinger equations. **(84c:35218)**

Getsadze, R. D. Convergence and divergence of multiple orthonormal Fourier series in C and L metrics. (Russian. English and Georgian summaries) **(84c:42039)**

McGehee, O. Carruth (with Woodward, Gordon S.) Continuous manifolds in \mathbb{R}^n that are sets of interpolation for the Fourier algebra. **(84h:43014)**

O'Neill, Richard Spaces formed with special atoms. **(84c:26005)**

Phong, D. H. See Fefferman, Charles, **(84c:35218)**

Varopoulos, Nicholas Th. A theorem on weak type estimates for Riesz transforms and martingale transforms. (French summary) **(84c:60070)**

Woodward, Gordon S. See McGehee, O. Carruth, **(84h:43014)**

42Cxx Nontrigonometric Fourier analysis

Babich, V. M. (with Grigor'eva, N. S.) \star Ортогональные разложения и метод Фурье. (Russian) [Orthogonal expansions and the Fourier method] **84j:42035**

Grigor'eva, N. S. See Babich, V. M., **84j:42035**

42C05 Orthogonal functions and polynomials, general theory [See also 33A65.]

Alfaro García, M. P. Recurrence and summation formulas of order p for polynomials orthogonal on the unit circle. (Spanish. English summary) **84c:42019**

Barnsley, M. F. (with Geronimo, Jeffrey S.; Harrington, Andrew N.) Orthogonal polynomials associated with invariant measures on Julia sets. **84a:42031**

Crăciun, P. T. See Mangeron, D.; et al., **84f:42016**

Fernandez, Dicesar Lass See Mangeron, D.; et al., **84f:42016**

Geronimo, Jeffrey S. (with Nevai, Paul G.) Necessary and sufficient conditions relating the coefficients in the recurrence formula to the spectral function for orthogonal polynomials. **84i:42037**

See also Barnsley, M. F.; et al., **84a:42031**

Ghizzetti, Aldo (with Ossicini, A.) \star Polinomi ortogonali e problema dei momenti. (Italian) [Orthogonal polynomials and the moment problem] **84k:42020**

Grinshpun, Z. S. Characteristic properties of orthogonal polynomials in terms of functions of the second kind. (Russian) **84c:42024**

Guadalupe Hernandez, Jose Javier (with Vinuesa Tejedor, Jaime) An additional condition to the theorem of equivalence of the fundamental formulas for real sequences of orthogonal polynomials. (Spanish. English summary) **84k:42021**

Gukevich, V. I. The Parseval equality and the Fischer-Riesz theorem for almost orthogonal series. (Ukrainian. Russian summary) **84c:42035a**

Distribution of positive and negative values of functions of a complete almost orthogonal system. (Ukrainian. Russian summary) **84c:42035b**

Harrington, Andrew N. See Barnsley, M. F.; et al., **84a:42031**

Khristov, Khristo Iv. A complete orthonormal system of functions in $L^2(-\infty, \infty)$ space. **84h:42018**

Krall, Allan M. See Mangeron, D.; et al., **84f:42016**

Littlejohn, Lance L. The Krall polynomials: a new class of orthogonal polynomials. **84c:42036**

Lubinsky, Doron S. (with Sharif, A.) On the largest zeroes of orthogonal polynomials for certain weights. **84f:42015**

Makarova, V. V. On the expansion of functions in orthogonal polynomials of a certain class. (Russian) **84g:42022**

- Mangeron, D. (with Krall, Allan M.; Fernandez, Dicesar Lass; Craciunas, P. T.) A new look at some classic problems in orthogonal polynomials. **84f:42016**
- Nakahara, Masatoshi. See Tokumaru, Shinobu; et al., **84f:42038**
- Neval, Paul G. See Geronimo, Jeffrey S., **84f:42037**
- Oscini, A. See Ghizzetti, Aldo, **84f:42020**
- Rakhmanov, E. A. Asymptotic properties of orthogonal polynomials on the real axis. (Russian) **84e:42025**
- Sharif, A. See Lubinsky, Doron S., **84f:42015**
- Szabados, J. On some problems connected with polynomials orthogonal on the complex unit circle. **84j:42036**
- Tokumaru, Shinobu (with Nakahara, Masatoshi; Yamamoto, Shigeru) New doubly orthogonal functions and their application to pattern synthesis. **84f:42038**
- Vinuesa Tejedor, Jaime. See Guadalupe Hernandez, Jose Javier, **84f:42021**
- Yamamoto, Shigeru. See Tokumaru, Shinobu; et al., **84f:42038**
- Zayed, Ahmed I. Generalized functions and orthogonal polynomials on the unit circle. **84e:42026**
- secondary classifications:
- Al-Salam, W. A. (with Verma, Arun) q -analogs of some biorthogonal functions. (84e:33010)
- Barnsley, M. F. (with Geronimo, Jeffrey S.; Harrington, Andrew N.; Dager, L. D.) Approximation theory on a snowflake. (84c:30026)
- Bessis, Daniel (with Mehta, Madan Lal; Moussa, Pierre) Polynômes orthogonaux sur des ensembles de Cantor et itérations des transformations quadratiques. (English summary) [Orthogonal polynomials on Cantor sets and iterations of quadratic maps] **84e:58036**
- Bochkarev, S. V. Construction of polynomial bases in finite-dimensional spaces of functions analytic in the disk. (Russian) (See **84c:00012**)
- Chisăliță, Florica-Elena Interpolation d'Hermite-Fejér sur des racines quadruples—racines des polynômes d'Hermite. (Romanian summary) [Hermite-Fejér interpolation on nodes which are quadruple roots of Hermite polynomials] **84b:41001**
- Cuclin, Dan A. A complex form of the generalized Fourier series and transforms. (See **84g:93005a**)
- Dager, L. D. See Barnsley, M. F.; et al., **84c:30026**
- Debiard, Amédée Polynômes de Tchétchebychev et de Jacobi dans un espace euclidien de dimension p . (English summary) [Chebyshev and Jacobi polynomials in a Euclidean space of p dimensions] **84g:33016**
- Demeur, M. Polynômes orthogonaux naturels. [Natural orthogonal polynomials] **84g:33017**
- Eier, Richard (with Lidl, Rudolf) A class of orthogonal polynomials in k variables. (84d:33013)
- Geronimo, Jeffrey S. See Barnsley, M. F.; et al., **84c:30026**
- Ghizzetti, Aldo A problem regarding the approximation of the functions $f(x)$ of a space $L^2_p[a, b]$ by means of linear combinations of given functions. (Italian. English summary) **84f:41035**
- Grinbaum, F. Alberto A new property of reproducing kernels for classical orthogonal polynomials. (84c:33013)
- Harrington, Andrew N. See Barnsley, M. F.; et al., **84c:30026**
- Jain, Vinod Kumar. See Verma, Arun, **84c:33018**
- Kailath, Thomas (with Porat, Boaz) State-space generators for orthogonal polynomials. (84f:60059)
- Lew, John S. (with Quarles, Donald A., Jr.) Nonnegative solutions of a nonlinear recurrence. (84m:39007)
- Lidl, Rudolf. See Eier, Richard, **84d:33013**
- Lo Cascio, M. L. Note on some properties of the zeros of s -orthogonal polynomials in unbounded intervals. (Italian. English summary) **84f:33016**
- Mehta, Madan Lal. See Bessis, Daniel; et al., **84e:58036**
- Moussa, Pierre. See Bessis, Daniel; et al., **84e:58036**
- Porat, Boaz. See Kailath, Thomas, **84f:60059**
- Prabhakar, T. R. (with Tomar, R. C.) Biorthogonal polynomials suggested by the Legendre polynomials. (84j:33010)
- Quarles, Donald A., Jr. See Lew, John S., **84m:39007**
- Sharapudinov, I. I. Some properties of polynomials, orthogonal on a finite system of points. (Russian) **84f:33011**
- Tomar, R. C. See Prabhakar, T. R., **84j:33010**
- Verma, Arun (with Jain, Vinod Kumar) Self-reproducing kernels and bilinear formulas for q -orthogonal polynomials. (84c:33018)
- See also Al-Salam, W. A., **84c:33010**
- 42C10 Fourier series in special orthogonal functions (Legendre polynomials, Walsh functions, etc.)
- Agrawal, S. R. (with Patel, C. M.) On the convergence and Riesz-summability of a Fourier-Bessel series of special kind. **84j:42037**
- Andrienko, V. A. (with G'rnevska, L. V.) The rate of approximation of functions by their orthogonal series in convergence systems. (Russian) **84d:42028**
- Arfin, Khurshidul (with Prasad, Rajendra; Saxena, Ashok) Nörlund summability of Fourier-Jacobi series. **84m:42034**
- Balashov, L. A. (with Skvortsov, V. A.) The Gibbs phenomenon for the Walsh system. (Russian) **84e:42027**
- Bugadze, V. M. Absolutely convergent Fourier-Haar series. (Russian. English and Georgian summaries) **84c:42037**
- Cartwright, Donald I. Lebesgue constants for Jacobi expansions. **84b:42019**
- Chandra, Prem (with Sharma, M. M.) Absolute Riesz summability of series associated with Legendre series. **84b:42020**
- Chesnokova, O. S. Some estimates of Lebesgue functions for Fourier series in Chebyshev-Hermite polynomials and in Chebyshev-Laguerre polynomials. (Russian) **84c:42032**
- Dreseler, B. (with Sordi, Paolo M.) A Cohen-type inequality for Jacobi expansions and divergence of Fourier series on compact symmetric spaces. **84d:42029**
- Esfahanizadeh, J. (with Siddiqi, Ataulah) On the approximation of functions by de la Vallée-Poussin mean of their Walsh Fourier series. **84c:42038**
- Gersadze, R. D. Convergence and divergence of multiple orthonormal Fourier series in C and L metrics. (Russian. English and Georgian summaries) **84c:42039**
- Giardina, Charles R. (with Kuhl, Frank P.; Grogan, T. A.; Mitchell, O. Robert) A spatial domain Walsh feature set. (See **84e:00007**)
- G'rnevska, L. V. See Andrienko, V. A., **84d:42028**
- Grogan, T. A. See Giardina, Charles R.; et al., (See **84e:00007**)
- Grove, A. C. An introduction to Walsh functions and their applications. **84d:42030**
- Ibragimov, E. Dz. Jackson type operators on a sphere. (Russian) **84c:42028**
- A series in Jacobi polynomials that is defined on the sphere. (Russian) **84f:42017**
- Ismatullaev, Sh. A. (with Job, István) Equiconvergence theorems. (Russian) **84f:42039**
- Job, István. See Ismatullaev, Sh. A., **84f:42039**
- Kazaryan, K. S. A remark on the divergence of Fourier series. (Russian. English and Armenian summaries) **84c:42039**
- Khodak, L. B. Convergence of Fourier series in Jacobi polynomials in the mean. (Russian. English summary) **84f:42018**
- Kivinuk, A. (C, r) -bounded Fourier expansions and generalized translation. **84c:42029**
- Krotov, V. G. The property of being an unconditional basis for the Haar system in the spaces A^1_n . (Russian) **84c:42033**
- Kuhl, Frank P. See Giardina, Charles R.; et al., (See **84e:00007**)
- Lakhani, K. B. On order of approximation of a function by its Laguerre expansion. **84b:42021**
- Lomov, I. S. Rate of equiconvergence of Fourier series in eigenfunctions of Sturm-Liouville operators in an integral metric. (Russian) **84d:42031**
- Meaney, Christopher Divergent Jacobi polynomial series. **84c:42040**
- Mitchell, O. Robert. See Giardina, Charles R.; et al., (See **84e:00007**)
- Ostlenker, B. P. Fourier-Pollaczek series. (Russian) **84c:42034**
- Oswald, Peter On some convergence properties of Haar-Fourier series in the classes $\varphi(L)$. **84j:42038**
- Patel, C. M. See Agrawal, S. R., **84j:42037**
- Pawelke, Siegfried Weak smoothness conditions for the uniform convergence of Fourier-Jacobi series. **84c:42041**
- Pietrzyk, Barbara An application of the modulus of variation to the Vilenkin's series. **84e:42040**
- Prasad, Rajendra. See Arfin, Khurshidul; et al., **84m:42034**
- Rautela, S. S. On the absolute summability by logarithmic means of the ultraspherical series. (Hindi. English summary) **84c:42035**
- Saxena, Ashok. See Arfin, Khurshidul; et al., **84m:42034**
- Sharma, M. M. See Chandra, Prem, **84b:42020**
- Sharma, Sushil On the absolute harmonic summability of a Legendre series. **84g:42023**
- Siddiqi, Ataulah. See Esfahanizadeh, J., **84c:42038**
- Simon, Peter Remarks on the shift operators with respect to the Haar and Franklin systems. **84c:42040**
- Skvortsov, V. A. See Balashov, L. A., **84e:42027**
- Sordi, Paolo M. See Dreseler, B., **84d:42029**
- Sulaiman, W. T. On absolute Cesàro summability of Laplace series. **84c:42042**
- Tevzade, V. I. On the uniform convergence of the Cesàro means of negative order of Fourier-Walsh series. (Russian. English and Georgian summaries) **84g:42024**
- Ufyanov, P. L. An algebra of functions and Fourier coefficients. (Russian) **84j:42039**
- Urbanśka, Władysław On absolute convergence of random Fourier series with respect to Vilenkin and Rademacher orthonormal systems. **84k:42022**
- Wade, William R. Walsh series and growth of functions on nested dyadic intervals. **84b:42022**
- Recent developments in the theory of Walsh series. **84d:42033**
- Locally constant dyadic derivatives. **84d:42032**
- Walsh-Fourier coefficients and locally constant functions. **84d:42034**
- Decay of Walsh series and dyadic differentiation. **84c:42043**
- Xu, Qian Fang The absolute convergence of lacunary Walsh series. (Chinese) **84k:42023**
- Zotikov, S. V. Correction: "The class of systems of Rademacher type" [Izv. Vyssh. Uchebn. Zaved. Matematika 1976, no. 7(170), 30-43; MR 56 #967]. (Russian) **84b:42023**
- secondary classifications:
- Agar, G. N. (with Vilenkin, N. Ya.; Dzhabfari, G. M.; Rubinshtein, A. I.) ★Мультипликативные системы функций и гармонический анализ на нульмерных группах. (Russian) [Multiplicative systems of functions and harmonic analysis on zero-dimensional groups] **84b:43001**
- Arfin, Khurshidul (with Prasad, Rajendra; Saxena, Ashok) On the (A_1) summability of Legendre series. **84c:40004**
- Bazilevich, I. E. On the orthogonal systems of functions associated with the solutions of the Loewner differential equation. (Russian) **84c:30016**
- Bohn, E. V. Recursive expressions for evaluating Walsh coefficients for linear dynamic systems. (84c:93052)
- Butzer, Paul L. (with Engels, Wolfgang) Dyadic calculus and sampling theorems for functions with multidimensional domain. I. General theory. (84d:94003a)
- (with Engels, Wolfgang) Dyadic calculus and sampling theorems for functions with multidimensional domain. II. Applications to dyadic sampling representations. (84k:94003b)
- Chao, J. A. Hardy spaces on regular martingales. (84b:60064)
- Chen, Wen Liang (with Lee, Chun Liang) Walsh series expansion of composite functions and its application to linear systems. (84f:93026)
- Cibils, Claude Groupe de Witt d'une algèbre avec involution. [Witt group of an algebra with involution] **84m:43009**
- Dubovets, V. D. (with Shmerko, V. P.) Mutual mapping of discrete spectra of Fourier and Walsh power of a stationary random process. (Russian) **84f:94013**
- Dzhabfari, G. M. See Agar, G. N.; et al., **84b:43001**

- Engels, Wolfgang See Butzer, Paul L., (84c:94003a) and (84c:94003b)
 Gevorkyan, G. G. On the representation of measurable functions by martingales. (Russian summary) (84f:60072)
 Henstock, Ralph Density integration and Walsh functions. (84i:26010)
 Janicki, O. See Todorow, J., (84j:94011)
 Kai'nei, S. G. Summability of Jacobi series by triangular matrices. (Russian) (84m:40007)
 Kamzolov, A. I. Approximation of smooth functions on a sphere S^n by the Fourier method. (Russian) (84c:33011)
 Lee, Chun Liang See Chen, Wen Liang, (84f:93026)
 Prasad, Rajendra See Arfin, Khurshidul; et al., (84a:40004)
 Romanov, A. V. Sufficient conditions for positive definiteness of radial functions in domains of \mathbb{R}^n . (Russian) (84d:45041)
 Rubinshtein, A. I. See Agaev, G. N.; et al., (84b:43001)
 Saxena, Ashok See Arfin, Khurshidul; et al., (84a:40004)
 Shmerko, V. P. See Dubovets, V. D., (84i:94013)
 Su, Wei Yi See Zheng, Wei Xing, (84m:41041)
 Todorow, J. (with Janicki, O.) Darstellung mehrwertiger Funktionen durch Reihenentwicklung nach orthogonalen Funktionensystemen über endlichen Körpern. [Representation of multivalued functions through series expansion in orthogonal function systems over finite fields] (84j:94011)
 Vilenkin, N. Ya. See Agaev, G. N.; et al., (84b:43001)
 Yoneda, Kaoru Sets of uniqueness for a certain class \mathfrak{M} , on the dyadic group. (84m:42038)
 Zheng, Wei Xing (with Su, Wei Yi) Best approximation on a Walsh system. (Chinese. English summary) (84m:41041)

42C15 Series of general orthogonal functions, generalized Fourier expansions, nonorthogonal expansions

- Bakhshetsyan, A. V. (with Krotov, V. G.) On universal series in Schauder systems. (Russian. English and Armenian summaries) 84d:42035
 Cazzaniga, Franco (with Meaney, Christopher) A local property of absolutely convergent Jacobi polynomial series. 84c:42036
 Chen, Isaac I. H. Modified Fourier-Bessel series and finite spherical Hankel transform. 84c:42044
 Gevorkyan, G. G. Sets of uniqueness for orthonormal complete systems. (Russian) 84c:42044
 Gulisashvili, A. B. Rearrangements, arrangements of signs and convergence of sequences of operators. (Russian. English summary) 84b:42041
 Kandil, M. A. Convergence of Fourier coefficients' series for vector-valued functions. (Italian summary) 84j:42040
 Kazaryan, K. S. Some questions of the theory of orthogonal series. (Russian) 84m:42035
 Krotov, V. G. See Bakhshetsyan, A. V., 84d:42035
 Lamp, J. Almost everywhere unconditional (C, 1)-summability of generalized orthonormal series. (Russian. German summary) 84b:42025
 Leindler, L. On the strong and very strong summability and approximation of orthogonal series by generalized Abel method. 84c:42024
 On the strong approximation of orthogonal series with large exponent. (Russian summary) 84c:42045
 Lukashenko, T. P. Union of divergence sets of function series. (Russian) 84c:42030
 Meaney, Christopher See Cazzaniga, Franco, 84c:42036
 Móricz, Ferenc On the a.e. convergence of multiple orthogonal series. I. Square and spherical partial sums. 84d:42036
 On the regular summability of multiple function series and Lebesgue functions. (Russian summary) 84c:42041
 Perlstadt, Marci Chopped orthogonal polynomial expansions—some discrete cases. 84j:42041
 Petrovich, A. Yu. Application of Abel's method to generalized multiple Fourier series. (Russian) 84c:42037
 Prather, C. L. (with Shaw, J. K.) On the oscillation of differential transforms of eigenfunction expansions. 84m:42036
 Rempulska, Lucyna On the λ -summability almost everywhere of orthonormal series. 84c:42031
 On the equivalence of logarithmic methods of summability of orthonormal series. 84c:42042
 Sedletsii, A. M. Biorthogonal expansions of functions in exponential series on intervals of the real axis. (Russian) 84g:42025
 Shaw, J. K. See Prather, C. L., 84m:42036
 Szalay, I. On the generalized absolute Cesàro-summability and the strong approximation of orthogonal series. 84m:42037
 Talalyan, A. A. Dependence of the convergence of orthogonal series on changes in the values of an expanded function. (Russian) 84g:42026
 Tandori, Károly Comments on: "Remarks on a theorem of S. Kaczmarz" [Acta Sci. Math. (Szeged) 42 (1980), no. 1-2, 171-173; MR 81i:42031]; "On a theorem of Alexis and Sharma" [ibid. 42 (1980), no. 1-2, 175-182; MR 81i:42032]. (German) 84g:42027
 Über die Cesàrosche Summierbarkeit der Funktionenreihen. [On Cesàro summability of function series] 84h:42043
 Tjurnpu, H. Maximal theorems for function series. (Russian. English summary) 84h:42044
 Zyabrev, N. B. A method for summation of Fourier series of continuous functions. (Russian. English summary) 84c:42046

secondary classifications:

- Avetisyan, Ruben Avetisovich The generalized D -property of functional sequences. (Russian. Armenian summary) (84b:42015)
 Janušauskas, Algimantas Double series of orthogonal polynomials. (Russian. English and Lithuanian summaries) (84h:42025)
 Leindler, L. On very strong summability of orthogonal series by Euler method. (84h:42009)
 Schwinn, H. On strong summability of orthogonal series by Euler methods. (84m:42009)

42C20 Rearrangements and other transformations of Fourier and other orthogonal series

secondary classifications:

- Pogosyan, N. B. Universal Fourier series. (Russian) (84c:42007)
 Talalyan, A. A. Dependence of the convergence of orthogonal series on changes in the values of an expanded function. (Russian) (84g:42026)

42C25 Uniqueness and localization for orthogonal series

- Bakhshetsyan, A. V. Zeros of series in the Rademacher system. (Russian) 84c:42025
 Meaney, Christopher Uniqueness of spherical harmonic expansions. 84f:42019
 Yoneda, Kaoru Sets of uniqueness for a certain class \mathfrak{M} , on the dyadic group. 84m:42038

secondary classifications:

- Gevorkyan, G. G. Sets of uniqueness for orthonormal complete systems. (Russian) (84b:42024)

42C30 Completeness of sets of functions

- Hasumi, Morisuke Remarks on theorems of Müntz-Szász type. 84h:42045
 Kazaryan, K. S. On bases and unconditional bases in the spaces $L^p(\mu)$, $1 \leq p < \infty$. 84d:42037
 Khrushchev, S. V. Perturbation theorems for bases consisting of exponentials and the Muckenhoupt condition. (Russian) 84j:42043
 Konoplev, B. V. On the completeness of systems of functions and systems of orthogonal polynomials. (Russian. English summary) 84a:42038
 Oswald, Peter On spline bases in periodic Hardy spaces ($0 < p \leq 1$). 84c:42032
 Pavlov, B. S. The basis property of a system of exponentials and the condition of Muckenhoupt. (Russian) 84j:42042
 Redheffer, Raymond M. (with Young, Robert M.) Completeness and basis properties of complex exponentials. 84c:42047
 Sedletsii, A. M. Excesses of systems, close to one another, of exponentials in L^p . (Russian) 84i:42042
 Young, Robert M. On complete biorthogonal systems. 84c:42048
 See also Redheffer, Raymond M., 84c:42047

secondary classifications:

- Blinov, I. N. A B -algebra of almost periodic functions. (Russian) (84a:42022)
 Ciesielski, Zbigniew The Franklin orthogonal system as unconditional basis in $\text{Re } H^1$ and VMO . (84c:46034)
 Koval'chuk, B. V. (with Sereda, Ya. M.) Completeness of the space of S^p -almost periodic matrices. (Ukrainian. Russian summary) (84h:46046)
 Lee, T. T. See Nath, A. K., (84i:94015)
 Nath, A. K. (with Lee, T. T.) On the multidimensional extension of block-pulse functions and their completeness. (84i:94015)
 Sereda, Ya. M. See Koval'chuk, B. V., (84h:46046)
 Wojtaszczyk, P. The Franklin system is an unconditional basis in H_1 . (84f:46047)

42C99 None of the above, but in this section

- Abilov, V. A. Fourier-Hermite coefficients of continuous functions of two variables. (Russian) 84g:42028
 Ciulin, Dan A. A complex form of the generalized Fourier series and transforms. (See 84g:93005a)

secondary classifications:

- Chang, Yang Chun On the saturation problem for strong approximation by double Fourier series. (84c:42011)
 Shcherbakov, V. I. Pointwise convergence of Fourier series with respect to multiplicative systems. (Russian. English summary) (84d:43013)

43-XX ABSTRACT HARMONIC ANALYSIS {For other analysis on topological and Lie groups, see 22Exx.}

43-01 Elementary exposition, textbooks

43-02 Advanced exposition (research surveys, monographs, etc.)

- Agaev, G. N. (with Vilenkin, N. Ya.; Dzhaferli, G. M.; Rubinshtein, A. I.) ★Мультипликативные системы функций и гармонический анализ на нульмерных группах. (Russian) [Multiplicative systems of functions and harmonic analysis on zero-dimensional groups] 84b:43001
 Dzhaferli, G. M. See Agaev, G. N.; et al., 84b:43001
 Quek, T. S. (with Yap, Leonard Y. H.) Convergence of Fourier series on compact 0-dimensional groups. 84g:43001
 Rubinshtein, A. I. See Agaev, G. N.; et al., 84b:43001
 Vilenkin, N. Ya. See Agaev, G. N.; et al., 84b:43001
 Yap, Leonard Y. H. See Quek, T. S., 84g:43001

secondary classifications:

- Boseck, Helmut (with Czichowski, Günter; Rudolph, Klaus-Peter) ★Analysis on topological groups—general Lie theory. (84a:22001)
 Czichowski, Günter See Boseck, Helmut; et al., (84a:22001)
 Rudolph, Klaus-Peter See Boseck, Helmut; et al., (84a:22001)

- 43-03 Historical (must also be assigned at least one classification number from Section 01)
- 43-04 Explicit machine computation and programs (not the theory of computation or programming)
- 43-06 Proceedings, conferences, etc.

Harmonic analysis: study group on translation-invariant Banach spaces ★Analyse harmonique: groupe de travail sur les espaces de Banach invariants par translation. (French) [Harmonic analysis: study group on translation-invariant Banach spaces] **84c:43001**

secondary classifications:

(Cahen, Michel) See Harmonic analysis and representations of semisimple Lie groups. **(84c:22001)**

(De Wilde, Marc) See Harmonic analysis and representations of semisimple Lie groups. **(84c:22001)**

(Wolf, Joseph A.) See Harmonic analysis and representations of semisimple Lie groups. **(84c:22001)**

Group representations and noncommutative harmonic analysis ★Group representations and noncommutative harmonic analysis. (Japanese) **(84c:22001)**

Harmonic analysis and representations of semisimple Lie groups ★Harmonic analysis and representations of semisimple Lie groups. **(84c:22001)**

Lie groups ★Harmonic analysis and representations of semisimple Lie groups. **(84c:22001)**

Liege ★Harmonic analysis and representations of semisimple Lie groups. **(84c:22001)**

NATO Advanced Study Institute:

Representations of Lie Groups and Harmonic Analysis ★Harmonic analysis and representations of semisimple Lie groups. **(84c:22001)**

Symposium:

Group Representations and Noncommutative Harmonic Analysis ★Group representations and noncommutative harmonic analysis. (Japanese) **(84c:22001)**

43A05 Measures on groups, semigroups, etc.

Belley, Jean-Marc (with Prasad, V. S.) A measure invariant under group endomorphisms. **84d:43001**

(with Morales, Pedro) A generalization of Wiener's criteria for the continuity of a Borel measure. **84j:43001**

Brown, Gavin Commutative harmonic analysis. **84b:43002**

Dierolf, Peter On the existence of convolution for measures. **84h:43002**

Lake, Jane Some noncritical idempotents in the closure of the characters in the maximal ideal space of $M(D_2)$. **84g:43002**

Morales, Pedro See Belley, Jean-Marc, **84j:43001**

Mukhin, V. V. Topologization of semigroups with invariant measure. (Russian) **84d:43001**

Oberlin, Daniel M. A convolution property of the Cantor-Lebesgue measure. **84f:43001**

Pigno, Louis (with Smith, Brent) On measures of analytic type. **84a:43001**

Prasad, V. S. See Belley, Jean-Marc, **84d:43001**

Smith, Brent See Pigno, Louis, **84a:43001**

Woś, Janusz The convolution equation of Choquet and Deny for probability measures on discrete semigroups. **84d:43002**

secondary classifications:

Bougerol, Ph. Exemples de théorèmes locaux sur les groupes résolubles. [Examples of local theorems on solvable groups] **(84g:60013)**

Byczkowska, H. (with Hulanicki, A.) On the support of the measures in a semigroup of probability measures on a locally compact group. **(84a:60016)**

Duncan, John (with Williamson, John Hunter) Spectra of elements in the measure algebra of a free group. **(84a:43005)**

Feldman, G. M. On Urbanik's characterization of Gaussian measures on locally compact abelian groups. **(84a:60017)**

Harris, Bruno Triple products, modular forms, and harmonic volumes. **(84j:10026)**

Hazod, Wilfried Stable probabilities on locally compact groups. **(84m:60019)**

Heyer, Herbert ★Вероятностные меры на локально компактных группах. (Russian) [Probability measures on locally compact groups] **(84a:60018)**

Hulanicki, A. See Byczkowska, H., **(84a:60016)**

Ibni-Oumar Représentation intégrale des mesures de type positif. (English summary) [Integral representation of positive type measures] **(84c:43003)**

Janssen, Arnold Continuous convolution semigroups with unbounded Lévy measures on locally compact groups. **(84c:60017)**

Khan, M. Ahmad A theorem on power-open LCA groups and its consequences. **(84b:22009)**

Kinzi, Franz Convolution powers of probability measures on locally compact semigroups. **(84b:60008)**

McCrudden, M. Local tightness of convolution semigroups over locally compact groups. **(84b:60009)**

(Mirantsev, V. G.) See Heyer, Herbert, **(84a:60018)**

(Molchanov, S. A.) See Heyer, Herbert, **(84a:60018)**

Paterson, Alan L. T. A nonprobabilistic approach to Poisson spaces. **(84c:60016)**

Ressel, Paul On additively correlated random processes. **(84j:60046)**

(Sazonov, Vyacheslav Vasil'evich) See Heyer, Herbert, **(84a:60018)**

Sekiuchi, Jiro Invariant measures on orbits associated to a symmetric pair. **(84i:22011)**

Talagrand, Michel Un théorème de théorie de la mesure, lié à deux théorèmes de Mokobodzki. [A theorem of measure theory related to two theorems of Mokobodzki] **(84m:28008)**

(Ufyanov, V. V.) See Heyer, Herbert, **(84a:60018)**

Williamson, John Hunter See Duncan, John, **(84a:43005)**

Yang, Ya Li On the quasi-invariant measures on a commutative Lie group and the corresponding topology. (Chinese. English summary) **(84j:22030)**

43A07 Means on groups, semigroups, etc.

Adyan, S. I. Random walks on free periodic groups. (Russian) **84m:43001**

Lust-Piquard, Françoise Éléments ergodiques et totalement ergodiques dans $L^\infty(\Gamma)$. (English summary) [Ergodic and totally ergodic elements in $L^\infty(\Gamma)$] **84b:43003**

Promislow, David Nonexistence of invariant measures. **84c:43001**

Rajagopalan, M. (with Ramakrishnan, P. V.) ★Uses of βS in invariant means and extremely left amenable semigroups. **84f:43002**

Ramakrishnan, P. V. See Rajagopalan, M., **84f:43002**

Rangan, G. On the existence of non-Archimedean valued invariant means. **84d:43003**

Rubio de Francia, José Luis Correction to: "Nets of subgroups in locally compact groups" [Comment. Math. Prace Mat. 20 (1977/78), no. 2, 453-466; MR 80c:43002]. **84c:43001**

Sakai, Kouichi Characterization of extremely amenable semigroups with a unique invariant mean. **84f:43003**

Wong, James C. S. On the relation between left thickness and topological left thickness in semigroups. **84c:43002**

Left thickness, left amenability and extreme left amenability. **84c:43003**

secondary classifications:

Anantharaman-Delaroche, C. Action moyennable d'un groupe localement compact sur une algèbre de von Neumann. II. (English summary) [Amenable action of a locally compact group on a von Neumann algebra. II] **(84d:22012)**

Dubins, Lester E. Towards characterizing the set of ergodic probabilities. **(84c:28023)**

Sujan, Stefan Generators for amenable group actions. **(84g:28022)**

43A10 Measure algebras on groups, semigroups, etc.

Dhar, R. K. (with Vasudeva, H. L.) $M(R, X)$ with order convolution. **84b:43003**

Kanjin, Yüichi On the structure semigroups of L -subalgebras generated by spectral measures. **84c:43002**

Homomorphisms and structure semigroups of spectral measure algebras. **84m:43002**

Karanikas, C. A note on a Wiener-Pitt theorem on Wiener groups. **84j:43002**

Papadopoulos, Susanna (with Ritter, Gunter) On integral representation and the Choquet boundary for convolution algebras of measures. **84a:43002**

Ritter, Gunter See Papadopoulos, Susanna, **84a:43002**

Vasudeva, H. L. See Dhar, R. K., **84b:43003**

secondary classifications:

Bloom, Walter R. Infinitely divisible measures on hypergroups. **(84c:60022)**

Grunbaek, Niels Weighted discrete convolution algebras. **(84b:46068)**

Karanikas, C. S.I.P. measures on metrizable groups. **(84m:43006)**

Przebinda, Tomasz Holomorphy of a class of semigroups of measures operating on $L^p(G/H)$. **(84c:47043)**

Pytlík, T. Radial functions on free groups and a decomposition of the regular representation into irreducible components. **(84a:22017)**

Sato, Enji On maximal ideals depending on some thin sets in $M(G)$. **(84b:43007)**

43A15 L^p -spaces and other function spaces on groups, semigroups, etc.

Bachelis, Gregory F. Some radical quotients in harmonic analysis. **84c:43001**

Baker, John Walter (with Pym, John S.; Vasudeva, H. L.) Totally ordered measure spaces and their L^p algebras. **84c:43004**

Bourgain, Jean Translation invariant complemented subspaces of L^p . **84f:43004**

Bürger, Reinhard Functions of translation type and solid Banach spaces of functions. **84a:43003**

Cowling, Michael G. Harmonic analysis on semigroups. **84b:43004**

Crombez, G. (with Govaerts, W.) The convolution-induced topology on $L_\infty(G)$ and linearly dependent translates in $L_1(G)$. **84d:43004**

Datry, Christian Modules de Banach et algèbres de Segal du type $U^q(S)$. (English summary) [Banach modules and Segal algebras of $U^q(S)$ type] **84c:43002**

Déchamps-Gondim, Myriam Sur une caractérisation des sous-espaces complémentés invariants de $L^p(G)$, d'après J. Bourgain. [On a characterization of the invariant complemented subspaces of $L^p(G)$, following J. Bourgain] (See **84c:43001**)

Domar, Yngve Bilaterally translation-invariant subspaces of weighted $L^p(\mathbb{R})$. (See **84c:46001**)

A solution of the translation-invariant subspace problem for weighted L^p on \mathbb{R} , \mathbb{R}^+ or \mathbb{Z} . **84d:43005**

Feichtinger, Hans G. A compactness criterion for translation invariant Banach spaces of functions. (Russian summary) **84f:43005**

Govaerts, W. See Crombez, G., **84d:43004**

Losert, Viktor w^* -closed subalgebras of $L^\infty(G)$. **84d:43006**

Loy, Richard J. Function spaces on the unit circle. **84c:43005**

McKennon, Kelly (with Novak, David) The algebra of test functions on a locally compact abelian group. **84i:43002**

Novak, David See McKennon, Kelly, **84i:43002**

Ouyang, Guang Zhong (with Yu, Shu Mo) The approximate identity of Segal algebras $S_q(G)$. (Chinese. English summary) **84b:43005**

Parthasarathy, Krishnan See Tewari, U. B., **84i:43006**

Pym, John S. See Baker, John Walter; et al., **84c:43004**

Quek, T. S. (with Yap, Leonard Y. H.) Multipliers of Lipschitz spaces on a certain class of groups. **84g:43003**

- Ruzsa, Imre Z. (with Székely, Gábor J.) Convolution quotients of nonnegative functions. **84j:43003**
 Székely, Gábor J. See Ruzsa, Imre Z., **84j:43003**
 Székelyhidi, László Note on exponential polynomials. **84k:43003**
 Tewari, U. B. (with Parthasarathy, Krishnan) A theorem on abstract Segal algebras over some commutative Banach algebras. **84k:43006**
 Travaglini, Giancarlo Weyl functions and the A_p condition on compact Lie groups. **84a:43004**

The translation invariant uniform approximation property for compact groups. **84e:43006**

- Vasudeva, H. L. See Baker, John Walter; et al., **84e:43004**
 Ward, J. A. Weighted algebras of integrable functions. **84g:43004**
 Wu, Triu Ch'iang Duality on p -Fourier algebras and its application to multipliers. **84h:43007**
 Yap, Leonard Y. H. See Quek, T. S., **84g:43003**
 Yu, Shu Mo See Ouyang, Guang Zhong, **84h:43005**

secondary classifications:

- Aleksandrov, G. A. Equivalent locally uniformly convex renorming of a Banach space of continuous functions on a compact topological group. (Russian) **(84i:46034)**
 Bloom, Walter R. Absolute convergence of Fourier series on totally disconnected groups. **(84d:43009)**
 (with Sussich, Joseph F.) The degree of approximation by positive linear operators on compact connected abelian groups. **(84g:41030)**
 Braun, W. (with Feichtinger, Hans G.) Banach spaces of distributions having two module structures. **(84h:46062)**
 Dinculeanu, Nicolae Weak compactness criteria in function spaces over a locally compact group. **(84d:46045)**
 On Kolmogorov-Tamarkin and M. Riesz compactness criteria in function spaces over a locally compact group. **(84d:46044)**
 Dreseler, B. Norms of zonal spherical functions and Fourier series on compact symmetric spaces. **(84j:43010)**
 Feichtinger, Hans G. See Braun, W., **(84h:46062)**
 Fournier, John J. F. On the Hausdorff-Young theorem for amalgams. **(84m:43004)**
 Johnson, David Lee A new proof of the L^p -conjecture for locally compact abelian groups. **(84d:22008)**
 Oberlin, Daniel M. A convolution property of the Cantor-Lebesgue measure. **(84f:43001)**
 Onneweer, C. W. Generalized Lipschitz spaces and Herz spaces on certain totally disconnected groups. **(84f:43010)**
 Rezola Solana, María Luisa \star Subespacios invariantes y aproximación en espacios de funciones medibles. (Spanish) [Invariant subspaces and approximation in spaces of measurable functions] **(84c:47005)**
 Schochetman, I. E. Integral operators in the theory of induced Banach representations. II. The bundle approach. **(84c:22009)**
 Sussich, Joseph F. See Bloom, Walter R., **(84g:41030)**
 Umeda, Tōru A characterization of the identity operator on L^∞ -spaces and its application to locally compact groups. **(84i:47047)**

43A17 Analysis on ordered groups, H^p -theory

- Bagchi, Somesh Chandra Invariant subspaces of vector valued function spaces on Bohr groups and multivariate prediction theory. **84d:43007**
 Pigno, Louis (with Smith, Brent) A Littlewood-Paley inequality for analytic measures. **84d:43008**
 (with Smith, Brent) Quantitative behaviour of the norms of an analytic measure. **84h:43004**
 Smith, Brent See Pigno, Louis, **84h:43004** and **84d:43008**
 Tanaka, Jun-ichi Cocycles and local product decomposition. **84k:43004**

secondary classifications:

- Glicksberg, Irving Spectra of invariant uniform and transform algebras. **(84e:46051)**
 McDonald, John N. Measures on the torus which are real parts of holomorphic functions. **(84k:32003)**
 Pigno, Louis (with Smith, Brent) On measures of analytic type. **(84a:43001)**
 Smith, Brent See Pigno, Louis, **(84a:43001)**
 Suna, Satoshi On completely singular measures orthogonal to Dirichlet algebras. (Japanese) **(84h:46065)**
 Yamaguchi, Hiroshi Some multipliers on the space consisting of measures of analytic type. **(84j:43006a)**
 Some multipliers on the space consisting of measures of analytic type. II. **(84j:43006b)**

43A20 L^1 -algebras on groups, semigroups, etc.

- Barnes, Bruce A. Ideal and representation theory of the L^1 -algebra of a group with polynomial growth. **84h:43008**
 Chen, Chang Pao Constructions of the maximal strongly character invariant Segal algebras and their applications. **84j:43004**
 Duncan, John (with Williamson, John Hunter) Spectra of elements in the measure algebra of a free group. **84a:43005**
 Kaniuth, Eberhard On primary ideals in group algebras. **84e:43003**
 Williamson, John Hunter See Duncan, John, **84a:43005**
 Willis, George A. Approximate units in finite codimensional ideals of group algebras. **84f:43006**

Factorization in codimension one ideals of group algebras. **84g:43005**

secondary classifications:

- Boidol, J. \ast -regularity of some classes of solvable groups. **(84g:22016)**
 Bomash, E. M. Non-Hermitian group algebras. (Russian) **(84i:22007)**

- Chang, Hong Jean On some algebraic properties of H^1 . **(84m:46061)**
 Cowie, E. R. An analytic characterization of groups with no finite conjugacy classes. **(84d:46074)**
 Dales, H. Garth (with Willis, George A.) Cofinite ideals in Banach algebras, and finite-dimensional representations of group algebras. **(84h:46061)**
 Dinculeanu, Nicolae Uniform σ -additivity in spaces of Bochner or Pettis integrable functions over a locally compact group. **(84f:28004)**
 Dutta, M. See Tewari, U. B.; et al., **(84e:46082)**
 Feichtinger, Hans G. Banach spaces of distributions defined by decomposition methods and some of their applications. (See **84a:00012**)
 A compactness criterion for translation invariant Banach spaces of functions. (Russian summary) **(84f:43005)**
 Henrichs, R. W. (with Skudlarek, H.-L.) Onesided harmonic analysis and uniform continuity. **(84g:22009)**
 Ludwig, Jean On primary ideals in the group algebra of a nilpotent Lie group. **(84h:22016)**
 Madan, Shobha See Tewari, U. B.; et al., **(84e:46082)**
 Poguntke, Detlev Einfache Moduln über gewissen Banachschen Algebren: ein Imprimitivitätssatz. [Simple modules over certain Banach algebras: an imprimitivity theorem] **(84i:22008)**
 Sinclair, Allan M. \star Continuous semigroups in Banach algebras. **(84h:46053)**
 Skudlarek, H.-L. See Henrichs, R. W., **(84g:22009)**
 Tewari, U. B. (with Dutta, M.; Madan, Shobha) Tensor products of commutative Banach algebras. **(84e:46082)**
 Willis, George A. See Dales, H. Garth, **(84h:46061)**

43A22 Homomorphisms and multipliers of function spaces on groups, semigroups, etc.

- Baronti, Marco (with Foresti, Genzianella) An example of asymmetry of convolution operators. (Italian summary) **84h:43009**
 Chang, Hung Chih A note on Segal algebras. **84m:43003**
 Crombez, G. Compactness and almost periodicity of multipliers. **84f:43007**
 Foresti, Genzianella See Baronti, Marco, **84h:43009**
 Fournier, John J. F. On the Hausdorff-Young theorem for amalgams. **84m:43004**
 Lambertson, Damien Spectre d'opérateurs de convolution définis sur L^p à valeurs vectorielles. (English summary) [Spectra of convolution operators defined on L^p with vector values] **84h:43005**
 Parthasarathy, Krishnan See Tewari, U. B., **84a:43006** and **84j:43005**
 Quek, T. S. (with Yap, Leonard Y. H.) Fourier multipliers of Lipschitz spaces. **84h:43004**
 (with Yap, Leonard Y. H.) Fourier multipliers on compact groups. **84h:43010**
 Szwarc, Ryszard Convolution operators of weak type $(2, 2)$ which are not of strong type $(2, 2)$. **84f:43008**
 Tewari, U. B. (with Parthasarathy, Krishnan) Isomorphisms of some Segal algebras and their multiplier algebras. **84a:43006**
 (with Parthasarathy, Krishnan) Compact multipliers of Segal algebras. **84j:43005**
 Yamaguchi, Hiroshi Some multipliers on the space consisting of measures of analytic type. **84j:43006a**
 Some multipliers on the space consisting of measures of analytic type. II. **84j:43006b**
 Yap, Leonard Y. H. See Quek, T. S., **84h:43010** and **84h:43004**

secondary classifications:

- Bachelis, Gregory F. Some radical quotients in harmonic analysis. **(84k:43001)**
 Corwin, Lawrence Tempered distributions on Heisenberg groups whose convolution with Schwartz class functions is Schwartz class. **(84e:22010)**
 Crombez, G. (with Govaerts, W.) Strongly and weakly almost periodic multipliers from $L_1(G)$ to $L_\infty(G)$. **(84g:43011)**
 (with Govaerts, W.) Multipliers from $L_1(G)$ into $L_\infty(G)$ which are not almost weakly compact. **(84g:47018)**
 Datry, Christian Modules de Banach et algèbres de Segal du type $U^q(S)$. (English summary) [Banach modules and Segal algebras of $U^q(S)$ type] **(84k:43002)**
 Eschmeier, Jörg Operator decomposability and weakly continuous representations of locally compact abelian groups. **(84e:47045)**
 Govaerts, W. See Crombez, G., **(84g:43011)** and **(84g:47018)**
 Grünbaum, F. Alberto (with Longhi, L.; Perlstadt, Marci) Differential operators commuting with finite convolution integral operators: some nonabelian examples. **(84f:43013)**
 Khalil, Roshdi Pointwise multipliers. (Arabic summary) **(84c:46074)**
 Lewin, Jonathan W. Automatic continuity of measurable group homomorphisms. **(84j:22004)**
 Longhi, L. See Grünbaum, F. Alberto; et al., **(84f:43013)**
 Perlstadt, Marci See Grünbaum, F. Alberto; et al., **(84f:43013)**
 Quek, T. S. (with Yap, Leonard Y. H.) Multipliers of Lipschitz spaces on a certain class of groups. **(84g:43003)**
 Shteinberg, A. M. Inequalities of weak type for translation-invariant operators. (Russian. English and Georgian summaries) **(84e:47041)**
 Tateoka, Jun Fourier multipliers over a local field. **(84h:43008)**
 Umeda, Tōru A characterization of the identity operator on L^∞ -spaces and its application to locally compact groups. **(84i:47047)**
 Wu, Triu Ch'iang Duality on p -Fourier algebras and its application to multipliers. **(84h:43007)**
 Yap, Leonard Y. H. See Quek, T. S., **(84g:43003)**

43A25 Fourier and Fourier-Stieltjes transforms on locally compact abelian groups

- Bloom, Walter R. Absolute convergence of Fourier series on totally disconnected groups. **84d:43009**

- Inoue, Junji On a lifting problem of Fourier-Stieltjes transforms of measures. **84f:43009**
 Kishiyakov, S. V. Un théorème de correction de type Men'lov. (English summary) [A correction theorem of Men'shov type] **84d:43010**
 Méta, J.-F. Mesures τ -idempotentes de norme bornée. [τ -idempotent measures with bounded norm] **84c:43007**
 Onneweer, C. W. Generalized Lipschitz spaces and Herz spaces on certain totally disconnected groups. **84f:43010**
 Osipov, V. F. Symbolic calculus in the algebra of absolutely convergent Fourier integrals. (Russian. English summary) **84c:43005**
 Price, John F. Littlewood's conjecture for Dirichlet kernels. **84g:43006**

secondary classifications:

- Arveson, William The harmonic analysis of automorphism groups. **(84m:46085)**
 Basit, Bolis Unconditional convergent series and subalgebras of $C_0(X)$. (Italian summary) **(84d:46027)**
 Belley, Jean-Marc Les fonctions additives en analyse harmonique. [Additive functions in harmonic analysis] **(84g:43007)**
 Brown, Gavin (with Moran, William) Probability measures with trivial Stam groups. **(84c:60015)**
 Connes, Alain (with Moscovici, Henri) The L^2 -index theorem for homogeneous spaces of Lie groups. **(84f:58108)**
 Fournier, John J. F. On the Hausdorff-Young theorem for amalgams. **(84m:43004)**
 Lake, Jane Some noncritical idempotents in the closure of the characters in the maximal ideal space of $M(D_2)$. **(84g:43002)**
 McKennon, Kelly (with Novak, David) The algebra of test functions on a locally compact abelian group. **(84i:43002)**
 Meaney, Christopher Divergent Jacobi polynomial series. **(84c:42040)**
 Moran, William See Brown, Gavin. **(84c:60015)**
 Moscovici, Henri See Connes, Alain. **(84f:58108)**
 Novak, David See McKennon, Kelly. **(84i:43002)**
 Pigno, Louis (with Smith, Brent) Quantitative behaviour of the norms of an analytic measure. **(84b:43004)**
 Smith, Brent See Pigno, Louis. **(84b:43004)**
 Stegeman, J. D. On the constant in the Littlewood problem. **(84m:42006)**

43A30 Fourier and Fourier-Stieltjes transforms on nonabelian groups and on semigroups, etc.

- Bloom, Walter R. (with Heyer, Herbert) The Fourier transform for probability measures on hypergroups. **84b:43006**
 (with Heyer, Herbert) Convergence of convolution products of probability measures on hypergroups. **84b:43006**
 Heyer, Herbert See Bloom, Walter R., **84b:43006** and **84b:43006**
 Ibn-Umar Representation intégrale des mesures de type positif. (English summary) [Integral representation of positive type measures] **84c:43003**

secondary classifications:

- Bourgain, Jean A Hausdorff-Young inequality for B -convex Banach spaces. **(84d:46014)**
 Chao, Wèn Min Fourier transforms of the stabilized invariant integrals. **(84j:22014)**
 Herb, Rebecca A. Fourier inversion and the Plancherel theorem for semisimple real Lie groups. **(84c:22013)**
 Ibn-Umar Representation intégrale des mesures de type positif. (English summary) [Integral representation of positive type measures] **(84c:43003)**
 Kawazoe, Takeshi Fourier transform of L^p on real rank 1 semisimple Lie groups. **(84d:22016)**
 Nghiêm Xuân Hai The Fourier integral transform on nilpotent Lie groups. **(84j:22011)**
 Price, John F. Littlewood's conjecture for Dirichlet kernels. **(84g:43006)**
 Tsuchikawa, Masao The Plancherel transform on $SL_2(k)$ and its application to the decomposition of tensor products of irreducible representations. **(84c:22020)**
 Vergne, Michèle A Poisson-Plancherel formula for semisimple Lie groups. **(84d:22028)**

43A32 Other transforms and operators of Fourier type

secondary classifications:

- Helgason, Sigurdur Ranges of Radon transforms. **(84b:44016)**
 43A35 Positive definite functions on groups, semigroups, etc.
 Arendt, Wolfgang (with De Cannière, Jean) Order isomorphisms of Fourier algebras. **84b:43011**
 Belley, Jean-Marc Les fonctions additives en analyse harmonique. [Additive functions in harmonic analysis] **84g:43007**
 Christensen, Jens Peter Reus (with Ressel, Paul) Norm-dependent positive definite functions on B -spaces. **84j:43007**
 De Cannière, Jean See Arendt, Wolfgang. **84b:43011**
 Kahane, Jean-Pierre Hélices et quasi-hélices. [Helices and quasihelices] **84i:43005**
 Lasser, Rupert Bochner theorems for hypergroups and their applications to orthogonal polynomial expansions. **84m:43005**
 Ressel, Paul See Christensen, Jens Peter Reus. **84j:43007**

secondary classifications:

- Erven, Joachim (with Falkowski, Bernd-Jürgen) Continuous cohomology, infinitely divisible positive definite functions and continuous tensor products for $SU(1,1)$. **(84j:60019)**
 Falkowski, Bernd-Jürgen See Erven, Joachim. **(84j:60019)**
 Je, Hai Gon On the Bochner-Herglotz-Weil-Raikov theorem. (Korean summary) **(84a:46118)**

- Karpushev, S. I. Conditionally positive-definite functions on locally compact groups and the Lévy-Khinchin formula. (Russian. English summary) **(84f:22019)**
 See also Vershik, A. M., **(84d:22010)**
 Ressel, Paul A general Hoeffding type inequality. **(84c:60019)**
 Saworotnow, Parfeny P. Generalized positive definite functions and stationary processes. **(84j:60045)**
 Vershik, A. M. (with Karpushev, S. I.) Cohomology of groups in unitary representations, neighborhood of the identity and conditionally positive definite functions. (Russian) **(84d:22010)**
 Wulfsohn, Aubrey Factorisation of characteristic functions on noncommutative groups. **(84j:60020)**

43A40 Character groups and dual objects

secondary classifications:

- Azcél, J. Some good and bad characters I have known and where they led (harmonic analysis and functional equations). **(84j:39009)**
 French, W. P. (with Luukkainen, Jouni; Price, John F.) The Tannaka-Krein duality principle. **(84f:22011)**
 Luukkainen, Jouni See French, W. P.; et al., **(84f:22011)**
 Petz, Dénes Locally compact groups: the group von Neumann algebra and duality. (Hungarian) **(84c:22008)**
 Price, John F. See French, W. P.; et al., **(84f:22011)**
 Sundberg, Carl (with Wolff, Thomas H.) Interpolating sequences for QA_B . **(84c:30078)**
 Tatsumi, Nobuhiko A duality theorem for factor spaces. **(84f:22012)**
 Wolff, Thomas H. See Sundberg, Carl. **(84c:30078)**

43A45 Spectral synthesis on groups, semigroups, etc.

- Colella, David On spectral synthesis for sets of the form $E = \text{int}(\overline{E})$. **84j:43008**
 Ludwig, Jean On the spectral synthesis problem for points in the dual of a nilpotent Lie group. **84c:43007**
 Murali, Takafumi Lacunary series and ranges of nonsynthesis. **84b:43012**
 Osipov, V. F. On the pseudomeasures $\delta(a-f)\mu$ and $\delta(a-f)\mu$ for the algebra of absolutely convergent Fourier integrals. (Russian. English summary) **84d:43011**
 Fibration of a group of characters into level sets of a nonsynthesizable function. **(Russian. English summary) 84c:43008**
 Salinger, D. L. (with Stegeman, J. D.) Difference spectra of ideals for nonmetrizable groups. **84c:43007**
 Stegeman, J. D. See Salinger, D. L., **84c:43007**

secondary classifications:

- Braun, Amiram (with Weit, Yitzhak) On invariant subspaces of continuous vector valued functions. **(84h:42022)**
 Hauenschild, Wilfried (with Kaniuth, Eberhard; Kumar, Ajay) Ideal structure of Beurling algebras on $[FC]^-$ groups. **(84m:22007)**
 Kaniuth, Eberhard See Hauenschild, Wilfried; et al., **(84m:22007)**
 Kumar, Ajay See Hauenschild, Wilfried; et al., **(84m:22007)**
 Osipov, V. F. Symbolic calculus in the algebra of absolutely convergent Fourier integrals. (Russian. English summary) **(84c:43005)**
 Romo, John G. Spectral synthesis in Banach modules. II. **(84g:46072)**
 Weit, Yitzhak See Braun, Amiram. **(84h:42022)**

43A46 Special sets (thin sets, Kronecker sets, Helson sets, Ditkin sets, Sidon sets, etc.)

- Bourgain, Jean Sur les ensembles d'interpolation pour les mesures discrètes. (English summary) [On interpolation sets for discrete measures] **84c:43004**
 Fournier, John J. F. (with Pigno, Louis) Analytic and arithmetic properties of thin sets. **84h:43013**
 Hartman, Stanislaw A new class of particular sets in harmonic analysis. (Italian summary) **84g:43008a**
 Errata: "A new class of particular sets in harmonic analysis". **84g:43008b**
 Karanikas, C. S.I.P. measures on metrizable groups. **84m:43006**
 Kaufman, Robert P. On the weak L^1 space and singular measures. (French summary) **84i:43006**
 McGehee, O. Carruth (with Woodward, Gordon S.) Continuous manifolds in \mathbb{R}^n that are sets of interpolation for the Fourier algebra. **84b:43014**
 Miles, Frank B. A note on Helson sets. **84g:43009**
 Pigno, Louis See Fournier, John J. F., **84h:43013**
 Pisier, Gilles Arithmetic characterizations of Sidon sets. **84b:43015**
 Sato, Enji On maximal ideals depending on some thin sets in $M(G)$. **84b:43007**
 Woodward, Gordon S. On Bohr cluster sets. **84d:43012**
 See also McGehee, O. Carruth, **84b:43014**

secondary classifications:

- Brown, Gavin Commutative harmonic analysis. **(84b:43002)**
 Oberlin, Daniel M. Hausdorff dimension and interpolation by certain function spaces. **(84b:42010)**
 Orlov, E. V. On Fourier coefficients over Sidon sets. (Russian. English summary) **(84d:42009)**

43A50 Convergence of Fourier series and of inverse transforms

- Bradley, John Scott Interpolation and Lipschitz classes. **84f:43011**
 Shcherbakov, V. I. Pointwise convergence of Fourier series with respect to multiplicative systems. (Russian. English summary) **84d:43013**

- Simon, P  ter On the divergence of Vilenkin-Fourier series. **84c:43007**
 Wade, William R. (with Yoneda, Kaoru) Erratum to: "Uniqueness and quasimeasures on the group of integers of a p -series field" [Proc. Amer. Math. Soc. **84** (1982), no. 2, 202-206; MR **83c:43010**]. **84c:43008**
 Yoneda, Kaoru See Wade, William R., **84c:43008**

secondary classifications:

- Dreseler, B. Norms of zonal spherical functions and Fourier series on compact symmetric spaces. **(84j:43010)**
 Inglis, Ian R. Bernstein's theorem and the Fourier algebra of the Heisenberg group. (Italian summary) **(84g:43014)**
 Jamn  uskas, Algimantas Double series of orthogonal polynomials. (Russian. English and Lithuanian summaries) **(84h:42025)**
 Yang, Jin Gen A proof of a formula in Fourier analysis on the sphere. **(84h:43029)**

43A55 Summability methods on groups, semigroups, etc. [See also 40J05.]

secondary classifications:

- Heyer, Herbert Convolution semigroups of probability measures on Gel'fand pairs. **(84m:60020)**

43A60 Almost periodic functions on groups and semigroups and their generalizations (recurrent functions, distal functions, etc.); almost automorphic functions

- Basit, Bolis Spectral characterization of abstract functions. **84g:43010**
 Chou, Ching Weakly almost periodic functions and Fourier-Stieltjes algebras of locally compact groups. **84c:43008**
 Crombez, G. (with Govaerts, W.) Strongly and weakly almost periodic multipliers from $L_1(G)$ to $L_\infty(G)$. **84g:43011**
 Dangello, F. (with Lindahl, R.) Semidirect product compactifications. **84j:43009**
 Drinotiyewiy, Heneri A. M. Nonseparability of quotient spaces of function algebras on topological semigroups. **84h:43016**
 Almost convergent and weakly almost periodic functions on a semigroup. **84g:43012**
 Govaerts, W. See Crombez, G., **84g:43011**
 Junghenn, H. D. Distal compactifications of semigroups. **84h:43017**
 Lindahl, R. See Dangello, F., **84j:43009**
 Milnes, Paul Almost periodic compactifications of direct and semidirect products. **84h:43018**
 N'Gu  r  kata, Gaston Mandata Quelques remarques sur les fonctions asymptotiquement presque automorphes. [Some remarks on asymptotically almost automorphic functions] **84k:43009**
 Romanelli, Silvia Almost periodic functions with respect to subgroups and corresponding invariant means. (Italian. English summary) **84m:43007**
 Ruppert, Wolfgang On semitopological compactifications of nonabelian groups. **84c:43009**
 Venkataraman, Krishnaswamy Boolean valued almost periodic functions: existence of the mean. **84f:43012**

secondary classifications:

- Crombez, G. (with Govaerts, W.) Multipliers from $L_1(G)$ into $L_\infty(G)$ which are not almost weakly compact. **(84g:47018)**
 Compactness and almost periodicity of multipliers. **(84f:43007)**
 Govaerts, W. See Crombez, G., **(84g:47018)**
 Levitan, B. M. (with Zhikov, V. V.) \star Almost periodic functions and differential equations. **(84g:34004)**
 (Longdon, L. W.) See Levitan, B. M.; et al., **(84g:34004)**
 Lust-Piquard, Fran  oise   l  ments ergodiques et totalement ergodiques dans $L^\infty(\Gamma)$. (English summary) [Ergodic and totally ergodic elements in $L^\infty(\Gamma)$] **(84h:43003)**
 Milnes, Paul Semigroup compactifications of direct and semidirect products. **(84m:22003)**
 Ruppert, Wolfgang On structural methods and results in the theory of compact semitopological semigroups. **(84m:22004)**
 Sz  kelyhidi, L  szl   Note on exponential polynomials. **(84k:43003)**
 Zhikov, V. V. See Levitan, B. M., **(84g:34004)**

43A65 Representations of groups, semigroups, etc. [See also 22Dxx.]

- J  rgensen, Palle E. T. A generalization to locally compact abelian groups of a spectral problem for commuting partial differential operators. **84h:43019**
 Taylor, Keith F. Geometry of the Fourier algebras and locally compact groups with atomic unitary representations. **84h:43020**

secondary classifications:

- Barnes, Bruce A. A note on separating families of representations. **(84k:22006)**
 D'Antoni, Claudio (with Longo, Roberto; Zsid  , L  szl  ) A spectral mapping theorem for locally compact groups of operators. **(84c:47058)**
 Longo, Roberto See D'Antoni, Claudio; et al., **(84c:47058)**
 Stoeckel, J. Individual boundedness condition for positive definite sesquilinear form valued kernels. **(84j:47072)**
 Sz  kelyhidi, L  szl   Note on exponential polynomials. **(84k:43003)**
 Zsid  , L  szl   See D'Antoni, Claudio; et al., **(84c:47058)**

43A70 Analysis on specific locally compact abelian groups [See also 12A85.]

- Bloom, Walter R. Absolute convergence of Fourier series on finite-dimensional groups. **84g:43013**
 Hewitt, Edwin (with Ritter, Gunter) Conjugate Fourier series on certain solenoids. **84h:43021**
 Ritter, Gunter See Hewitt, Edwin, **84h:43021**
 Saloff-Coste, Laurent Op  rateurs pseudo-diff  rentiels sur un corps local. (English summary) [Pseudodifferential operators on a local field] **84m:43008**
 Yoneda, Kaoru Positive definite generalized measures on the dyadic field. **84h:43022**

secondary classifications:

- Quek, T. S. (with Yap, Leonard Y. H.) Convergence of Fourier series on compact 0-dimensional groups. **(84g:43001)**
 Simon, P  ter On the divergence of Vilenkin-Fourier series. **(84i:43007)**
 Yap, Leonard Y. H. See Quek, T. S., **(84g:43001)**
 Yoneda, Kaoru Sets of uniqueness for a certain class \mathcal{U}_λ on the dyadic group. **(84m:42038)**

43A75 Analysis on specific compact groups

- Cowling, Michael G. (with Mantero, Anna Maria; Ricci, Fulvio) Pointwise estimates for some kernels on compact Lie groups. (Italian summary) **84h:43023**
 Lichtenstein, Woody Multipole potentials for $SU(n)$ and $SO(n)$. **84h:43024**
 Mantero, Anna Maria See Cowling, Michael G.; et al., **84h:43023**
 Ricci, Fulvio See Cowling, Michael G.; et al., **84h:43023**
 Tateoka, Jun Fourier multipliers over a local field. **84h:43008**

secondary classifications:

- Ag  ev, G. N. (with Vilenkin, N. Ya.; Dzhaferli, G. M.; Rubinshtein, A. I.) \star Мультипликативные системы функций и гармонический анализ на нульмерных группах. (Russian) [Multiplicative systems of functions and harmonic analysis on zero-dimensional groups] **(84h:43001)**
 Dzhaferli, G. M. See Ag  ev, G. N.; et al., **(84h:43001)**
 Rubinshtein, A. I. See Ag  ev, G. N.; et al., **(84h:43001)**
 Vilenkin, N. Ya. See Ag  ev, G. N.; et al., **(84h:43001)**
 Wade, William R. Recent developments in the theory of Walsh series. **(84d:42033)**
 (with Yoneda, Kaoru) Erratum to: "Uniqueness and quasimeasures on the group of integers of a p -series field" [Proc. Amer. Math. Soc. **84** (1982), no. 2, 202-206; MR **83c:43010**]. **(84c:43008)**
 Decay of Walsh series and dyadic differentiation. **(84c:42043)**
 Yoneda, Kaoru See Wade, William R., **(84c:43008)**

43A77 Analysis on general compact groups

- Cibils, Claude Groupe de Witt d'une alg  bre avec involution. [Witt group of an algebra with involution] **84m:43009**

secondary classifications:

- Strichartz, Robert S. Improved Sobolev inequalities. **(84h:46044)**

43A80 Analysis on other specific Lie groups [See also 22E30.]

- Giacalone, Ermanno Hardy's inequality for compact Lie groups. **84h:43025**
 Inglis, Ian R. Bernstein's theorem and the Fourier algebra of the Heisenberg group. (Italian summary) **84g:43014**

secondary classifications:

- Aoki, Shigeru The Paley-Wiener type theorem on the universal covering group of $SL(2, \mathbb{R})$. **(84j:22013)**
 Chao, Wen Min Fourier inversion and Plancherel formula for $Sp(2, \mathbb{R})$. **(84h:22017)**
 Cowling, Michael G. A remark on twisted convolution. **(84g:42015)**
 Gr  nbaum, F. Alberto (with Longhi, L.; Perlstadt, Marci) Differential operators commuting with finite convolution integral operators: some nonabelian examples. **(84f:43013)**
 Janas, Jan On commutators on nilpotent Lie group. **(84m:58168)**
 Kalnins, E. G. (with Manocha, H. L.; Miller, Willard, Jr.) Harmonic analysis and expansion formulas for two-variable hypergeometric functions. **(84a:58091)**
 Leptin, Horst (with M  ller, Detlef Horst) Schranken f  r verschr  nkte Faltungsoperatoren. [Bounds for twisted convolution operators] **(84f:46053)**
 L  vy-Bruhl, Pierre Application de la formule de Plancherel    la r  solubilit   d'op  rateurs invariants    gauche sur des groupes nilpotents d'ordre deux. (English summary) [Application of the Plancherel formula to the solvability of left-invariant operators on second-order nilpotent groups] **(84h:58104)**
 Longhi, L. See Gr  nbaum, F. Alberto; et al., **(84f:43013)**
 Ludwig, Jean Irreducible representations of exponential solvable Lie groups and operators with smooth kernels. **(84g:22025)**
 Manocha, H. L. See Kalnins, E. G.; et al., **(84a:58091)**
 Mauceri, Giancarlo (with Picardello, Massimo A.; Ricci, Fulvio) Twisted convolution, Hardy spaces and H  rmander multipliers. **(84g:42014)**
 Miller, Kenneth G. Invariant pseudodifferential operators on two-step nilpotent Lie groups. **(84i:58118)**
 Miller, Willard, Jr. See Kalnins, E. G.; et al., **(84a:58091)**
 M  ller, Detlef Horst See Leptin, Horst, **(84f:46053)**
 Perlstadt, Marci See Gr  nbaum, F. Alberto; et al., **(84f:43013)**

Phong, D. H. (with Stein, Erwin) Some further classes of pseudodifferential and singular-integral operators arising in boundary value problems. I. Composition of operators. (84j:35163)

Picardello, Massimo A. See Mauceri, Giancarlo; et al. (84g:42014)

Ricci, Fulvio See Mauceri, Giancarlo; et al. (84g:42014)

Rothschild, Linda Preiss Local solvability of second order differential operators on nilpotent Lie groups. (84c:58080)

Schempp, Walter Radar reception and nilpotent harmonic analysis. I. (84m:78024a)

Radar reception and nilpotent harmonic analysis. II. (84m:78024b)

Radar reception and nilpotent harmonic analysis. III. (84m:78024c)

Radar reception and nilpotent harmonic analysis. IV. (84m:78024d)

On the Wigner quasiprobability distribution function. I. (84m:81062a)

On the Wigner quasiprobability distribution function. II. (84m:81062b)

On the Wigner quasiprobability distribution function. III. (84m:81062c)

Sevast'yanov, L. A. An analogue of the Paley-Wiener theorem for metabelian Lie groups. (Russian. English summary) (84c:22024a)

An analogue of the Paley-Wiener theorem for a nilpotent Lie group. (Russian. English summary) (84c:22024b)

Stein, Erwin See Phong, D. H. (84j:35163)

Strese, Hartmut Über den Dirac-Operator auf Grassmann-Mannigfaltigkeiten. [About the Dirac operator on Grassmann manifolds] (84j:58130a)

Zur harmonischen Analyse der Paare $(SO(n), SO(k) \times SO(n-k))$ und

$(SP(n), SP(k) \times SP(n-k))$. [On the harmonic analysis of pairs

$(SO(n), SO(k) \times SO(n-k))$ and $(SP(n), SP(k) \times SP(n-k))$] (84j:58130b)

Spektren symmetrischer Räume. [Spectra of symmetric spaces] (84j:58130c)

Wang, Si Lei A survey of developments in Littlewood-Paley theory. (Chinese) (84k:42016)

43A85 Analysis on homogeneous spaces

Cazzaniga, Franco Hardy's inequality for compact symmetric spaces of rank one. (Italian summary) 84c:43005

Dreseler, B. Norms of zonal spherical functions and Fourier series on compact symmetric spaces. 84j:43010

Eguchi, Masaaki Some properties of Fourier transform on Riemannian symmetric spaces. 84k:43026

(with Kumahara, Keisaku) An L^p Fourier analysis on symmetric spaces.

84c:43010

Folland, G. B. (with Stein, Erwin) ★Hardy spaces on homogeneous groups. 84h:43027

Grünbaum, F. Alberto (with Longhi, L.; Perlstadt, Marci) Differential operators commuting with finite convolution integral operators: some nonabelian examples. 84f:43013

Korányi, Adam On the injectivity of the Poisson transform. 84i:43008

Kumahara, Keisaku See Eguchi, Masaaki. 84c:43010

Lichtenstein, Woody Quadrature, scattering, and representations. 84h:43009

Longhi, L. See Grünbaum, F. Alberto; et al. 84f:43013

Molchanov, V. F. Harmonic analysis on pseudo-Riemannian symmetric spaces of the group $SL(2, \mathbb{R})$. (Russian) 84c:43006

Perlstadt, Marci See Grünbaum, F. Alberto; et al. 84f:43013

Saka, Kōichi Singular integrals on a matrix space. 84h:43028

Stein, Erwin See Folland, G. B. 84h:43027

Yang, Jin Gen A proof of a formula in Fourier analysis on the sphere. 84h:43029

secondary classifications:

Benoist, Yves Analyse harmonique sur les espaces symétriques nilpotents. (English summary) [Harmonic analysis on nilpotent symmetric spaces] (84i:22009)

Borho, Walter (with Brylinski, Jean-Luc) Differential operators on homogeneous spaces. I. Irreducibility of the associated variety for annihilators of induced modules. (84b:17007)

Brylinski, Jean-Luc See Borho, Walter. (84b:17007)

Dreseler, B. (with Soardi, Paolo M.) A Cohen-type inequality for Jacobi expansions and divergence of Fourier series on compact symmetric spaces. (84d:42029)

Friedlander, Leonid Sur le spectre de la perturbation faible d'un opérateur auto-adjoint. (English summary) [On the spectrum of a weak perturbation of a selfadjoint operator] (84f:58110)

Gelfand, I. M. (with Graev, M. I.) Integral transformations connected with two remarkable complexes in a projective space. (Russian) (84m:53070)

(with Graev, M. I.; Roshu, R.) Nonlocal inversion formulas in a problem of integral geometry, connected with p -dimensional planes in real projective space. (Russian) (84d:53078)

Godin, Paul Hypoelliptic and Gevrey hypoelliptic invariant differential operators on certain symmetric spaces. (84i:58131)

Graev, M. I. See Gelfand, I. M.; et al. (84d:53078) and (84m:53070)

Helgason, Sigurdur Ranges of Radon transforms. (84h:44016)

Hirschman, I. I., Jr. (with Liang, D. S.; Wilson, Edward N.) Szegő limit theorems for Toeplitz operators on compact homogeneous spaces. (84d:47033)

Ivanov, Viktor Aleksandrovich Bernstein-Nikol'ski and Favard inequalities on compact homogeneous spaces of rank 1. (Russian) (84m:41022)

Jørgensen, Palle E. T. Spectral theory of finite volume domains in \mathbb{R}^n . (84k:47024)

Kaneda, Eiji The spectra of 1-forms on simply connected compact irreducible Riemannian symmetric spaces. (84c:58224)

Kuchment, P. A. Functions that are periodic in the mean on symmetric spaces. (Russian) (84c:22012)

Liang, D. S. See Hirschman, I. I., Jr.; et al. (84d:47033)

Maius, K. Integral geometry on linear complexes of lines. (Russian) (84f:53060)

Molchanov, V. F. Plancherel's formula for the pseudo-Riemannian space

$SL(3, \mathbb{R})/GL(2, \mathbb{R})$. (Russian) (84h:22029)

Nakajima, Shōichi On invariant differential operators on bounded symmetric domains of type IV. (84f:32039)

Pysiak, Leszek First-order differential G -invariant operators in G -homogeneous vector bundles. (Russian summary) (84j:58135)

Quinto, Eric Todd The invertibility of rotation invariant Radon transforms. (84j:44007a) Erratum: "The invertibility of rotation invariant Radon transforms". (84j:44007b)

Reimann, H. M. Invariant differential operators in hyperbolic space. (84i:58133)

Roshu, R. See Gelfand, I. M.; et al. (84d:53078)

Rubio de Francia, José Luis Weighted norm inequalities for homogeneous families of operators. (84f:42014)

Schlichtkrull, Henrik The Langlands parameters of Flensted-Jensen's discrete series for semisimple symmetric spaces. (84c:22030)

Sekiguchi, Jiro Invariant measures on orbits associated to a symmetric pair. (84i:22011)

Shahshahani, Mehdi M. Invariant hyperbolic systems on symmetric spaces. (84m:58149)

Soardi, Paolo M. See Dreseler, B. (84d:42029)

Strichartz, Robert S. A Poisson summation formula for integrals over quadratic surfaces. (84c:42026)

Improved Sobolev inequalities. (84h:46044)

Terras, Audrey Analysis on positive matrices as it might have occurred to Fourier. (84b:22025)

Thomas, Erik G. F. The trace formula. (84m:47030)

Tsukamoto, Chiaki Spectra of Laplace-Beltrami operators on $SO(n+2)/SO(2) \times SO(n)$ and $Sp(n+1)/Sp(1) \times Sp(n)$. (84h:58108)

Wilson, Edward N. See Hirschman, I. I., Jr.; et al. (84d:47033)

43A90 Spherical functions [See also 22E45, 22E46.]

Korányi, Adam Kelvin transforms and harmonic polynomials on the Heisenberg group. 84f:43014

secondary classifications:

Grinberg, Eric L. Spherical harmonics and integral geometry on projective spaces. (84m:53071)

Herb, Rebecca A. An inversion formula for weighted orbital integrals. (84c:22011)

Hoogenboom, R. ★Intertwining functions on compact Lie groups. I. (84m:22025)

Kato, Shin-ichi Spherical functions and a q -analogue of Kostant's weight multiplicity formula. (84h:22030)

Muta, Yōichi On the spherical functions with one-dimensional K -types and the Paley-Wiener type theorem on some simple Lie groups. (84h:22019)

Rader, Cary Invariant polynomials and zonal spherical functions. (84g:22036)

43A95 Categorical methods [See also 18-XX, 46Mxx.]

43A99 Miscellaneous topics

Berezans'kii, Yu. M. (with Kalyuzhnyi, A. A.) Hypercomplex systems with a locally compact basis. (Russian) 84i:43009

Kalyuzhnyi, A. A. See Berezans'kii, Yu. M. 84i:43009

Lebow, A. (with Schreiber, Morris) Polynomials over groups and a theorem of Fejér and Riesz. 84c:43011

Schreiber, Morris See Lebow, A. 84c:43011

secondary classifications:

Benedetto, John J. A closure problem for signals in semigroup invariant systems. (84h:94001)

Harmonic analysis and spectral estimation. (84h:62131)

Johnson, David Lee Continuity of positive functionals on topological \ast -algebras. (84c:46117)

Schmidt, Franz Banach-space valued stationary processes on partially ordered groups. (84k:60050)

44-XX INTEGRAL TRANSFORMS, OPERATIONAL CALCULUS (For fractional derivatives and integrals, see 26A33. For numerical methods, see 65R10.)

44-01 Elementary exposition, textbooks

Pukhov, G. E. ★Дифференциальные преобразования функций и уравнений. (Russian) [Differential transformations of functions and equations] 84a:44001

secondary classifications:

Babich, V. M. (with Grigor'eva, N. S.) ★Ортогональные разложения и метод Фурье. (Russian) [Orthogonal expansions and the Fourier method] (84j:42035)

Grigor'eva, N. S. See Babich, V. M. (84j:42035)

44-02 Advanced exposition (research surveys, monographs, etc.)

Dimovski, Ivan Kh. ★Convolutional calculus. 84d:44001

(Erdélyi, Arthur) See van Haeringen, H.; et al. 84m:44001

Fenyő, István Verallgemeinerte Integraltransformationen. [General integral transforms] 84k:44001

van Haeringen, H. (with Kok, L. P.) Table errata: *Tables of integral transforms, Vol. I* [McGraw-Hill, New York, 1954; MR 15, 868] by A. Erdélyi, W. Magnus, F.

Oberhettinger and F. G. Tricomi. 84m:44001a

(with Kok, L. P.) Table errata: *Tables of integral transforms, Vol. II* [McGraw-Hill, New York, 1954; MR 16, 468] by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. 84m:44001b

Kok, L. P. See van Haeringen, H. 84m:44001

- (Magnus, Wilhelm) See van Haeringen, H.; et al., 84m:44001a and 84m:44001b
 (Oberhettinger, Fritz) See van Haeringen, H.; et al., 84m:44001a and 84m:44001b
 Okikiolu, G. O. ★Special integral operators. Vol. II. 84m:44002
 (Tricomi, Francesco G.) See van Haeringen, H.; et al., 84m:44001a and 84m:44001b

secondary classifications:

- (Gakhov, F. D.) See Marichev, O. I., (84f:00017)
 (Longdon, L. W.) See Marichev, O. I., (84f:00017)
 Marichev, O. I. ★Handbook of integral transforms of higher transcendental functions. (84f:00017)

Handbook:

Integral transforms See Marichev, O. I., (84f:00017)

Tables:

Integral transforms See Marichev, O. I., (84f:00017)

- 44-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Cormack, A. M. Computed tomography: some history and recent developments. (84g:92006)
 Denkin, Michael A. B. A scandal in Vienna. (84f:01021)
 The development of the Laplace transform, 1737-1937. II. Poincaré to Doetsch, 1880-1937. (84b:01026)
 Radon, Johann Über die Bestimmung von Funktionen durch ihre Integralwerte längs gewisser Mannigfaltigkeiten. [Determination of a function from the values of its integrals along certain manifolds] (84f:01040)
 44-04 Explicit machine computation and programs (not the theory of computation or programming)
 44-06 Proceedings, conferences, etc.
 44A05 General transforms [See also 42A38.]

- Duggal, B. P. On some convolution transforms. 84c:44001
 Finch, David V. (with Solomon, Donald C.) Sums of homogeneous functions and the range of the divergent beam X-ray transform. 84m:44003
 Gupta, K. C. On a study of integral transforms. II. (Hindi. English summary) 84i:44001
 Olariu, Valter Theory of distributions and integral transforms. (Romanian. English summary) 84f:44001
 Radecki, Jerzy On integral transforms of Volterra type preserving convexity. 84f:44002
 Saitoh, Saburo Hilbert spaces induced by Hilbert space valued functions. 84h:44001
 Solomon, Donald C. See Finch, David V., 84m:44003
 Soni, K. (with Soni, R. P.) Slowly varying functions and asymptotic behavior of a class of integral transforms. IV. 84h:44002
 Soni, R. P. See Soni, K., 84h:44002
 Stanković, Miomir S. On a convolution product for the transform which maps derivatives into differences. 84h:44001
 Wang, Zhong De Harmonic analysis with a real frequency function. I. Aperiodic case. 84i:44002

secondary classifications:

- Chorlton, Frank (with Turnock, J.) Solution of a magnetoviscous channel flow problem using integral transforms. (84c:76079)
 Gupta, K. C. On multidimensional integral transforms. (84c:44004)
 Isomichi, Yoshinori Polynomial theory of computer tomography. (Japanese) (84h:92008)
 Lawrynowicz, Julian On determining the switching instants in time-optimal control of linear time-varying plant with disturbances by a suitable choice of an integral transform. (See 84c:34003)
 Sakseena, K. M. Extension of certain integral transforms to generalized functions. (84c:46097)
 Sirovich, Lawrence Boundary effects in neural networks. (84f:92019)
 Smith, Kennan T. Reconstruction formulas in computed tomography. (84f:92013)
 Soni, K. On uniform asymptotic expansion of a class of integral transforms. (84c:41026)
 Turnock, J. See Chorlton, Frank, (84c:76079)

44A10 Laplace transform

- Belov, M. A. The F-A-inversion method for the Laplace integral transform by means of Hermitian polynomials. (Russian) 84f:44003
 Bhattacharya, D. K. General real inversion operator. 84j:44001
 Chakravarty, N. K. On the convergence of Laplace integral. 84g:44001
 Conlan, James (with Koh, E. L.) Further results on the association of variables. (See 84g:93005a)
 Dimovski, Ivan Kh. (with Kiryakova, V. S.) The connection between the integral transformations of Laplace and Obreshkov. (Russian) 84j:44002
 Gupta, K. C. (with Kalla, S. L.; Handa, S.) A study of generalized Laplace transforms involving two variables. 84k:44002
 (with Kalla, S. L.; Handa, S.) On the double inverse Laplace transform of the product of Whittaker and the H -function of two variables. 84k:44003
 Handa, S. See Gupta, K. C.; et al., 84k:44002 and 84k:44003
 Jagerman, D. L. An inversion technique for the Laplace transform. 84c:44002
 Kalla, S. L. See Gupta, K. C.; et al., 84k:44002 and 84k:44003
 Kiryakova, V. S. See Dimovski, Ivan Kh., 84j:44002
 Koh, E. L. See Conlan, James, (See 84g:93005a)
 Koul, C. L. See Raina, R. K., 84c:44002

- Kubenko, V. D. A method of inversion of the integral Laplace transform in nonstationary problems of mathematical physics. (Russian) 84b:44002
 Mishra, Ramadhar Application of generalized q -Laplace transforms to the solution of certain q -integral equations. 84m:44004
 Some fundamental properties of a generalized q -Laplace transform. 84c:44001
 Neamtu, N. (with Zopota, N.) Generalization of a theorem on multiplying images and a theorem on multiplying original functions in the discrete Laplace transform. (Romanian. English summary) 84m:44005
 Raina, R. K. (with Koul, C. L.) On Laplace transforms and their applications. 84c:44002
 Remo, Pasquale On an inversion formula of certain Laplace transforms in dissipative wave propagation. (Italian summary) 84k:44004
 Sova, Miroslav General representability problem for the Laplace transform of exponentially bounded vector-valued functions. (Czech summary) 84g:44002
 Stadtmüller, U. Tauberian theorems for Laplace and Stieltjes transforms. 84k:44005
 Tiwari, A. K. On the Laplace transform of generalized functions. 84f:44004
 Tu, Shih Tong A comonodiffic Laplace transform. 84j:44003
 Zopota, N. See Neamtu, N., 84m:44005

secondary classifications:

- Christensen, Jens Peter Reus (with Ressel, Paul) Norm-dependent positive definite functions on B-spaces. (84j:43007)
 Fedoryuk, M. V. See Maslov, V. P., (84g:58101)
 Hagihara, Satoshi See Ichikawa, Satoshi; et al., (84g:93036)
 Higawara, Tetsuya See Ichikawa, Satoshi; et al., (84g:93036)
 Ichikawa, Satoshi (with Tokoro, Setsuo; Kawasaki, Shuji; Hagihara, Satoshi; Higawara, Tetsuya) Reduction method of calculating high-order Volterra functionals. (84g:93036)
 Kawasaki, Shuji See Ichikawa, Satoshi; et al., (84g:93036)
 Kolbig, K. S. On the integral $\int_0^\infty e^{-\mu t} t^{\mu-1} \log^m t dt$. (84h:33021)
 Maslov, V. P. (with Fedoryuk, M. V.) Logarithmic asymptotic behavior of Laplace integrals. (Russian) (84g:58101)
 Mel'nik, V. I. Tauberian theorems with a remainder for the Laplace operator in the plane. (Russian) (84c:44008)
 Moharir, S. K. A generalised Whittaker transform and some of its properties. (84h:44008)
 Ressel, Paul See Christensen, Jens Peter Reus, (84j:43007)
 Seierstad, Atle Capacity distributions derived from macro productions functions. (84c:90019)
 Sommen, Fransiscus Hypercomplex Fourier and Laplace transforms. II. (84g:46061)
 Tokoro, Setsuo See Ichikawa, Satoshi; et al., (84g:93036)
 Voigt, Jürgen On the abscissa of convergence for the Laplace transform of vector valued measures. (84c:28010)

44A15 Special transforms (Legendre, Hilbert, etc.)

- Akhaury, S. K. Abelian theorem for a distributional generalized Laplace transform. II. 84h:44003
 Bahar, E. The paths of integration for the new generalized Bessel transform. 84d:44002
 Bajracharya, Bhanu Chandra On a distributional Poisson transform. 84f:44005
 Carroll, Robert Wayne On a transform theory involving Whittaker functions. 84h:44004
 Chaudhary, M. S. Hankel type transform of distribution. 84f:44006
 Dube, L. S. Iterated Stieltjes transform of generalized functions. (See 84a:47002)
 Duggal, B. P. Self-reciprocal functions: some remarks. 84h:44005
 Functional equations and linear transformations. V. Self-reciprocal functions. 84d:44003
 On a functional relation satisfied by fractional integrals. 84h:44006
 Erratum: "On the spectrum of a class of integral transforms" [J. Math. Anal. Appl. 78 (1980), no. 1, 41-48; MR 82b:44003]. 84i:44003
 Garg, Mridula A study of a general integral transform with symmetric kernel. 84h:44003
 Glaeske, Hans-Jürgen On a class of integral transformations. (German and Russian summaries) 84m:44006
 Heinig, Hans P. On a Hilbert-type transform. 84b:44004
 Hertle, Alexander On the problem of well-posedness for the Radon transform. 84m:44007
 Lenyuk, M. P. Integral transformations with separated variables (Fourier, Hankel). (Russian) 84j:44004
 Logan, B. F. Hilbert transform of a function having a bounded integral and a bounded derivative. 84b:44005a
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 Makarov, A. P. Reference theorem for the integral Rayleigh transform. (Russian) 84f:44007
 Marichev, O. I. Conditions for the reversibility of Mellin-Barnes integrals. (Russian. English summary) 84j:44005
 Matsuoka, Katsuo Generalized harmonic analysis of functions of two variables. 84m:44008a
 On the generalized Hilbert transforms of functions of two variables. 84m:44008b
 Mishra, Ramadhar Certain theorems on a generalized q -Stieltjes transform. 84h:44007
 Misra, O. P. Distributional G -transformation. 84j:44006
 Moharir, S. K. A generalised Whittaker transform and some of its properties. 84h:44008
 Natterer, Frank Exploiting the ranges of Radon transforms in tomography. 84m:44009
 Nieve de del Pino, M. E. Integral operators involving the confluent hypergeometric function. I. (Spanish. English summary) 84k:44006a
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 Oberlin, Daniel M. (with Stein, Erwin) Mapping properties of the Radon transform. 84a:44002
 Okikiolu, G. O. Convolution and multiplier identities for Hankel-type operators. 84a:44003

- Pandey, J. N. An extension of the Gel'fand-Shilov technique for Hilbert transforms. **84a:44004**
- Pant, S. R. An iteration of the $M_{1,m}$ -transform. **84f:44008**
- Pathak, R. S. (with Singh, O. P.) Finite Hankel transforms of distributions. **84a:44005**
- Peters, James V. The ham sandwich theorem and some related results. **84k:44007**
- Quinto, Eric Todd. The invertibility of rotation invariant Radon transforms. **84j:44007a**
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- Rao, G. L. N. Complex inversion and representation theory for certain distributional generalized integral transformations. **84f:44009**
- Rooney, P. G. On integral transformations with G -function kernels. **84f:44010**
- Saitoh, Saburo. The Weierstrass transform and an isometry in the heat equation. **84k:44008**
- Schwartz, Charles. A class of discontinuous integrals involving Bessel functions. **84b:44006**
- Singh, O. P. See Pathak, R. S., **84a:44005**
- Sinha, Sunil Kumar. The n -dimensional distributional Mellin transformation. **84f:44011**
- Sneddon, Ian N. ★The use of operators of fractional integration in applied mathematics. **84m:44010**
- Stein, Erwin. See Oberlin, Daniel M., **84a:44002**
- Tiwari, A. K. Some theorems on a distributional generalized Stieltjes transform. **84f:44012**
- Ursell, F. Integrals with a large parameter: Hilbert transforms. **84b:44007**
- Verma, T. N. Real inversion formula for the distributional generalized Laguerre transform. **84f:44013**

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- Ablowitz, Mark J. See Fokas, A. S., **(84f:35139)**
- Altenburg, Gerd. Bessel-Transformationen in Räumen von Grundfunktionen über dem Intervall $\Omega=(0, \infty)$ und deren Dualräumen. [Bessel transformations in spaces of test functions on the interval $\Omega=(0, \infty)$ and in their dual spaces] **(84m:46045)**
- Bassetti, B. (with Montaldi, E.; Raciti, M.) Propagators for time-dependent linear and quadratic potentials and inverse Weierstrass transform. **(84b:81046)**
- Beth, Thomas. Finite versions of the Radon-transform based on finite geometric structures. **(84j:92011)**
- Bruggeman, Roelof W. ★Fourier coefficients of automorphic forms. **(84b:10034)**
- Brychkov, Yu. A. (with Prudnikov, A. P.) Integral transformations of generalized functions. (Russian) **(84g:46062)**
- Chen, Isaac I. H. Modified Fourier-Bessel series and finite spherical Hankel transform. **(84c:42044)**
- Choudhary, M. S. n -dimensional Hankel transforms of arbitrary order. **(84b:44010)**
- Chow, Pao Liu. Reconstruction of the mutual coherence function for a moving source. **(84j:78027)**
- Cormack, A. M. Computed tomography: some history and recent developments. **(84g:92006)**
- Dimovski, Ivan Kh. (with Kiryakova, V. S.) The connection between the integral transformations of Laplace and Obreshkov. (Russian) **(84j:44002)**
- Do, Duong D. Transient response of a reactive membrane bounded by two finite reservoirs. **(84c:80010)**
- Finch, David V. (with Solomon, Donald C.) Stability and consistency for the divergent beam X-ray transform. **(84k:92005)**
- Fokas, A. S. (with Ablowitz, Mark J.) The inverse scattering transform for the Benjamin-Ono equation—a pivot to multidimensional problems. **(84f:35139)**
- Fritz, Günter (with Oppel, Ulrich G.) Generalized Radon transformations. **(84g:92006)**
- Gallagher, Neal C., Jr. See Murphy, Patricia K., **(84k:65139)**
- Goedbloed, J. P. Free-boundary high-beta tokamaks. II. Mathematical intermezzo: Hilbert transforms and conformal mapping. **(84c:76081a)**
Free-boundary high-beta tokamaks. III. Free-boundary stability. **(84c:76081b)**
- Gustavsson, Jan (with Peetre, Jaak) Properties of the L function. **(84a:46160)**
- Gutierrez, J. A. (with Lacey, H. E.) On the Hilbert transform for Banach space valued functions. **(84a:42018)**
- Hahn, Marjorie G. (with Hahn, Peter) The pointwise translation problem for the Radon transform in Banach spaces. **(84f:60037)**
(with Hahn, Peter; Klass, Michael J.) Pointwise translation of the Radon transform and the general central limit problem. **(84b:60047)**
- Hahn, Peter. See Hahn, Marjorie G., **(84f:60037)** and **(84b:60047)**
- Indurkar, P. N. (with Saxena, Rajendra K.) Substitution theorem for two-dimensional general transform with symmetric kernel. **(84d:44004)**
- Jacopini, Giuseppe (with Rosati, Mario Valerio) ★A study about some questions concerning the mathematical problem of reconstructing objects from radiographs. **(84i:92019)**
- Jerri, A. J. On general transforms hill functions. **(84b:65007)**
- Jodeit, Max, Jr. (with Shaw, Richard K.) Extension of Stein's L log L result to the closed interval. **(84h:42030)**
- Joshi, Vinayak Gopal (with Saxena, Rajendra K.) Complex inversion and uniqueness theorem for the generalized H -transform. **(84h:33007)**
- Kiryakova, V. S. See Dimovski, Ivan Kh., **(84j:44002)**
- Klass, Michael J. See Hahn, Marjorie G.; et al., **(84b:60047)**
- Kumara Swamy, Y. S. (with Mathur, S. N.) A relation between Gauss's hypergeometric transform and generalized H -function transform. **(84c:33007)**
- Lacey, H. E. See Gutierrez, J. A., **(84a:42018)**
- Li, Yü Chia. Integral transforms of analytic functions on abstract Wiener spaces. **(84j:28021)**
- Logan, B. F. An integral equation connected with the Jacobi polynomials. **(84f:45006)**
- Louis, Alfred K. Approximate inversion of the 3-D Radon transform. **(84j:92013)**
- Lukashenko, T. P. On the A -integral representation of the Hilbert transform and conjugate function. (Russian summary) **(84h:42021)**
- Malgoude, S. P. (with Saxena, Rajendra K.) A representation of H -transformable generalized functions. **(84c:46043)**

- Matevosyan, A. K. Complex Hadamard transform and connected questions. (See **84f:00031**)
- Mathur, S. N. See Kumara Swamy, Y. S., **(84c:33007)**
- Montaldi, E. See Bassetti, B.; et al., **(84b:81046)**
- Moses, Harry E. (with Prosser, Reese T.) Phases of complex functions from the amplitudes of the functions and the amplitudes of the Fourier and Mellin transforms. **(84j:94009)**
- Muckenhoupt, Benjamin. Weighted norm inequalities for the Fourier transform. **(84m:42019)**
- Murphy, Patricia K. (with Gallagher, Neal C., Jr.) Fast algorithm for the computation of the zero-order Hankel transform. **(84k:65139)**
- Natterer, Frank. The identification problem in emission computed tomography. **(84m:92008)**
- Oppel, Ulrich G. See Fritz, Günter, **(84g:92006)**
- Oudin, L. R. The Radon transform in \mathbb{R}^n . The distributions used as a tool for its inversion in circular decomposition and elimination of an additive noise. Systematic tables of transforms. **(84j:92014)**
- Pandey, J. N. The Hilbert transform of Schwartz distributions. **(84g:46064)**
- Peetre, Jaak. See Gustavsson, Jan, **(84a:46160)**
- Peters, James V. A Tauberian theorem for the Radon transform. **(84g:40003)**
The Radon transform: an application to probability theory. **(84c:60050)**
- Prather, C. L. (with Shaw, J. K.) Zeros of successive iterates of multiplier-sequence operators. **(84a:30041)**
- Prosser, Reese T. See Moses, Harry E., **(84j:94009)**
- Prudnikov, A. P. See Brychkov, Yu. A., **(84g:46062)**
- Puro, A. E. Application of the Bromwich expansion in the problem of torsion of a layered medium. (Russian) **(84c:86003)**
- Pykhteev, G. N. ★Приближенные методы вычисления интегралов типа Коши специального вида. (Russian) [Approximate methods for calculating integrals of Cauchy type of a special form] **(84c:30052)**
- Raciti, M. See Bassetti, B.; et al., **(84b:81046)**
- Rooney, P. G. Multipliers for the Mellin transformation. **(84a:42017)**
- Rosati, Mario Valerio. See Jacopini, Giuseppe, **(84i:92019)**
- Roy, Ranjan. On a paper of Ramanujan on definite integrals. **(84d:33001)**
- Saxena, Rajendra K. See Malgoude, S. P., **(84c:46043)**; Indurkar, P. N., **(84d:44004)** and Joshi, Vinayak Gopal, **(84h:33007)**
- Shaw, J. K. See Prather, C. L., **(84a:30041)**
- Shaw, Richard K. See Jodeit, Max, Jr., **(84h:42030)**
- Sinha, Sushil Kumar. On the summability and absolute summability of a generalized Laplace-Stieltjes integral. **(84k:40010)**
- Solomon, Donald C. See Finch, David V., **(84k:92005)**
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- Wachowiak, Jan. A condition for commutativity of Fenchel transform and a convex integral functional, on the space of vector-valued functions. **(84c:46035)**
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- Zhizhishvili, L. V. The validity of A. N. Kolmogorov's theorem for conjugate functions of several variables. (Russian) **(84c:42028)**

44A20 Transforms of special functions

- Agrawal, Ram Kishor. On a two-dimensional H - H integral transform. II. **84m:44011**
- Chang, Peter H. See Naylor, D., **84b:44009**
- Deeba, E. Y. (with Koh, E. L.) The continuous Jacobi transform. **84b:44009**
- Fenyő, István. Die Berechnung einiger Integraltransformationen mit Hilfe von Funktionalgleichungen. [The computation of some integral transforms by the means of functional equations] **84m:44012**
- Goyal, S. P. See Gupta, K. C.; et al., **84k:44009**
- Gupta, K. C. (with Goyal, S. P.; Handa, S.) Fractional integral operators involving two variables. **84k:44009**
- Habibullah, G. M. An integral operator involving a Legendre function. **84f:44014**
- Handa, S. See Gupta, K. C.; et al., **84k:44009**
- Joshi, J. M. C. On the generalized Laplace transform of Lorentz spaces. **84b:44008**
- Kalla, S. L. A class of integral transforms involving orthogonal polynomials. **84k:44010**
(with Villalobos, Alfredo) On a new integral transform. I. **84c:44003**
- Koh, E. L. See Deeba, E. Y., **84b:44009**
- Nasim, Cyril. Integral operators involving Whittaker functions. **84m:44013**
Identities involving iterated integral transforms. **84m:44014**
- Naylor, D. (with Chang, Peter H.) On a formula of inversion. **84b:44009**
On an inversion formula. **84m:44015**
- Nizhnikov, A. I. Integral transformations containing Meijer G -functions. (Russian) **84j:44008**
- Prasad, Y. N. See Singh, Awadhesh Kumar, **84f:44015**
- Singh, Awadhesh Kumar (with Prasad, Y. N.) Basic properties of the transform involving an H -function of r variables as kernel. **84f:44015**
- Verma, T. N. Abelian theorems for the distributional generalized Laguerre transform. **84c:44003**
- Villalobos, Alfredo. See Kalla, S. L., **84c:44003**

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- Chaurasia, V. B. L. See Olkha, G. S., **(84b:33009)**
- Gupta, K. C. (with Kalla, S. L.; Handa, S.) A study of generalized Laplace transforms involving two variables. **(84k:44002)**
(with Kalla, S. L.; Handa, S.) On the double inverse Laplace transform of the product of Whittaker and the H -function of two variables. **(84k:44003)**
- Handa, S. See Gupta, K. C.; et al., **(84k:44002)** and **(84k:44003)**
- Kalla, S. L. See Gupta, K. C.; et al., **(84k:44002)** and **(84k:44003)**

- Khan, B. (with Pathan, M. A.) On certain hypergeometric function of three variables. I. (84g:33006)
- Marichev, O. I. Conditions for the reversibility of Mellin-Barnes integrals. (Russian. English summary) (84j:44005)
- Modi, G. C. See Saxena, Ram Kishore, (84c:33007)
- Nieva de del Pino, M. E. Integral operators involving the confluent hypergeometric function. I. (Spanish. English summary) (84c:44006a)
- Integral operators involving the confluent hypergeometric function. II. (Spanish) (84c:44006b)
- Olkh, G. S. (with Chaurasia, V. B. L.) Some integral transformations involving the H -function of several variables. (84b:33009)
- Pathan, M. A. See Khan, B., (84g:33006)
- Pradhan, K. M. On some results of generalized hypergeometric polynomials and generalized H -functions. (84c:33008)
- Saxena, Ram Kishore (with Modi, G. C.) Generalized H -function as a symmetrical Fourier kernel. (84c:33007)

44A30 Multiple transforms

- Box, M. A. See McKellar, B. H. J.; et al., 84m:44016
- Chaurasia, V. B. L. On simultaneous operational calculus involving a generalised function of two variables. 84g:44003
- Choudhary, M. S. n -dimensional Hankel transforms of arbitrary order. 84b:44010
- Garg, Mridula See Gupta, K. C., 84b:44012
- Garg, R. S. On general multiple transformation involving the multivariable H -function with applications. 84c:44006
- See also Goyal, S. P., 84b:44011
- Goyal, S. P. (with Garg, R. S.) Certain results on a multiple integral transform. 84b:44011
- Gupta, K. C. On multidimensional integral transforms. 84c:44004
- (with Garg, Mridula) A study of some multidimensional integral transforms with applications. 84b:44012
- Indurkar, P. N. (with Saxena, Rajendra K.) Substitution theorem for two-dimensional general transform with symmetric kernel. 84d:44004
- (with Saxena, Rajendra K.) Substitution theorems for the two-dimensional Laplace transform. 84c:44005
- Love, E. R. See McKellar, B. H. J.; et al., 84m:44016
- McKellar, B. H. J. (with Box, M. A.; Love, E. R.) Inversion of the Struve transform of half integer order. 84m:44016
- Pati, R. See Prasad, Y. N., 84b:44013 and 84c:44006
- Prasad, Y. N. (with Pati, R.) Some integral representations of the modified multidimensional Whittaker transform. 84b:44013
- (with Pati, R.) Some integral representations of the modified multidimensional Whittaker transform. 84c:44006
- Saxena, Rajendra K. See Indurkar, P. N., 84d:44004 and 84c:44005

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- Bhattacharya, D. K. General real inversion operator. (84j:44001)

44A35 Convolution

- Bozhinov, Nikolai S. Classes of multipliers of Berg-Dimovski convolution and real Dirichlet expansions. 84b:44010
- A convolutional approach to the multiplier problem connected with generalized eigenvector expansions of an unbounded operator. 84f:44016
- Representation of commutants and multipliers connected with Sturm-Liouville expansions. 84m:44017
- Chien, Mao Ting Generalized convolutions. 84d:44005
- Dimovski, I. H. (with Kiryakova, V. S.) Convolution and commutant of Gelfond-Leontiev operator of integration. 84m:44018
- Feigin, Paul D. (with Yashchin, Emmanuel) Asymptotic behaviour of integral functions connected with an infinite convolution of exponential densities for small values of the argument. 84b:44011
- Kiryakova, V. S. See Dimovski, I. H., 84m:44018
- Masuda, Kyōya A note on the convolution theorem on functions of several variables. 84c:44007
- Okikiolu, G. O. Amendments to: "Weighted inequalities for convolutions: conjugate space estimates" [Bull. Math. 1981/82, no. 2, 62-108; MR 83h:44014]. 84i:44004
- Yashchin, Emmanuel See Feigin, Paul D., 84b:44011

secondary classifications:

- Aizenberg, I. B. Summation of certain series in fourth powers of Bessel functions. (Russian) (84d:33007)
- Bozhinov, Nikolai S. (with Dimovski, Ivan Kh.) Convolutions, multipliers and commutants related to double complex Dirichlet expansions. (84b:30004)
- Representation formulas for the multiplier sequences of real Dirichlet expansions. (84a:42016)
- Dales, H. Garth Convolution algebras on the real line. (84m:46052)
- Dimovski, Ivan Kh. See Bozhinov, Nikolai S., (84b:30004)
- Fefferman, Robert (with Stein, Erwin) Singular integrals on product spaces. (84d:42023) (Giurgutiu, Victor) See Kees, Wilhelm., (84g:46057)
- Kees, Wilhelm ★ The convolution product and some applications. (84g:46057)
- Kuba, Atila Reconstruction from linearly distorted projections. (Hungarian. English summary) (84i:92021)
- Leptin, Horst (with Müller, Detlef Horst) Schranken für verschränkte Faltungsoperatoren. [Bounds for twisted convolution operators] (84f:46053)

- Madych, W. R. (with Nelson, S. A.) Characterization of tomographic reconstructions which commute with rigid motions. (84d:92010)
- (with Nelson, S. A.) Polynomial based algorithms for computed tomography. (84i:92022)
- Müller, Detlef Horst See Leptin, Horst, (84f:46053)
- Nelson, S. A. See Madych, W. R., (84d:92010) and (84i:92022)
- Okikiolu, G. O. Generations of "convolution semigroups" of operators and functions by parameter integrals. (84b:47051a)
- Correction: "Generations of 'convolution semigroups' of operators and functions by parameter integrals". (84b:47051b)
- Stein, Erwin See Fefferman, Robert, (84d:42023)

44A40 Calculus of Mikusiński and other similar operational calculi

- Koh, E. L. A direct extension of Meller's calculus. 84d:44006
- Muses, C. Hypernumbers and time operators. 84i:44005a
- Errata: "Hypernumbers and time operators". 84i:44005b
- Errata: "Hypernumbers and time operators". 84i:44005c
- Ogata, Takashi Operational calculus of two variables. 84b:44012
- Stanković, Bogoljub Linear differential equation with coefficients in a subfield of Mikusiński operators. 84b:44013
- Approximate solutions for operator differential equations. 84c:44004

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- Dimovski, Ivan Kh. Duhamel-type representations of the solutions of nonlocal boundary value problems. (84m:35023)
- Geszteyi, E. The application of generalized functions in color recognition. (84h:78003)
- Hayabara, Sirō z -transformation by the new operator methods. (84f:44017)
- Heynig, Frank Eindeutigkeitssatz für ein Anfangswertproblem für Operatordifferentialgleichungen. [Uniqueness theorem for an initial value problem for operator differential equations] (84b:35025)
- Eine verallgemeinerte Variationsformulierung für Operatordifferentialgleichungen. [A generalized variational formulation for operator differential equations] (84j:35027)
- Knyazev, A. V. Differential operators with nonrational characteristics. (Russian) (84i:34010)
- Szász, Árpád Hausdorff topologies for the multiplier extensions of admissible vector modules. (84c:46049)
- Yosida, Kōsaku The algebraic derivative and Laplace's differential equation. (84g:34015)

44A45 Classical operational calculus

- Ungar, Abraham A new operational calculus method. 84b:44014
- Wang, Chi Hsu On the generalization of block pulse operational matrices for fractional and operational calculus. 84b:44014

secondary classifications:

- Mathur, Renu See Munot, P. C., (84d:33019)
- Munot, P. C. (with Mathur, Renu) Operational formulae associated with a class of generalized polynomials. (84d:33019)

44A55 Discrete operational calculus

- Hayabara, Sirō z -transformation by the new operator methods. 84f:44017
- Pukhov, G. E. Expansion formulas for differential transforms. 84b:44011

secondary classifications:

- Neamtu, N. (with Zopota, N.) Generalization of a theorem on multiplying images and a theorem on multiplying original functions in the discrete Laplace transform. (Romanian. English summary) (84m:44005)
- Zopota, N. See Neamtu, N., (84m:44005)

44A60 Moment problems

- Abramovich, V. S. Analytic forms of moments of a summable function. (Russian) 84f:44018
- Berg, Christian (with Christensen, Jens Peter Reus) Density questions in the classical theory of moments. (French summary) 84i:44006
- (with Maserick, P. H.) Polynomially positive definite sequences. 84k:44012
- (with Christensen, Jens Peter Reus) Suites complètement définies positives, majoration de Schur et le problème des moments de Stieltjes en dimension k . (English summary) [Completely positive definite sequences, Schur majorization and the Stieltjes moment problem in dimension k] 84k:44013
- Borwein, David (with Jakimovski, Amnon) Generalization of the Hausdorff moment problem. (See 84a:47002)
- Buchwalter, Henri (with Cassier, Gilles) Semi-groupes dans le problème des moments. [Semigroups in the moment problem] 84k:44014
- Burton, K. See Flessas, George P.; et al., 84g:44004
- Cassier, Gilles Le problème des moments pour un convexe compact de \mathbb{R}^n . (English summary) [The moment problem for a convex compact set in \mathbb{R}^n] 84d:44007
- Mesures canoniques dans le problème classique des moments. (English summary) [Canonical measures in classical moment problem] 84m:44019
- See also Buchwalter, Henri, 84k:44014
- Christensen, Jens Peter Reus See Berg, Christian, 84i:44006 and 84k:44013
- Cotlar, Mischa Moment theory and continuity of the Hilbert and Poisson transforms in L^2 spaces. 84d:44008
- Dzyadyk, V. K. The generalized moment problem and Padé approximation. (Russian) 84m:44020

- Fleissas, George P. (with Burton, K.; Whitehead, R. R.) On the generalized power moment problem. **84g:44004**
- Hwang, Jun Shung On a generalized moment problem. **84f:44019**
- Jakimovski, Amnon See Borwein, David, (See **84a:47002**)
- Jones, William B. (with Thron, W. J.) Survey of continued fraction methods of solving moment problems and related topics. **84k:44015**
(with Njåstad, Olav; Thron, W. J.) Continued fractions and strong Hamburger moment problems. **84j:44009**
- Katsnel'son, V. É. Continual analogues of the Hamburger-Nevanlinna theorem and fundamental matrix inequalities of classical problems. I. (Russian) **84k:44016a**
Continual analogues of the Hamburger-Nevanlinna theorem and fundamental matrix inequalities of classical problems. II. (Russian) **84k:44016b**
- Klambauer, G. The Stieltjes moment problem. **84d:44009**
- Maserick, P. H. See Berg, Christian, **84k:44012**
- McGregor, J. L. Solvability criteria for certain N -dimensional moment problems. **84c:44008**
- Njåstad, Olav See Jones, William B.; et al., **84j:44009**
- Ovcharenko, I. E. Integral representations of semidefinite multidimensional power moment sequences. (Russian. English summary) **84j:44010**
Moment sequences with representing measures free of masses in some domains. (Russian) **84m:44021**
- Peng, Teng Guang Generalized exponential Hausdorff moment problem. (Chinese. English summary) **84h:44015**
- Petersen, L. C. On the relation between the multidimensional moment problem and the one-dimensional moment problem. **84g:44005**
- Szafrański, F. H. Boundedness of the shift operator related to positive definite forms: an application to moment problems. **84h:44015**
- Thron, W. J. See Jones, William B.; et al., **84j:44009** and **84k:44015**
- Whitehead, R. R. See Fleissas, George P.; et al., **84g:44004**
- Williams, M. M. R. On the calculation of the partial moments of a distribution function from its Fourier transform. **84i:44007**
- Zanelli, Vanna Moment functions converging "from below" in variation of noninteger order. (Italian) **84i:44008**

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- Arocena, Rodrigo (with Cotlar, Mischa) Dilation of generalized Toeplitz kernels and some vectorial moment and weighted problems. **(84j:47006)**
- Barbieri, Francesco (with Zironi, Fernando) An experimental study of singular functions: the moments of the Vitali function. (Italian) **(84h:26012)**
- Cotlar, Mischa (with Sadosky, Cora) Majorized Toeplitz forms and weighted inequalities with general norms. **(84h:42019)**
See also Arocena, Rodrigo, **(84j:47006)**
- Davydov, E. G. (with Ringo, N. I.) Some questions of the theory of the L -problem of moments. **(84h:49085)**
- Ghizzetti, Aldo (with Ossicini, A.) ★Polinomi ortogonali e problema dei momenti. (Italian) [Orthogonal polynomials and the moment problem] **(84k:42020)**
- Heiss, W. D. Padé approximants for the solvent of selfadjoint operators. **(84m:47032)**
- Illán González, J. See López Lagomasino, Guillermo, **(84j:41045)**
- Kemperman, J. H. B. On the role of duality in the theory of moments. **(84j:49017)**
- Kovalishina, I. V. Analytic theory of a class of interpolation problems. (Russian) **(84i:30043)**
- Landau, H. J. The inverse problem for the vocal tract and the moment problem. **(84k:76095)**
- López Lagomasino, Guillermo (with Illán González, J.) Quadrature formulas for unbounded intervals. (Spanish. English summary) **(84j:41045)**
On the moment problem and the convergence of Padé approximants for meromorphic functions of Stieltjes type. **(84m:30063)**
- Moszyński, Krzysztof Spectral approximation of a selfadjoint operator by the method of moments. (Italian) **(84j:47031)**
- Ossicini, A. See Ghizzetti, Aldo, **(84k:42020)**
- Ringo, N. I. See Davydov, E. G., **(84h:49085)**
- Romanov, A. V. Sufficient conditions for positive definiteness of radial functions in domains of \mathbb{R}^n . (Russian) **(84d:45041)**
- Sadosky, Cora See Cotlar, Mischa, **(84h:42019)**
- Welstead, Stephen T. Selfadjoint extensions of Jacobi matrices of limit-circle type. **(84h:34042)**
- Zironi, Fernando See Barbieri, Francesco, **(84h:26012)**

44A99 Miscellaneous topics

- Helgason, Sigurdur Ranges of Radon transforms. **84h:44016**
- Omarov, T. E. Some expansions of singular integral operators in a series in fractional powers of the variable. (Russian. English and Azerbaijani summaries) **84h:44017**
- Tuy, Heang K. An inversion formula for cone-beam reconstruction. **84j:44011**
- secondary classifications:
- Byrne, Charles L. (with Fitzgerald, Raymond M.) Reconstruction from partial information with applications to tomography. **(84a:92009)**
- Carlson, B. C. (with Gustafson, John L.) Total positivity of mean values and hypergeometric functions. **(84d:33008)**
- Fitzgerald, Raymond M. See Byrne, Charles L., **(84a:92009)**
- Grünbaum, F. Alberto The limited angle reconstruction problem. **(84m:92007)**
- Gustafson, John L. See Carlson, B. C., **(84d:33008)**
- Przeworska-Rolewicz, D. Theorems on polynomials in right invertible operators. (German and Russian summaries) **(84m:47006)**
- Roman, Steven Operational formulas. **(84b:15014)**
- Wu, Xue Mou Approximation transforming theory. I. (Chinese. English summary) **(84j:00002)**

45-XX INTEGRAL EQUATIONS

45-01 Elementary exposition, textbooks

secondary classifications:

- Bitsadze, A. V. ★Уравнения математической физики. (Russian) [Equations of mathematical physics] **(84f:35001)**
- Reinhard, Hervé ★Equations différentielles. (French) [Differential equations] **(84g:34002)**

45-02 Advanced exposition (research surveys, monographs, etc.)

- Babaev, A. A. See Imanaliev, M. I.; et al., **84f:45001**
- Botashev, A. I. See Imanaliev, M. I.; et al., **84f:45001**
- Gegelia, T. G. See Imanaliev, M. I.; et al., **84f:45001**
- Imanaliev, M. I. ★Обобщенные решения интегральных уравнений первого рода. (Russian) [Generalized solutions of integral equations of the first kind] **84m:45001**
(with Khvedelidze, B. V.; Gegelia, T. G.; Babaev, A. A.; Botashev, A. I.) Integral equations. (Russian) **84f:45001**
- Khvedelidze, B. V. See Imanaliev, M. I.; et al., **84f:45001**
- Muskheliishvili, N. I. ★Singularuli integraluri gantolebebi. (Georgian) [Singular integral equations] **84k:45001**
- Zhong, Tong De Multidimensional singular integrals and singular integral equations. (Chinese) **84f:45002**

secondary classifications:

- Delves, L. M. (with Freeman, T. L.) ★Analysis of global expansion methods: weakly asymptotically diagonal systems. **(84a:65002)**
- Freeman, T. L. See Delves, L. M., **(84a:65002)**
- van der Heiden, Uwe ★Analysis of neural networks. **(84h:92020)**

45-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (Kerimov, M. K.) See Volterra, Vito, **(84h:01097)**
- (Kuznetsov, P. I.) See Volterra, Vito, **(84h:01097)**
- (Liouville, Joseph) See Lützen, Jesper, **(84e:01038)**
- Lützen, Jesper Joseph Liouville's contribution to the theory of integral equations. (French and Russian summaries) **(84e:01038)**
- Movchan, V. O. M. P. Kravchuk's work in the theory of differential and integral equations. (Ukrainian. Russian summary) **(84m:01034)**
- Volterra, Vito ★Теория функционалов, интегральных и интегро-дифференциальных уравнений. (Russian) [Theory of functionals and of integral and integro-differential equations] **(84h:01097)**
- (Whittaker, Edmund) See Volterra, Vito, **(84h:01097)**
- Bibliography:
Volterra, Vito See Volterra, Vito, **(84h:01097)**
- Biography:
Volterra, Vito See Volterra, Vito, **(84h:01097)**

45-04 Explicit machine computation and programs (not the theory of computation or programming)

- Shih, Yen P'ing See Wang, Chi Hsu, **84m:45002**
- Wang, Chi Hsu (with Shih, Yen P'ing) Explicit solutions of integral equations via block pulse functions. **84m:45002**

45-06 Proceedings, conferences, etc.

- (Hannsgen, Kenneth B.) See Volterra and functional-differential equations, **84h:45002**
- (Herdman, Terry L.) See Volterra and functional-differential equations, **84h:45002**
- (Imanaliev, M. I.) See Studies in integro-differential equations, **84j:45001**
- (Romankulov, S. R.) See Asymptotic methods of the theory of differential and integro-differential equations and their application, **84h:45001**
- (Stech, Harlan W.) See Volterra and functional-differential equations, **84h:45002**
- (Wheeler, Robert L.) See Volterra and functional-differential equations, **84h:45002**
- Asymptotic methods of the theory of differential and integro-differential equations and their application ★Асимптотические методы теории дифференциальных и интегро-дифференциальных уравнений и их приложения. [Asymptotic methods of the theory of differential and integro-differential equations and their application] **84h:45001**
- Blacksburg, Va. ★Volterra and functional-differential equations. **84h:45002**
- Conference:
Volterra and Functional-Differential Equations ★Volterra and functional-differential equations. **84h:45002**
- Studies in integro-differential equations ★Исследования по интегро-дифференциальным уравнениям. Вып. 16. (Russian) [Studies in integro-differential equations. No. 16] **84j:45001**
- Volterra and functional-differential equations ★Volterra and functional-differential equations. **84h:45002**

45A05 Linear integral equations

- Alekseev, G. V. On the theory of multidimensional problems of synthesis of radiation systems. (Russian) **84c:45001**
- de Angulo, M. E. F. On some integral equations. (Spanish. English summary) **84k:45002**

- Asanov, A. Regularization and uniqueness of the solution of Volterra linear integral equations of the first kind with two independent variables. (Russian) **84d:45001**
- Chabanyuk, Ya. M. See Kozak, P. P., **84d:45002**
- Cherskii, Yu. I. On the solution of integral equations in quadratures. (Russian) **84j:45002**
- Ermakov, S. M. Summation of series connected with integral equations. (Russian. English summary) **84m:45003**
- González de Galindo, Susana On some integral equations involving Bessel functions. (Spanish. English summary) **84d:45003**
- Kahane, Charles S. The solution of a mildly singular integral equation of the first kind on a ball. **84d:45001**
- Kozak, P. P. (with Chabanyuk, Ya. M.) Representation of the solution of an infinite system of linear integral equations in the form of a Wiener integral. (Russian. English summary) **84d:45002**
- Rzepecki, Bogdan On some classes of Volterra integral equations in Banach space. **84d:45003**
- Slepian, David Solution of certain integral equations with difference kernels. **84g:45001**
- Victory, H. D., Jr. On linear integral operators with nonnegative kernels. **84j:45003**

secondary classifications:

- Capel, H. W. See Nijhoff, F. W.; et al., **(84g:81050)**
- Gogonea, Sorin Un problème de mouvement des eaux artésiennes dans les milieux poreux homogènes par portions. [A problem of the flow of artesian waters in porous media that are piecewise homogeneous] **(84c:76068)**
- van der Linden, J. See Nijhoff, F. W.; et al., **(84g:81050)**
- Lekhai, I. F. Solution of an integral equation. (Russian) **(84j:30041)**
- Milici, C. (with Vuc, L.; Rachin, N.) On the integral equation $\int_{\mathbb{R}^n} z(x,y)g(y)dy = q(x)$ [$z(x,y) = z(x,y)$] (some technological applications). (Romanian. English summary) **(84c:39008)**
- Nijhoff, F. W. (with van der Linden, J.; Quispel, G. R. W.; Capel, H. W.; Velthuisen, J.) Linearization of the nonlinear Schrödinger equation and the isotropic Heisenberg spin chain. **(84g:81050)**
- Quispel, G. R. W. See Nijhoff, F. W.; et al., **(84g:81050)**
- Rachin, N. See Milici, C.; et al., **(84c:39008)**
- Velthuisen, J. See Nijhoff, F. W.; et al., **(84g:81050)**
- Vuc, L. See Milici, C.; et al., **(84c:39008)**
- Williams, Marc H. Diffraction by a finite strip. **(84c:78020)**

45B05 Fredholm integral equations

- Alymkulov, K. A. See Imanaliev, M. I., **84m:45005**
- Anan'ev, A. I. Convergence of approximations to eigenvalues in the Fredholm series method. (Russian. English summary) **84d:45004**
- Aziz-Kariev, N. S. (with Gege'el, E. I.) The indeterminate factor method for Fredholm equations. (Russian) **84d:45005**
- Brender, O. G. See Imanaliev, M. I.; et al., **84m:45006**
- Cahlon, Baruch (with Eskin, Michael) Existence theorems for an integral equation of the Chandrasekhar H -equation with perturbation. **84d:45002**
- Chebotaeva, E. B. See Imanaliev, M. I.; et al., **84d:45003**
- Dzhuraev, M. See Imanaliev, M. I., **84d:45004**
- Dzhuraev, M. See Imanaliev, M. I., **84d:45004**
- Eskin, Michael See Cahlon, Baruch, **84d:45002**
- Gege'el, E. I. See Aziz-Kariev, N. S., **84d:45005**
- Haccia, Lechoslaw On solving of Fredholm-Volterra equations. **84m:45004**
- Imanaliev, M. I. (with Pankov, P. S.; Chebotaeva, E. B.) Conditions for the existence of solutions in generalized functions of integral equations of the first kind. (Russian) **84d:45003**
- (with Dzhuraev, M.) On an approximation of a generalized solution of an integral equation of Fredholm type of the first kind in the critical case. (Russian) **84d:45004**
- (with Alymkulov, K. A.) Generalized solution of a Fredholm integral equation and its regularization. (Russian) **84m:45005**
- (with Dzhuraev, M.) Generalized solution of a system of integral equations of Fredholm type of the first kind. (Russian) **84d:45004**
- (with Pankov, P. S.; Brender, O. G.) The method of successive differentiation for construction of the general solution of a Fredholm integral equation of the first kind. (Russian) **84m:45006**
- (with Petrova, L. B.) Approximation of the generalized solution of a two-dimensional Fredholm integral equation of the first kind and convolution type. (Russian) **84m:45007**
- Pankov, P. S. See Imanaliev, M. I.; et al., **84d:45003** and **84m:45006**
- Petrova, L. B. See Imanaliev, M. I., **84m:45007**
- Saadabaev, A. Approximate solution of a Fredholm integral equation of the first kind in the space of continuous functions. (Russian) **84d:45005**
- Seikala, Seppo Iterations for an H -equation. **84d:45003**
- Van Vliet, Carolyn M. General solution methods for Fredholm integral equations with kernel $K(z, z_0) = g(z z_0)$ on the interval $(0, \infty)$. (French summary) **84d:45006**

secondary classifications:

- Ageev, A. L. (with Babanov, Yu. A.; Vasin, V. V.; Ershov, N. V.) Construction of regularizing algorithms for the determination of the structure of amorphous bodies by the method of X-ray spectral structural analysis. (Russian) **(84f:65086)**
- Akhmedov, T. M. (with Veliev, E. I.) Solution of a class of paired integral equations in problems of diffraction theory. (Russian. English summary) **(84j:45033)**
- Azoff, E. (with Clancey, Kevin F.; Gohberg, Israel) On line integrals of rational functions of two complex variables. **(84a:32002)**
- Babanov, Yu. A. See Ageev, A. L.; et al., **(84f:65086)**
- de Bruijn, N. G. The Lagrange-Good inversion formula and its application to integral equations. **(84g:30004)**

- Clancey, Kevin F. See Azoff, E.; et al., **(84a:32002)**
- Costabel, Martin (with Stephan, Ernst; Wendland, Wolfgang L.) Zur Randintegralmethode für das erste Fundamentalproblem der ebenen Elastizitätstheorie auf Polygongebieten. [The boundary integral method for the first fundamental problem of plane elasticity theory in polygonal domains] **(84d:73020)**
- Ershov, N. V. See Ageev, A. L.; et al., **(84f:65086)**
- Gogonea, Sorin Un problème général de mouvement dans les milieux poreux homogènes par portions en présence des cavités. [A general problem of motion in piecewise homogeneous porous media with cavities] **(84c:76072)**
- Gohberg, Israel See Azoff, E.; et al., **(84a:32002)**
- Guseinov, E. A. Justification of the projection method for an integral equation of the first kind with a logarithmic singularity of the kernel. (Russian. English and Azerbaijani summaries) **(84d:65128)**
- Il'inskii, A. S. See Vorontsov, A. A., **(84f:78019)**
- Kleinman, R. E. Constructive methods for boundary value problems depending on a parameter. **(84c:35029)**
- Lal, Mange The torsion of a microelastic half-space by a flat annular rigid stamp. **(84c:73066)**
- Mamedov, Yu. M. On the torsion of a beam with a doubly connected cross section of arbitrary form. (Russian. English and Azerbaijani summaries) **(84c:73005)**
- Miranda, Guillermo (with Power, Henry) Integral equation solution of Oseen's flow with a free surface. **(84c:76056)**
- Nerseysan, A. B. The structure of resolvents of certain integral operators. (Russian. English and Armenian summaries) **(84c:45013)**
- Nguyễn Văn Mậu A condition for the analytic continuation of a Cauchy integral and applications. (Vietnamese. English summary) **(84c:30063)**
- Pereverzev, S. V. On the optimization of adaptive methods for the approximate solution of integral equations. (Russian) **(84f:65089)**
- Power, Henry See Miranda, Guillermo, **(84c:76056)**
- Shlepakov, L. N. See Tivonchuk, V. I., **(84c:65129)**
- Stephan, Ernst See Costabel, Martin; et al., **(84d:73020)**
- Sugisaka, Masanori The design of on-line linear least-squares estimators given covariance specifications via an imbedding method. **(84c:65140)**
- Tivonchuk, V. I. (with Shlepakov, L. N.) On the justification of an approximation method for solving systems of linear Fredholm integral equations. (Russian) **(84c:65129)**
- Vasin, V. V. See Ageev, A. L.; et al., **(84f:65086)**
- Veliev, E. I. See Akhmedov, T. M., **(84j:45033)**
- Vorontsov, A. A. (with Il'inskii, A. S.) Integral equation methods in the study of mathematical models of convex antenna arrays. (Russian) **(84f:78019)**
- Wendland, Wolfgang L. See Costabel, Martin; et al., **(84d:73020)**

45C05 Eigenvalue problems [See also 34B25, 35Pxx, 45P05.]

- Reade, J. B. Eigenvalues of Lipschitz kernels. **84d:45006**

secondary classifications:

- Chatfield, J. A. Eigenvalues of a Stieltjes-Volterra integral equation. **(84d:45007)**
- Chaudhry, M. Bashir See Serizawa, Yoichi; et al., **(84c:65128)**
- Knight, B. W. See Sirovich, Lawrence, **(84d:47022)**
- Mercer, A. McD. A class of biorthogonal expansions arising from a Volterra operator equation. **(84d:47028)**
- Mkhitarian, S. M. Eigenfunctions of an integral operator generated by a logarithmic kernel on two intervals and their application to contact problems. (Russian. English and Armenian summaries) **(84j:45025)**
- Nishikawa, Kyoji See Serizawa, Yoichi; et al., **(84c:65128)**
- Pietsch, Albrecht Eigenvalues of integral operators. II. **(84d:47025)**
- Ramm, Alexander G. Eigenfunction expansions for some nonselfadjoint operators and the transport equation. **(84j:47032)**
- Serizawa, Yoichi (with Chaudhry, M. Bashir; Watanabe, Tsuguiro; Nishikawa, Kyoji) A numerical method for eigenvalue problems of integral equations. **(84c:65128)**
- Sirovich, Lawrence (with Knight, B. W.) On the eigentheory of operators which exhibit a slow variation. **(84d:47022)**
- Sukhinin, S. V. Justification of a model of the oscillations of a gas flowing around a lattice of plates. (Russian) **(84f:76063)**
- Watanabe, Tsuguiro See Serizawa, Yoichi; et al., **(84c:65128)**

45D05 Volterra integral equations [See also 34A10.]

- Asanov, A. Regularization and sufficient conditions for the uniqueness of the solution of a linear integral equation of Volterra type of the first kind with two independent variables in the space of continuous functions. (Russian) **84j:45004**
- Regularization and sufficient conditions for the uniqueness of the solution for Volterra and Volterra-Uryson integral equations. (Russian) **84j:45005**
- Regularization of a Volterra operator equation of the first kind. (Russian) **84a:45001**
- Bachurskaya, A. F. (with Tsalyuk, Z. B.) Existence of solutions of a class of Volterra integro-functional equations. (Russian) **84j:45006**
- Baizakov, A. B. Expansion of solutions of a class of Volterra integral equations. (Russian) **84m:45008**
- Bazarbaeva, S. E. Solution of a singular Volterra integral equation of the second kind in Hölder classes. (Russian) **84g:45002**
- Burton, T. A. Volterra equations with small kernels. **84m:45009**
- Structure of solutions of Volterra equations. **84i:45001**
- (with Mahfoud, W. E.) Stability criteria for Volterra equations. **84h:45004**
- Chaschchin, O. N. Regularization of Volterra operator equations of the first kind in a scale of Banach spaces. (Russian) **84j:45007**
- Chatfield, J. A. Eigenvalues of a Stieltjes-Volterra integral equation. **84d:45007**
- Dzhuraev, M. See Imanaliev, M. I.; et al., **84d:45009**

- Getmantseva, T. I. Averaging in Volterra integral equations with fast and slow time. (Russian) **84b:45005**
- Gripenberg, Gustaf Unique solutions of some Volterra integral equations. **84d:45008**
Volterra integral operators and logarithmic convexity. **84f:45003**
An estimate for the solution of a Volterra equation describing an epidemic. **84f:45004**
- Imanaliyev, M. I. (with Seitkaziya, A. S.; Dzhuraev, M.) Finding the second-order approximate mixed derivative of a function of two variables. (Russian) **84d:45009**
- Iskandarov, S. Membership of the solution of an integral equation of Volterra type to the space $L^2[t_0, \infty)$. (Russian) **84j:45008**
Boundedness of solutions of a class of second-order nonlinear integro-differential equations of Volterra type. (Russian) **84m:45010**
- Jędryka, Tadeusz Marian An estimation of the solution of Volterra's integral equation for vector-valued functions with values in an Orlicz space. (Polish summary) **84c:45005**
An estimation of the solution of Volterra's integral equation for vector-valued functions with values in some function spaces. **84m:45011**
- Jordan, G. Samuel Weighted L^1 -spaces and resolvents of Volterra equations. (See **84d:45002**)
- Kim, E. I. (with Orynbasarov, M. O.) Construction of the solution of a singular integral equation of Volterra-Fredholm type. (Russian. Kazakh summary) **84c:45006**
- Ladde, G. S. (with Lakshmikantham, V.; Pachpatte, B. G.) The method of upper and lower solutions and Volterra integral equations. **84c:45001**
- Lakshmikantham, V. See Ladde, G. S.; et al. **84c:45001**
- Levin, J. J. Some synthesis problems for integral equations. (See **84b:45002**)
- Londen, Stig-Olof On the asymptotics of some Volterra equations with locally finite measures and large perturbations. (See **84b:45002**)
On Volterra equations with locally finite measures and L^∞ -perturbations. **84j:45009**
- Mahfoud, W. E. See Burton, T. A. **84b:45004**
- Misra, Niyati See Parhi, N. **84j:45003**
- Orynbasarov, M. O. See Kim, E. I. **84c:45006**
- Pachpatte, B. G. See Ladde, G. S.; et al. **84c:45001**
- Parhi, N. (with Misra, Niyati) On oscillatory and nonoscillatory behaviour of solutions of Volterra integral equations. **84j:45003**
- Radiollo, M. V. (with Salenko, S. D.) The use of Volterra integral equations in hydroelasticity problems. (Russian. English summary) **84j:45010**
- Rzepecki, Bogdan On integral equations of Volterra type. (See **84c:34002**)
- Salenko, S. D. See Radiollo, M. V. **84j:45010**
- Seitkaziya, A. S. Volterra integral equations of the first kind of convolution type. (Russian) **84d:45010**
See also Imanaliyev, M. I.; et al. **84d:45009**
- Smirnov, M. M. A solution in closed form of the Volterra equation with a hypergeometric function in the kernel. (Russian) **84c:45002**
- Srazhdinova, A. Existence of solutions of linear Volterra integral equations of the first kind. (Russian) **84j:45011**
Regularization of multidimensional Volterra integral equations of the first kind. (Russian) **84c:45002**
Existence theorems for a linear Volterra integral equation of the first kind. (Russian) **84m:45012**
- Sventsitskaya, T. A. Integral multivalued Volterra equations. (Russian. English summary) **84j:45012**
- Taniguchi, Kazuo An integral equation of Volterra type and multiproducts of pseudodifferential operators. **84b:45007**
- Tsalyuk, Z. B. An estimate for the solution of the Volterra integral equation. (Russian) **84b:45006**
See also Bachurskaya, A. F. **84j:45006**
- Vasil'ev, V. G. A Volterra integral equation of the first kind that has a positive solution. (Russian) (See **84b:65004**)
- secondary classifications:
- Amini, Siamak Stability analysis of methods employing reducible rules for Volterra integral equations. (84j:65072)
(with Baker, Christopher T. H.; van der Houwen, Pieter J.; Wolkenfelt, Paul H. M.) Stability analysis of numerical methods for Volterra integral equations with polynomial convolution kernels. (84i:65112)
- Asanov, A. Regularization and uniqueness of the solution of Volterra linear integral equations of the first kind with two independent variables. (Russian) (84d:45001)
- Bainov, D. D. See Khristova, S. G. (84b:26019)
- Baker, Christopher T. H. An introduction to the numerical treatment of Volterra and Abel-type integral equations. (84g:65160)
See also Amini, Siamak; et al. (84i:65112)
- Carr, R. W. Integrable resolvent operators for an abstract Volterra equation in Hilbert space. (See **84b:45002**)
- Diekmann, Odo (with Montijn, R.) Prelude to Hopf bifurcation in an epidemic model: analysis of a characteristic equation associated with a nonlinear Volterra integral equation. (84b:92042)
- Garey, L. E. Finding a zero of the solution of an integral equation. (84b:65126)
- Greenberg, James M. (with Xiao, Ling; MacCamy, Richard C.) A model Riemann problem for Volterra equations. (84j:45049)
- Gripenberg, Gustaf Integrability of resolvents of systems of Volterra equations. (84a:45005)
Asymptotic solutions of some nonlinear Volterra integral equations. (84a:45011)
Optimization of crystal growth with diffusion. (84d:49010)
Stability of the expected value of the solution of a random Volterra integral equation. (84c:60092)
- Haccia, Lechoslaw On solving of Fredholm-Volterra equations. (84m:45004)
- van der Houwen, Pieter J. See Amini, Siamak; et al. (84i:65112)
- Imomnazarov, B. Regularization of dissipative operator equations of the first kind. (Russian) (84d:47012)
- Khristova, S. G. (with Bainov, D. D.) On some integral inequalities for a scalar function of a vector argument. (Russian and Bulgarian summaries) (84b:26019)
- Kiffe, T. R. A Volterra equation with a time dependent operator. (84j:45050)
Systems of Volterra equations with nonmonotone discontinuous nonlinearities. (84c:45012)
- Kilbas, A. A. Asymptotic expansions for power-logarithmic integrals containing logarithms. (Russian. English summary) (84b:41026)
- MacCamy, Richard C. See Greenberg, James M.; et al. (84j:45049)
- Marcus, Moshe (with Mizel, Victor) Limiting equations for problems involving long range memory. (84j:54029)
- McKee, Sean Best convergence rates of linear multistep methods for Volterra first kind equations. (German summary) (84j:65075)
- Mizel, Victor See Marcus, Moshe. (84j:54029)
- Montijn, R. See Diekmann, Odo. (84b:92042)
- Nishimoto, Katsuyuki On a half order's integral equation $af \cdot z = f_{1/2}$ (Volterra type) and simultaneous half order's differintegral equations. (84b:26013)
- Orlicz, Wladyslaw (with Szulfa, Stanislaw) On some classes of nonlinear Volterra integral equations in Banach spaces. (Russian summary) (84b:45021)
- Srazhdinova, A. Regularization of Volterra integral equations of the first kind. (Russian) (84b:45024)
- Szulfa, Stanislaw See Orlicz, Wladyslaw. (84b:45021)
- Tkachuk, S. G. Some properties of spectrally positive stable distributions. (Russian) (84c:60029)
- Wang, Ting Fu A condition of asymptotic behaviour of certain vibration system. (84j:45060)
- Wolkenfelt, Paul H. M. See Amini, Siamak; et al. (84i:65112)
- Xiao, Ling See Greenberg, James M.; et al. (84j:45049)
- Yao, Yun Long Vector measure and maximum principle of distributed parameter systems. (84g:49008)
- Yeh, Cheh Chih On some integral inequalities in n independent variables and their applications. (84i:26020)
- 45Exx Singular integral equations [See also 30E20, 30E25, 44A15, 44A35.]**
secondary classifications:
- Clancey, Kevin F. (with Gohberg, Israel) ★Factorization of matrix functions and singular integral operators. (84c:47016)
- Gohberg, Israel See Clancey, Kevin F. (84c:47016)
- Muskhelishvili, N. I. ★Singularuli integraluri gantolebebi. (Georgian) [Singular integral equations] (84c:45001)
- 45E05 Integral equations with kernels of Cauchy type [See also 35J15.]**
- Chernokozhin, E. V. (with Shestopalov, Yu. V.) The Fredholm property of an integral operator with a kernel that has a weak singularity. (Russian) **84j:45013**
- Chibrikova, L. I. (with Pleshchinskii, N. B.) Singular integral equations with automorphic and quasiautomorphic logarithmic and power kernels. I. (Russian) **84b:45007**
- Duduchava, Roland An application of singular integral equations to some problems of elasticity. **84j:45014**
- Dzhangibekov, G. On a class of two-dimensional singular integral equations that contain a complex conjugate unknown function. (Russian. Tajiki summary) **84j:45015**
- Dzharakulov, R. (with Ivanov, Viktor Vladimirovich; Israilov, M. I.) On attaining the number of solutions, represented in closed form, of singular integral equations. (Russian) **84j:45016**
- Elliott, David Orthogonal polynomials associated with singular integral equations having a Cauchy kernel. **84c:45003**
- Haftmann, Rolf Über die Quadraturformelmethode zur Lösung singulärer Integralgleichungen. [The quadrature formula method for the solution of singular integral equations] **84b:45008**
- Israilov, M. I. See Dzharakulov, R.; et al. **84j:45016**
- Ivanov, Viktor Vladimirovich See Dzharakulov, R.; et al. **84j:45016**
- Kartasheva, L. V. Random degeneration of the symbol of a singular integral equation in the space of generalized functions $S'_{\alpha, \beta}$. (Russian) **84j:45017**
- Lu, Jian Ke On singular integrals with singularities of high fractional order and their applications. **84b:45008**
- Ma, Dao Wei Direct method of solution for a class of singular integral equations with Carleman shift. (Chinese. English summary) **84b:45003**
- Nguyễn Văn Mậu On a singular integral equation with a meromorphic kernel in complex domain. (Vietnamese. English summary) **84j:45018**
- Nogin, M. V. On the solution of integral equations of the first kind with a logarithmic kernel. (Russian) **84i:45004**
- Nyaga, V. I. Symbol of singular integral operators with conjugation in the case of a piecewise Lyapunov contour. (Russian) **84c:45002**
- Parton, V. Z. (with Perlin, P. I.) ★Integral equations in elasticity. **84d:45011**
- Perlin, P. I. See Parton, V. Z. **84d:45011**
- Pleshchinskii, N. B. Singular integral equations with generalized logarithmic and power kernels. (Russian) (See **84m:35003**)
See also Chibrikova, L. I. **84b:45007**
- Raikov, N. S. Approximate solution of a singular integro-differential equation of elasticity theory. (Russian) (See **84c:34002**)
- Rzaev, R. M. The singular Cauchy operator in spaces with weight. (Russian. English and Azerbaijani summaries) **84c:45007**
- Schirer, Andreas Mehrdimensionale singuläre Integralgleichungen über Gebieten mit nichtglatter Rand. [Multidimensional singular integral equations in domains with nonsmooth boundary] **84i:45005**
- Seichuk, V. N. See Zolotarevskii, V. A. **84j:45020**
- (Sherman, D. I.) See Parton, V. Z.; et al. **84d:45011**
- Shestopalov, Yu. V. See Chernokozhin, E. V. **84j:45013**

- Sil'vestrov, V. V. Solution in closed form of a complete singular integral equation. (Russian) **84j:45004**
- Smitko, Wanda On a system of nonlinear strongly singular equations. **84d:45012**
- von Wolfersdorf, Lothar Monotonicity methods for nonlinear singular integral and integro-differential equations. (German and Russian summaries) **84j:45019**
- Zhong, Shou Guo On the conditions of solvability for a class of systems of singular integral equations. (Chinese. English summary) **84i:45006**
- Zolotarevskii, V. A. (with Seichuk, V. N.) The collocation method for solving singular integral equations along a Lyapunov contour. (Russian) **84j:45020**

secondary classifications:

- Aslanov, V. D. A linear integro-differential boundary value problem with Carleman shift. (Russian) **(84h:30064)**
- Chakrabarti, Aloknath Solution of a singular integral equation. **(84j:76019)**
- Dunn, W. L. See Siewert, C. E., **(84m:85014)**
- Graham, Ivan G. Galerkin methods for second kind integral equations with singularities. **(84d:65090)**
- Homentovskii, Dorel On the Volterra boundary value problem for multiply-connected domains. **(84a:30079)**
- Ioakimidis, Nikolaos I. Further convergence results for the weighted Galerkin method of numerical solution of Cauchy-type singular integral equations. **(84g:65164)**
- On the application of the generalized Plemelj formulas to crack problems. **(84m:73081)**
- Khusnutdinov, R. Sh. Linear singular integro-differential equations perturbed by nonlinear terms. (Russian) **(84j:45044)**
- Kutrunov, V. N. Integral equations of the theory of elasticity for bodies bounded by piecewise-Lyapunov surfaces. (Russian. English and Georgian summaries) **(84j:73016)**
- Siewert, C. E. (with Dunn, W. L.) Radiation transport in plane-parallel media with nonuniform surface illumination. (German summary) **(84m:85014)**
- Ungiadze, A. V. Approximate solution of a class of singular integral equations with generalized Cauchy kernels. (Russian. English and Georgian summaries) **(84f:45019)**

45E10 Integral equations of the convolution type (Abel, Picard, Toeplitz and Wiener-Hopf type) [See also 47B35.]

- Alymkulov, K. A. See Imanaliev, M. I., **84d:45015**
- Babayan, A. O. Wiener-Hopf integral equations with a degenerate symbol. (Russian. Armenian summary) **84h:45009**
- A special case of the Wiener-Hopf equation. (Russian. English and Armenian summaries) **84j:45021**
- Bart, H. (with Gohberg, Israel; Kaashoek, M. A.) Wiener-Hopf integral equations, Toeplitz matrices and linear systems. **84d:45013**
- (with Gohberg, Israel; Kaashoek, M. A.) Convolution equations and linear systems. **84i:45008a**
- (with Gohberg, Israel; Kaashoek, M. A.) Errata: "Convolution equations and linear systems" [Integral Equations Operator Theory 5 (1982), no. 3, 283-340]. **84i:45008b**
- Cherskii, Yu. I. An integral equation that is inverse with respect to the Wiener-Hopf equation and its discrete analogue. (Russian) **84j:45022**
- Equations with periodic singular convolutions. (Russian. English and Georgian summaries) **84j:45023**
- Ganev, R. M. Solution of Abel's generalized integral equation with constant coefficients. (Russian) **84d:45014**
- Gohberg, Israel See Bart, H.; et al., **84d:45013**; **84i:45008a** and **84i:45008b**
- Heins, A. E. The Sommerfeld half-plane problem revisited. I. The solution of a pair of coupled Wiener-Hopf integral equations. **84i:45007**
- Huang, Lie De Convolution integral equations and boundary value problems. **84a:45004**
- Imanaliev, M. I. (with Alymkulov, K. A.) Regularization of nonclassical solutions of a Fredholm integral equation of the first kind of convolution type. (Russian) **84d:45015**
- Kaashoek, M. A. See Bart, H.; et al., **84d:45013**; **84i:45008a** and **84i:45008b**
- Khaikin, M. I. Homogeneous Wiener-Hopf equation with a positive kernel. (Russian) **84i:45009**
- Kilbas, A. A. (with Vu Kim Tuan) A multidimensional analogue of Abel's integral equation. (Russian. English summary) **84j:45024**
- Lascarides, C. See Zissis, V., **84e:45003**
- Lifanov, I. K. The constructive theory of singular integral equations of the first kind with one-dimensional and multiple integrals of Cauchy type. (Russian. English and Georgian summaries) **84f:45005**
- Logan, B. F. An integral equation connected with the Jacobi polynomials. **84f:45006**
- Lu, Jian Ke On method of solution for a class of equations of convolution type. (Chinese summary) **84m:45013**
- Mikhaelyan, L. V. Matrix continuous analogues of G. Szegő's theorems on Toeplitz determinants. (Russian. English and Armenian summaries) **84m:45014**
- Mkhitarian, S. M. Eigenfunctions of an integral operator generated by a logarithmic kernel on two intervals and their application to contact problems. (Russian. English and Armenian summaries) **84j:45025**
- Moss, William F. The two-dimensional oscillating airfoil: a new implementation of the Galerkin method. **84g:45005**
- Nowicka, Danuta Solution of a system of singular integral equations with a Hadamard integral and strongly singular right-hand sides. (Russian. Polish summary) **84d:45010**
- Pozin, S. M. (with Sakhnovich, L. A.) Behavior of solutions of an equation with difference kernel. (Russian. English and Armenian summaries) **84h:45010**
- Radeva, R. K. Singular integral equations and periodic functions. (Russian) (See **84c:34002**)
- Riedel, Roland See Wagner, Eberhard, **84d:45011**
- Rubin, B. S. An imbedding theorem for images of convolution operators on a finite segment, and operators of potential type. I. (Russian) **84d:45016a**
- An imbedding theorem for images of convolution operators on a finite segment, and operators of potential type. II. (Russian) **84d:45016b**
- Saadabaev, A. A generalized Abel integral equation of the first kind. (Russian) **84b:45009**
- Sakhnovich, L. A. See Pozin, S. M., **84h:45010**
- Silbermann, Bernd Ausgeartete paarige Integrodifferenzgleichungen und ein Projektionsverfahren zu ihrer Lösung. [Degenerate paired integro-difference equations and a projection method for their solution] **84j:45026**
- Vladimirov, V. S. (with Volovich, I. V.) The Wiener-Hopf equation, the Riemann-Hilbert problem and orthogonal polynomials. (Russian) **84j:45027**
- Volovich, I. V. See Vladimirov, V. S., **84j:45027**
- Vu Kim Tuan See Kilbas, A. A., **84j:45024**
- Wagner, Eberhard Spezielle asymptotische Untersuchungen der Lösungen linearer Faltungsgleichungen mit Hadamard-Integralen. [Special asymptotic investigations of the solutions of linear integral convolution equations with Hadamard integrals] **84c:45002**
- (with Riedel, Roland) Asymptotische Untersuchungen der Lösungen linearer Faltungsgleichungen mit Hadamard-Integralen. [Asymptotic investigations of the solutions of linear convolution integral equations with Hadamard integrals] **84c:45011**
- Zhao, Zhen Integral equations with shift and boundary value problems. (Chinese) **84f:45007**
- Zheludev, V. A. Derivatives of fractional order and the numerical solution of a class of convolution equations. (Russian) **84d:45017**
- Zissis, V. (with Lascarides, C.) A note on the solution of a convolution equation with trigonometric kernel. **84e:45003**
- secondary classifications:
- Bera, R. K. See Patra, Baidyanath, **(84g:73049)**
- Böttcher, A. (with Silbermann, Bernd) Über das Reduktionsverfahren für diskrete Wiener-Hopf-Gleichungen mit unstetigem Symbol. (English and Russian summaries) [On the reduction method for discrete Wiener-Hopf equations with discontinuous symbol] **(84h:47030)**
- Clancey, Kevin F. Exact sequences of algebras generated by singular integral operators. **(84e:47063)**
- Fabrikant, V. I. See Sankar, T. S., **(84g:73025)**
- Grünbaum, F. Alberto Differential operators commuting with convolution integral operators. **(84b:45023)**
- Haftmann, Rolf ★ Quadraturformeln vom Gaußtyp für singuläre Integrale und ihre Anwendung zur Lösung singulärer Integralgleichungen. (German) [Quadrature formulas of Gauss type for singular integrals and their application to the solution of singular integral equations] **(84b:65129)**
- Ioakimidis, Nikolaos I. On the quadrature methods for the numerical solution of singular integral equations. **(84b:65130)**
- On Kalandiya's method for the numerical solution of singular integral equations. **(84j:65074)**
- Jentsch, L. Über ein Bimetallproblem in der Ebene. (English and Russian summaries) [On a bimetal problem in the plane] **(84j:73087)**
- Karapetyants, N. K. Integral operators with coordinate-homogeneous kernels. (Russian. English and Georgian summaries) **(84j:45064)**
- Kutrunov, V. N. Integral equations of the theory of elasticity for bodies bounded by piecewise-Lyapunov surfaces. (Russian. English and Georgian summaries) **(84j:73016)**
- van der Meer, C. V. M. ★ Semigroup and factorization methods in transport theory. **(84m:82122)**
- Meister, Erhard V. Multiple-part Wiener-Hopf operators with some applications in mathematical physics. **(84j:47045)**
- Mikhailchuk, R. I. (with Syavavko, M. S.) A new method of construction of two-sided approximations of operator equations of the dual argument type. (Russian) **(84m:65137)**
- Miles, John W. Surface-wave interaction with a deeply submerged circular duct. **(84i:76020)**
- Muhly, Paul S. (with Renault, Jean N.) C^* -algebras of multivariable Wiener-Hopf operators. **(84h:46074)**
- Patra, Baidyanath (with Bera, R. K.) Note on a mixed boundary value problem in a composite wedge. **(84g:73049)**
- Peschanskii, A. I. (with Shevchik, V. V.) The area problem with shift. (Russian) **(84j:30074)**
- Renault, Jean N. See Muhly, Paul S., **(84h:46074)**
- Roberts, K. L. On fractional integrals equivalent to a constant. **(84b:26007)**
- Sankar, T. S. (with Fabrikant, V. I.) Investigations of a two-dimensional integral equation in the theory of elasticity and electrostatics. (French summary) **(84g:73025)**
- Shestopalov, V. P. See Vinogradov, S. S.; et al., **(84g:78013)**
- Shevchik, V. V. See Peschanskii, A. I., **(84j:30074)**
- Silbermann, Bernd Lokale Theorie des Reduktionsverfahrens für Toeplitzoperatoren. [Local theory of the reduction method for Toeplitz operators] **(84j:47046)**
- See also Böttcher, A., **(84h:47030)**
- Sugisaka, Masanori The design of on-line linear least-squares estimators given covariance specifications via an imbedding method. **(84c:65140)**
- Syavavko, M. S. See Mikhailchuk, R. I., **(84m:65137)**
- Tuchkin, Yu. A. See Vinogradov, S. S.; et al., **(84g:78013)**
- Vasil'ev, I. L. Systems of integral equations with an Abel kernel on a segment of the real axis. (Russian. English summary) **(84j:45034)**
- Vinogradov, S. S. (with Tuchkin, Yu. A.; Shestopalov, V. P.) Abel's transformation in the problem of diffraction by a thin strip. (Russian) **(84g:78013)**
- Widom, Harold A trace formula for Wiener-Hopf operators. **(84e:47038)**

45E99 None of the above, but in this section

- Aksent'eva, E. P. (with Garif'yanov, F. N.) On the investigation of an integral equation with a Carleman kernel. (Russian) **84j:45028**
- Garif'yanov, F. N. See Aksent'eva, E. P., **84j:45028**
- Gu, Yi Ming See Wu, Hang Sheng; et al., **84j:45031**

- Iskenderov, B. B. An approach to the solution of singular integral equations with two Carleman shifts, containing complex conjugate unknowns. (Russian) **84c:45003**
- Kuz'min, A. G. A singular integral equation with shift. (Russian) (See **84m:35003**)
- Maizenberg, I. G. (with Tarnopol'skaya, S. A.; Shapiro, M. V.) Integral operators with a weak singularity in Hölder spaces with weight. (Russian) **84g:45006**
- Mao, De Qiang. See Wu, Hang Sheng; et al., **84j:45031**
- Nyaga, V. I. Singular integral equations with shift along an unbounded contour. (Russian) **84j:45029**
- Sergeev, A. G. On the boundedness of singular integral operators with complex singularities. (Russian) **84j:45030**
- Shapiro, M. V. See Maizenberg, I. G.; et al., **84g:45006**
- Tarnopol'skaya, S. A. See Maizenberg, I. G.; et al., **84g:45006**
- Wu, Hang Sheng (with Gu, Yi Ming; Mao, De Qiang) The linear Eliashberg equation. **84j:45031**
- Zhao, Zhen The problem of the solvability of singular integral equations with two Carleman shifts. (Chinese. English summary) **84j:45032**

secondary classifications:

- Costabel, Martin On the algebra generated by singular integral operators with piecewise continuous coefficients. (**84j:45063**)
- Estrada, R. (with Kanwal, R. P.) Distributional boundary values of harmonic and analytic functions. (**84d:46058**)
- Junghans, Peter Kollokations- und Quadraturformelverfahren zur näherungsweisen Lösung einer Klasse singulärer Integralgleichungen mit einer festen Singularität. [Collocation and quadrature methods for the approximate solution of a class of singular integral equations with one fixed singularity] (**84f:65087**)
- Kanwal, R. P. See Estrada, R., (**84d:46058**)
- Mal'tseva, E. V. Application of singular integral equations to certain problems of mathematical physics. (Russian) (**84d:35036**)
- Phong, D. H. (with Stein, Erwin) Some further classes of pseudodifferential and singular-integral operators arising in boundary value problems. I. Composition of operators. (**84j:35163**)
- Sergeev, A. G. Criterion for boundedness of singular integral operators with complex singularities. (Russian) (**84g:47045**)
- Stein, Erwin See Phong, D. H., (**84j:35163**)
- Tweed, J. Some dual series equations with an application in the theory of elasticity. (**84d:45019**)

45Fxx Systems of linear integral equations

45F05 Systems of nonsingular linear integral equations

- Gripenberg, Gustaf Integrability of resolvents of systems of Volterra equations. **84a:45005**

45F10 Dual, triple, etc., integral and series equations

- Akhmedov, T. M. (with Veliev, E. I.) Solution of a class of paired integral equations in problems of diffraction theory. (Russian. English summary) **84j:45033**
- Anikonov, Yu. E. Uniqueness of the solution of multidimensional integral equations of the first kind. (Russian) (See **84m:35003**)
- Dwivedi, A. P. (with Singh, V. B.) N -sequence equations involving orthogonal polynomials. **84c:45004**
- (with Gupta, P. M.) Some further triple Fourier-Laguerre series equations. **84d:45018**
- (with Gupta, R. G.; Gupta, P. M.) Certain triple series equations involving Jacobi polynomials. **84m:45015**
- Gupta, P. M. See Dwivedi, A. P., **84d:45018** and **84m:45015**
- Gupta, R. G. See Dwivedi, A. P.; et al., **84m:45015**
- Modi, G. C. See Saxena, Ram Kishore, **84c:45005**
- Romashchenko, V. A. See Virchenko, N. A., **84f:45008**
- Saxena, Ram Kishore (with Modi, G. C.) Certain dual integral equations associated with H -function of two variables. **84c:45005**
- Shestopalov, V. P. See Tuchkin, Yu. A., **84c:45004**
- Singh, V. B. See Dwivedi, A. P., **84c:45004**
- Tuchkin, Yu. A. (with Shestopalov, V. P.) On a model class of boundary value problems of electrodynamics. (Russian) **84c:45004**
- Tweed, J. Some dual series equations with an application in the theory of elasticity. **84d:45019**
- Vasil'ev, I. L. Systems of integral equations with an Abel kernel on a segment of the real axis. (Russian. English summary) **84j:45034**
- Veliev, E. I. See Akhmedov, T. M., **84j:45033**
- Virchenko, N. A. (with Romashchenko, V. A.) Some triple integral equations with associated Legendre functions. (Russian) **84f:45008**
- Weir, G. J. Insulating circular rugs. **84g:45007**

secondary classifications:

- Alekseev, G. V. (with Likhatskii, V. N.) Existence of a solution of a mixed problem of synthesis of radiating systems on a plane. (Russian) (**84h:78017**)
- Amirov, A. Kh. Uniqueness of the solution of an ill-posed problem of astronomy. (Russian) (**84h:85009**)
- Berntsen, Svend Diffraction of an electric polarized wave by a dielectric wedge. (**84c:78014**)
- Dhalwal, R. S. (with Singh, B. M.; Vrbik, J.) Closed form solution for external cracks in an infinitely long elastic layer under shear. (**84m:73080**)
- Dzhangibekov, G. On a class of two-dimensional singular integral equations that contain a complex conjugate unknown function. (Russian. Tajiki summary) (**84j:45015**)

- Lifanov, I. K. The constructive theory of singular integral equations of the first kind with one-dimensional and multiple integrals of Cauchy type. (Russian. English and Georgian summaries) (**84f:45005**)
- Likhatskii, V. N. See Alekseev, G. V., (**84h:78017**)
- Polynokov, R. V. An application of splines to the solution of two-dimensional integral equations. (Russian) (**84m:45035**)
- Singh, B. M. See Dhalwal, R. S.; et al., (**84m:73080**)
- Vrbik, J. See Dhalwal, R. S.; et al., (**84m:73080**)

45F15 Systems of singular linear integral equations

- Khatiasvili, N. G. On a property of an integral of volume potential type. (Russian. English and Georgian summaries) **84d:45020**
- Rubanovich, S. G. On some systems of singular integral equations. (Russian. English and Armenian summaries) **84d:45010**

secondary classifications:

- Matvichuk, K. S. Conditions for the existence and stability of the solution of singular integral Kirkwood-Salsburg equations. I, II. (Russian. English summary) (**84j:82033**)
- Conditions for the existence and stability of the solution of singular integral Kirkwood-Salsburg equations. III. (Russian. English summary) (**84j:82034**)

45F99 None of the above, but in this section

- Grabowski, Jerzy Solution of an infinite system of integral equations. **84h:45011**
- Pantelev, D. K. (with Petrov, D. I.; Petrov, P. S.) Inverse problem for a system of nonlinear integro-differential equations and its application. (See **84c:34002**)
- Petrov, D. I. See Pantelev, D. K.; et al., (See **84c:34002**)
- Petrov, P. S. See Pantelev, D. K.; et al., (See **84c:34002**)

45Gxx Nonlinear integral equations [See also 47Hxx.]

45G05 Singular nonlinear integral equations

- Guseinova, S. A. Singular solutions of a nonlinear singular integral equation. (Russian) **84m:45016**
- Khusnutdinov, R. Sh. On the extension of solutions of nonlinear singular integro-differential equations. (Russian) **84j:45035**
- Obnosov, Yu. V. On the solution of a nonlinear singular integral equation. (Russian) (See **84m:35003**)
- Selekhman, N. A. Maximal algebra of symmetry of a system of integro-differential equations. (Russian. English summary) **84j:45036**
- Sznitko, Wanda On an infinite system of integral equations with deviated argument. **84m:45017**
- Vatsya, S. R. On approximating the solutions of the Chandrasekhar H -equation. **84h:45011**

secondary classifications:

- Cahlon, Baruch (with Eskin, Michael) Existence theorems for an integral equation of the Chandrasekhar H -equation with perturbation. (**84d:45002**)
- Dushkov, P. N. On a method for the approximate solution of nonlinear singular integro-differential equations. (Russian) (**84h:45022**)
- Eskin, Michael See Cahlon, Baruch, (**84d:45002**)
- von Wolfersdorf, Lothar Monotonicity methods for nonlinear singular integral and integro-differential equations. (German and Russian summaries) (**84j:45019**)

45G10 Other nonlinear integral equations

- Bizhanova, G. I. See Kim, E. I., **84f:45009**
- Botashev, A. I. Systems of nonlinear integral equations and branching of their solutions. (Russian) **84a:45006**
- Gaidarov, D. R. (with Ragimkhanov, R. K.) Multivalued integral mappings for single-valued vector-functions and some of their properties in the space of continuous n -dimensional vector-valued functions. (Russian) **84d:45022**
- Khalilov, M. S. (with Shamilov, A. Kh.) Solvability of a parametric problem for integral equations with deviating argument in some function spaces. (Russian. English and Azerbaijani summaries) **84g:45008**
- Kiffe, T. R. Systems of Volterra equations with nonmonotone discontinuous nonlinearities. **84c:45012**
- Kim, E. I. (with Bizhanova, G. I.) A class of integro-differential equations. (Russian) **84f:45009**
- Lai, Roger Existence and stability of travelling wave solutions of a nonlinear integral operator. **84f:45010**
- A nonlinear integral operator arising from a model in population genetics. I. Monotone initial data. **84h:45012a**
- A nonlinear integral operator arising from a model in population genetics. II. Initial data with compact support. **84h:45012b**
- Matkowski, Janusz Functional equations and Nemytskii operators. **84c:45008**
- Müller, G. O. Functional integral equations and measure of noncompactness. **84d:45021**
- Musuralliev, T. A variant of the method of partial external quasilinearization. (Russian) **84c:45013**
- Nurekenov, T. K. Complete continuity of a class of Uryson nonlinear integral operators and its application to solvability of solutions of nonlinear integral equations. (Russian) **84f:45011**
- Okrasinski, W. On a certain nonlinear equation. **84j:45037**
- Parker, G. Edgar (with Walters, Terry J.) Constructing solutions to $\int_0^1 f(j)A(j, x)/f(x)dx = \int_0^1 f(x)A(x, j)/f(j)dx$. **84c:45005**
- Ragimkhanov, R. K. See Gaidarov, D. R., **84d:45022**

Ryu, Ho Won. Solutions of nonlinear integro-differential equations by means of averaging functional correction combined with moment method. (Korean. English summary) **84i:45014**

Shamilov, A. Kh. See Khalilov, M. S., **84i:45008**

Walters, Terry J. See Parker, G. Edgar, **84i:45005**

secondary classifications:

Fusco, G. Pattern formation in hydrostatics. (**84c:58019**)

Kagiwada, Harriet H. (with Kalaba, Robert E.) An initial value method for the nonlinear integral equation $F(u(t), t, \lambda) = \lambda \int_0^t k(t, y, u(y)) dy$. (**84j:45054**)

Kalaba, Robert E. See Kagiwada, Harriet H., (**84j:45054**)

Leonov, K. Ya. See Makhmudov, A. P., (**84i:47070**)

Makhmudov, A. P. (with Leonov, K. Ya.) Solvability of some quasilinear operator equations. (Russian) (**84i:47070**)

Sandabaev, A. Construction of a regularizing algorithm for solving a nonlinear integral equation of the first kind. (Russian) (**84b:65135**)

Seitkazieva, A. S. Volterra integral equations of the first kind of convolution type. (Russian) (**84d:45010**)

Srazhdinov, A. Regularization of multidimensional Volterra integral equations of the first kind. (Russian) (**84a:45002**)

Turo, Jan. Existence and uniqueness of random solutions of nonlinear stochastic functional integral equations. (**84c:60089**)

45H05 Miscellaneous special kernels [See also 44A15.]

Berkovich, V. N. On the exact solution of a class of integral equations of mixed problems of elasticity and mathematical physics. (Russian) **84b:45013**

Kalia, R. N. A class of integral equations involving H -functions. **84d:45023**

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Gogniashvili, Z. M. Some integral equations and boundary value problems of the theory of elasticity for nonsmooth surfaces. (Russian. English and Georgian summaries) (**84d:73018**)

Gupta, H. L. (with Rusia, K. C.) On the solution of an integral equation involving the hypergeometric function ${}_2F_1$. (Hindi. English summary) (**84g:33005**)

Inselberg, Alfred. An integral equation arising in a convective heat (mass) transfer problem through a boundary layer. (**84a:76035**)

Mironenko, N. I. On a mixed problem for a strip. (Russian. Kazakh summary) (**84d:73067**)

Mishra, Ramadhar. Application of generalized q -Laplace transforms to the solution of certain q -integral equations. (**84m:44004**)

Popescu, Gheorghe. See Popescu, Ileana, (**84d:65092**)

Popescu, Ileana (with Popescu, Gheorghe) Mathematical models leading to a certain integral equation. (Romanian. English summary) (**84d:65092**)

Rusia, K. C. See Gupta, H. L., (**84g:33005**)

Trlifaj, L. The radial Marchenko-Blazek integral equation for complete spectra. (**84c:81069**)

45J05 Integro-ordinary differential equations

Abrahamson, D. L. (with Infante, Ettore F.) A Liapunov functional for linear Volterra integro-differential equations. **84g:45009**

Abylkasymov, K. A. See Ved', Yu. A.; et al., **84i:45014**

Agavea, D. A. Application of a modified Chaplygin method to the solution of an integro-differential equation. (Russian) **84d:45024**

Agarwal, Ravi P. A note on S. R. Grace and B. S. Lalli's paper: "Asymptotic behaviour of certain second order integro-differential equations" [J. Math. Anal. Appl. **76** (1980), no. 1, 84-90; MR **81k:45014**]. **84b:45012**

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84i:45009

Ahlip, R. A. See Gopalsamy, K., **84i:45016**

Alymbaev, A. T. Determination of periodic solutions of autonomous systems of integro-differential equations. (Russian) **84m:45018**

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Atdaev, S. A remark on a method of two-sided approximations for ordinary Volterra integro-differential equations. (Russian. English summary) **84j:45038**

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Bayalieva, S. S. See Ved', Yu. A., **84b:45014** and **84d:45028**

Besschitnov, M. E. Some classes of normally solvable systems of one-dimensional singular integro-differential equations with shift. (Russian) **84a:45007**

Bilan, E. P. Asymptotic method in the theory of second-order quasilinear Volterra integro-differential equations. (Russian) **84d:45025**

Bouc, R. Solution stationnaire d'une equation integro-differentielle periodique intervenant en viscoelasticite. [Stationary solution of a periodic integro-differential equation occurring in viscoelasticity] **84m:45019**

Brown, Richard C. (with Trdý, Milan; Vejvoda, Otto) Duality theory for linear n th order integro-differential operators with definition domain in L_∞^n determined by interface side conditions. **84a:45008**

Eremin, M. S. Transformation operators in a star-shaped domain of solutions of some integro-differential equations. (Russian) **84j:45039**

Èshenkulov, K. E. Asymptotic behavior of solutions of the Cauchy problem for a nonlinear system of integro-differential equations. (Russian) **84k:45015**

Gincher, Ivan. Stability of a linear retarded equation. **84b:45014**

Gopalsamy, K. (with Ahlip, R. A.) Time delays in n -species competition. I. Global stability in constant environments. **84i:45016**

Grace, S. R. (with Lalli, B. S.) On oscillatory behavior of general functional integro-differential equations. **84i:45010**

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Gul'ka, S. S. Justification of the averaging method for systems of integro-differential equations with impulse action. (Russian) **84c:45006**

Hale, Jack K. (with Rybakowski, Krzysztof P.) On a gradient-like integro-differential equation. **84j:45040**

Hannsgen, Kenneth B. (with Wheeler, Robert L.) A singular limit problem for an integro-differential equation. **84g:45011**

Ibaev, Yu. M. On the theory of bifurcation of solutions of the Cauchy problem for a class of integro-differential equations. (Russian. English and Azerbaijani summaries) **84m:45020**

Imanaliev, M. I. (with Kakishov, K. K.) Asymptotic methods in the theory of the branching of the solution of the Cauchy problem for integro-differential equations with a small parameter multiplying the derivative. (Russian) **84i:45017**

Infante, Ettore F. See Abrahamson, D. L., **84g:45009**

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Kakishov, K. K. (with Seitkazieva, K. S.) Asymptotic behavior of the solution of the Cauchy problem for an integro-differential equation with a small parameter multiplying the derivative, when the degenerate equation is on the spectrum. (Russian) **84i:45018**

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Kasymov, K. A. Estimates of solutions of linear singularly perturbed integro-differential equations of Fredholm type. (Russian) **84h:45016**

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(with Bainov, D. D.) Asymptotics of the solution of the Cauchy problem for a class of singularly perturbed systems of integro-differential equations. (French summary) **84i:45012**

Khusanov, D. Kh. Estimation in trigonometric norm of periodic solutions of linear and integro-differential equations. (Russian) **84k:45019**

Khusnutdinov, R. Sh. Investigation of solutions of a class of linear singular integro-differential equations. (Russian) **84j:45043**

Linear singular integro-differential equations perturbed by nonlinear terms.

(Russian) **84j:45044**

Koval'skii, N. P. Solutions of a class of integro-differential equations with deviating argument. (Russian) **84c:45006**

Krivoshin, L. E. A way of solving an implicit initial value problem for ordinary nonlinear integro-differential equations. (Russian) **84m:45021**

Lalli, B. S. See Grace, S. R., **84g:45010** and Agarwal, Ravi P., **84b:45012**

Luca, N. The behaviour of the solutions of an integro-differential system with infinite delays. **84j:45045**

MacCamy, Richard C. A model Riemann problem for Volterra equations. **84c:45007**

Makrel'ov, I. V. See Khristova, S. G., **84i:45013**

Markowich, Peter A. (with Renardy, Michael) A nonlinear Volterra integro-differential equation describing the stretching of polymeric liquids. **84d:45026**

Matysina, E. A. See Matysina, N. M., **84c:45007**

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Narmatov, Zh. Existence and uniqueness of the solution of integro-differential equations with lag depending on the solution and its derivative. (Russian) **84m:45022**

Normuratov, Kh. Averaging of integro-differential equations using Lie series. (Russian) **84m:45023**

Omuraliev, A. S. The regularization method for singularly perturbed integro-differential equations. (Russian) **84m:45024**

Pantelev, D. K. Bifurcation of bounded solutions of a singularly perturbed integro-differential system. (See **84c:34002**)

Pavel, Năslău. An asymptotic method for a cyclic system of integro-differential equations. (Romanian. French summary) **84c:45008**

Renardy, Michael. See Markowich, Peter A., **84d:45026**

Rybakowski, Krzysztof P. See Hale, Jack K., **84j:45040**

Sarafova, G. Kh. (with Bainov, D. D.) A numerical-analytic method of investigating countable systems of periodic integro-differential equations. (Russian. English and Bulgarian summaries) **84a:45009**

von Seggern, R. Ein Superkonvergenzresultat bei Anwendung der Methode der finiten Elemente auf lineare Integrodifferentialgleichungen. [A superconvergence result in the application of the finite element method to linear integro-differential equations] **84c:45009**

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Talipova, L. A. Branching of periodic solutions of Volterra integro-differential equations with a control parameter. (Russian) **84c:45010**

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Turbe, N. Justification de la méthode des échelles multiples pour un type d'équations integro-differentielles. [Justification of the multiple-scale method for a type of integro-differential equations] (See **84a:34003**)

Trdý, Milan. See Brown, Richard C.; et al., **84a:45008**

- Ved', Yu. A. Power asymptotic behavior of solutions of integro-differential equations of Volterra type. (Russian) **84d:45027**
 (with Bayaliev, S. S.) Convergence to finite limits of solutions of systems of second-order integro-differential equations of Volterra type. (Russian) **84d:45028**
 (with Iskandarov, S.; Abylkasymov, K. A.) Well-posedness on the semiaxis of an initial Cauchy problem for systems of integro-differential equations of Volterra-Fredholm type. (Russian) **84f:45014**
 Criteria for the existence of solutions with power asymptotic behavior of integro-differential equations of Volterra type with an infinite integration interval. (Russian) **84f:45018**
 (with Bayaliev, S. S.) A limit problem for second-order Volterra integro-differential systems. (Russian) **84f:45014**
 The limit Cauchy problem for integro-differential systems with deviating argument. (Russian) **84m:45025**
 Vejroda, Otto. See Brown, Richard C.; et al. **84d:45008**
 Vinokurov, V. R. (with Smolin, Yu. N.) Some properties of the fundamental matrix of a system of Volterra integro-differential equations. (Russian) **84c:45008**
 Wheeler, Robert L. See Hantsen, Kenneth B. **84g:45011**
 Yakovlev, M. N. Estimates of solutions of systems of loaded integro-differential equations subject to multipoint and integral boundary conditions. (Russian) **84f:45010**

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- Agarwal, Ravi P. See Thandapani, E. **(84b:26020)**
 Aliyev, Rashid Musa (with Bagirov, R. Yu.) Bounded solutions of integro-differential equations of neutral type. (Russian. English and Azerbaijani summaries) **(84g:34131)**
 Alymbaev, A. T. Numerical-analytic method of investigation of autonomous systems of integro-differential equations. (Russian) **(84c:45023)**
 Angelov, V. G. (with Bainov, D. D.) Bounded solutions of functional-differential equations of the neutral type with infinite delays. **(84c:34102)**
 Astapov, I. S. On the stability of solutions of integro-differential equations of aero-auto-elasticity. (Russian. English summary) **(84m:73043)**
 Bagirov, R. Yu. See Aliyev, Rashid Musa. **(84g:34131)**
 Bainov, D. D. See Angelov, V. G., **(84c:34102)**
 Bizhanova, G. I. See Kim, E. I., **(84f:45009)**
 Brewer, Dennis W. A parameter dependence problem in functional-differential equations. **(84j:34074)**
 Burton, T. A. Structure of solutions of Volterra equations. **(84f:45001)**
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 Busenberg, Stavros N. (with Travis, Curtis C.) On the use of reducible-functional-differential equations in biological models. **(84f:34102)**
 Bykov, Ya. V. (with Tankiev, I. A.) A generalized boundary value problem for a countable system of integro-differential equations. (Russian) **(84d:34074)**
 Chen, Masao R. Y. On the phase transition of the one-dimensional Percus-Yevick equation for an arbitrary potential of finite range. **(84i:82021)**
 Cooke, Kenneth L. (with Kaplan, James L.; Sorg, M.) Stability of a functional-differential equation for the motion of a radiating charged particle. **(84c:78009)**
 Dietz, Klaus. See Hader, K. P., **(84i:92063)**
 Dzhushev, I. Solution of an initial value problem for a class of semiexplicit nonlinear loaded integro-differential equations. (Russian) **(84h:45023)**
 Fernandez, Dicesar Lass. See Voinea, R. V.; et al., **(84a:92035)**
 Groh, Jürgen. On the optimal control for nonlinear equations with impulses. **(84a:49014)**
 Hader, K. P. (with Dietz, Klaus) An integral equation for helminth infections: global existence of solutions. **(84i:92063)**
 Iskandarov, S. See Pakhyrov, Z., **(84d:45038)**
 Kaplan, James L. See Cooke, Kenneth L.; et al., **(84c:78009)**
 Khoma, G. P. Asymptotic methods for investigating solutions of differential and integro-differential equations. (Russian) **(84d:34054)**
 Khusanov, D. Kh. See Ryabov, Yu. A., **(84d:34080)**
 Khutoryanskii, N. M. Boundary-contact integro-differential equations of elasticity theory for piecewise-homogeneous bodies. (Russian) **(84g:73066)**
 Kim, E. I. (with Bizhanova, G. I.) A class of integro-differential equations. (Russian) **(84f:45009)**
 Krivoshein, L. E. See Voinea, R. V.; et al., **(84a:92035)**
 Levin, J. J. Synthesis of solutions of integral equations. **(84j:45058)**
 Mahfoud, W. E. See Burton, T. A., **(84h:45004)**
 Mangeron, D. See Voinea, R. V.; et al., **(84a:92035)**
 Matisina, E. A. See Matisina, N. V., **(84j:45055)**
 Matisina, N. V. (with Matisina, E. A.) A variant of averaging of a problem of Cauchy type. (Ukrainian. Russian summary) **(84j:45055)**
 Mkhitarian, S. M. On the problem of a contact interaction between a semi-infinite inhomogeneous stringer and an elastic half plane or plane. (Russian. Armenian summary) **(84g:73067)**
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 Mkhitarian, V. G. (with Mkhitarian, S. M.) A way of constructing a solution of the Prandtl integro-differential equation on a semi-infinite interval and its application to contact problems of elasticity theory. (Russian. Armenian summary) **(84d:73068)**
 Normuratov, Kh. Study of resonance regimes in certain nonlinear systems. (Russian) **(84f:73025)**
 Nurzhanov, O. D. See Wójciszewski, Bogdan, **(84c:65134)**
 Pachpatte, B. G. A note on some fundamental integro-differential inequalities. **(84c:26018)**
 Pakhyrov, Z. (with Iskandarov, S.) Boundedness of solutions of second-order linear integro-differential equations of Volterra type. (Russian) **(84d:45038)**
 Pavlenko, V. N. The existence of solutions of nonlinear equations with discontinuous semimonotone operators. (Russian) **(84d:47088)**
 Prakasa Rao, B. L. S. Absolute stability of a stochastic integro-differential system. II. (Russian) **(84h:60119)**

- Prosperetti, Andrea. A method for the solution of a class of singular Volterra integro-differential equations. **(84c:65106)**
 Ryabov, Yu. A. (with Khusanov, D. Kh.) Periodic solutions of a second-order integro-differential equation in the nonresonance case. (Russian) **(84d:34080)**
 Sabe, P. See Terzieva, Veselina Denkova, **(See 84c:34002)**
 Sano, Osamu. An analytic solution of the Lorenz model. **(84j:58108)**
 (Shiganov, I. S.) See Prakasa Rao, B. L. S., **(84h:60119)**
 Sorg, M. See Cooke, Kenneth L.; et al., **(84c:78009)**
 Sosna, Dieter. Eine implizite Integro-Differentialgleichung und Bifurkationen. [An implicit integro-differential equation and bifurcations] **(84h:58027)**
 Takahasi, Nobuhiro. Some appending results of Galerkin's procedure for nonlinear periodic functional-differential equations. **(84h:34104)**
 Tankiev, I. A. See Bykov, Ya. V., **(84d:34074)**
 Terzieva, Veselina Denkova (with Sabe, P.) Property of certain nonlinear delay differential equation. (See **84c:34002**)
 Thandapani, E. (with Agarwal, Ravi P.) On some new integro-differential inequalities: theory and applications. **(84h:26020)**
 Travis, Curtis C. See Busenberg, Stavros N., **(84f:34102)**
 Voinea, R. V. (with Mangeron, D.; Krivoshein, L. E.; Fernandez, Dicesar Lass) Theorems concerning mixed structure mathematical systems which generalize the normal functioning of single nerve fiber equations. (Romanian summary) **(84a:92035)**
 Voronoi, O. M. Construction of formal solutions of a linear system of integro-differential equations with a small parameter and variable delay. (Russian) **(84c:34105)**
 Wójciszewski, Bogdan (with Nurzhanov, O. D.) The Bubnov-Galerkin method for nonlinear periodic systems of integro-differential equations of Volterra type with infinite aftereffect. (Russian) **(84h:65134)**

45K05 Integro-partial differential equations

- Andrianova, R. A. Construction of a formula for solution of a class of mixed problems for a system of Fredholm integro-differential equations. (Russian) **84m:45026**
 Atamanov, E. R. A problem for an integro-differential equation. (Russian) **84m:45027**
 Azhigulov, M. A. Construction of an asymptotic solution of a partial differential equation for rapid transients with a small parameter. (Russian) **84m:45028**
 Azimov, T. Sh. An analytic extension of solutions of a class of integro-differential equations with various parameters. (Russian) **84d:45029**
 Bassanini, Piero (with Salvatori, M. Cesarina) A boundary value problem for nonlinear hyperbolic integro-differential systems. (Italian. English summary) **84h:45015**
 Boltyanskii, V. V. (with Likhtarnikov, L. M.) A class of linear partial integral equations. (Russian) **84j:45047**
 Degasperis, Antonio (with Santini, P. M.) Linear operator and conservation laws for a class of nonlinear integro-differential evolution equations. **84d:45020**
 Giroire, Jean. Integral equation methods for the Helmholtz equation. **84m:45029**
 Gospodinov, M. G. A numerical-analytic method of investigation of a class of periodic systems of first-order integro-differential equations. (Bulgarian. English and Russian summaries) **84j:45048**
 Greenberg, James M. (with Xiao, Ling; MacCamy, Richard C.) A model Riemann problem for Volterra equations. **84j:45049**
 Hantsen, Kenneth B. A linear integro-differential equation for viscoelastic rods and plates. **84f:45015**
 Havárneanu, Teodor. On a certain integro-differential system with delay. (Russian and Polish summaries) **84c:45011**
 Hoare, M. R. (with Raval, S.; Rahman, Mizan) The Rayleigh model: singular transport theory in one dimension. **84m:45030**
 Kiffe, T. R. A Volterra equation with a time dependent operator. **84j:45050**
 Kritskaya, S. S. (with Rogach, D. I.) Solution of a problem with boundary and initial conditions. (Russian) **84d:45030**
 Krivoshein, L. E. Solution of a class of partial integro-differential equations with semiexplicit integral boundary conditions. (Russian) **84m:45031**
 Langlais, Michel R. On a linear age-dependent population diffusion model. **84h:45019**
 Likhtarnikov, L. M. See Boltyanskii, V. V., **84j:45047**
 MacCamy, Richard C. See Greenberg, James M.; et al., **84j:45049**
 Matsumo, Yoshimasa. On the Benjamin-Ono equation-method for exact solution. **84j:45051**
 Nazarov, G. K. Uniqueness of the solution of the first boundary value problem in an unbounded domain for an integro-differential equation. (Russian. English and Azerbaijani summaries) **84j:45052**
 Nazarov, S. A. (with Sholkhet, B. A.) Asymptotic behavior near a corner point of the boundary of the solution of an integro-differential equation. (Russian) **84m:45032**
 Nohel, John A. A nonlinear hyperbolic Volterra equation. **84c:45009**
 A nonlinear conservation law with memory. **84c:45021**
 Omurov, Talaibek. Approximate solution of an initial value problem for a class of semiexplicit nonlinear integro-differential equations. (Russian) **84h:45016**
 Pachpatte, B. G. Perturbations of Bianchi type partial integro-differential equation. **84g:45012**
 On some fundamental hyperbolic partial integral inequalities. **84d:45031**
 Rahman, Mizan. See Hoare, M. R.; et al., **84m:45030**
 Raval, S. See Hoare, M. R.; et al., **84m:45030**
 Rogach, D. I. See Kritskaya, S. S., **84d:45030**
 Sakabekov, A. Differential properties of solutions of a boundary value problem for a system of equations of the method of spherical harmonics in P_{2N+1} -approximation. (Russian. Kazakh summary) **84h:45020**
 Salvatori, M. Cesarina. See Bassanini, Piero, **84h:45015**
 Santini, P. M. See Degasperis, Antonio, **84d:45020**
 Shmarin, S. I. The second boundary value problem for an integro-differential equation of parabolic type. (Russian) **84m:45033**
 Sholkhet, B. A. See Nazarov, S. A., **84m:45032**
 Sultangazin, U. M. (with Sydykov, G. M.) An estimate of the rate of convergence of the method of spherical harmonics in the spaces L_2 and C . (Russian. Kazakh summary) **84a:45010**

- Sydykov, G. M. See Sultanzin, U. M., (84c:45010)
 Sysoeva, T. N. See Vasil'eva, A. B., (84c:45022)
 Ts'ai, Lung I. On the solvability of nonlinear integro-differential operators. (84c:45016)
 Vasil'eva, A. B. (with Sysoeva, T. N.) Application of the method of boundary functions to a first-order singularly perturbed integro-partial differential equation. (Russian) (84c:45022)
 Wexler, Dima Frequency domain stability for a class of evolution equations. (See 84c:34003)
 Xiao, Ling See Greenberg, James M.; et al., (84j:45049)
 Zhemukhov, Kh. K. The Cauchy problem for a fourth-order quasilinear degenerate integro-differential equation. (Russian. English summary) (84c:45021)

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- Alberti, Peter M. (with Crell, Bernd) Boltzmannähnliche Gleichungen und H -Theorem. [Boltzmann-like equations and H -theorems] (84b:76049)
 Arkeryd, Leif L^∞ estimates for the space-homogeneous Boltzmann equation. (84m:76074)
 Asano, Kiyoshi See Ukai, Seiji, (84c:82048)
 Barinova, T. Ya. (with Malikova, A. Sh.) On a boundary value problem for an integro-differential equation in the case of a half space. (Russian) (84h:73013)
 Bassanini, Piero (with Galaverni, Manuela) Multiple contractions, hyperbolic systems and the laser problem. (Italian. English summary) (84m:78034)
 Baumeister, Johann Boundary control of an integro-differential equation. (84f:49007)
 Berezovskii, A. A. See Mitropol'skii, Yu. A.; et al., (84g:78019)
 Bloom, Frederick Growth estimates for electric displacement fields and bounds for constitutive constants in the Maxwell-Hopkinson theory of dielectrics. (84a:35284)
 Boffi, V. C. (with Spiga, G.) Global solution to a nonlinear integral evolution problem in particle transport theory. (84f:82055)
 (with Spiga, G.) An equation of Hammerstein type arising in particle transport theory. (84h:82069)
 (with Spiga, G.) Nonlinear removal effects in time-dependent particle transport theory. (Italian summary) (84f:76055)
 Busenberg, Stavros N. (with Iannelli, Mimmo) A class of nonlinear diffusion problems in age-dependent population dynamics. (84g:92025)
 Cabannes, Henri Global solution of the discrete Boltzmann equation. (84j:82059)
 Caffisch, Russel E. (with Nicolaenko, Basil) Shock profile solutions of the Boltzmann equation. (84d:82022)
 Canadas, Guy (with Genet, Jean; Jgounni, Abdellah) Sur une équation intégrale-différentielle de type hyperbolique de la sismique. (English summary) [An integro-differential equation of hyperbolic type arising in seismology] (84h:86004)
 Capodanno, Pierre Sur les mouvements non stationnaires d'un profil dans un fluide pesant limité par une ligne libre. (Russian summary) [On the nonstationary motions of a profile in a heavy fluid bounded by a free line] (84f:76024)
 Colli Franzone, P. (with Guerri, L.; Viganotti, C.) Oblique dipole layer potentials applied to electrocardiology. (84j:92017)
 Crell, Bernd See Alberti, Peter M., (84b:76049)
 Danilevich, Ya. B. See Mitropol'skii, Yu. A.; et al., (84g:78019)
 Dunn, W. L. See Siewert, C. E., (84m:85014)
 Elmroth, T. Global boundedness of moments of solutions of the Boltzmann equation for forces of infinite range. (84f:76044)
 Gadoev, M. Weak solutions of the Vlasov equation. (Russian. Tajiki summary) (84h:82043)
 Galaverni, Manuela See Bassanini, Piero, (84m:78034)
 Genet, Jean See Canadas, Guy; et al., (84h:86004)
 Gopalsamy, K. Time lags and density dependence in age dependent two-species competition. (84h:92047)
 Guerri, L. See Colli Franzone, P.; et al., (84j:92017)
 Hendriks, E. M. (with Nieuwenhuizen, T. M.) Solution to the nonlinear Boltzmann equation for Maxwell models for nonisotropic initial conditions. (84f:76056)
 Iannelli, Mimmo See Busenberg, Stavros N., (84g:92025)
 Illner, Reinhard Global existence results for discrete velocity models of the Boltzmann equation in several dimensions. (French summary) (84h:76050)
 Jgounni, Abdellah See Canadas, Guy; et al., (84h:86004)
 Kato, Norio Statistical dynamical theory of crystal diffraction. I. General formulation. (84m:82099a)
 Statistical dynamical theory of crystal diffraction. II. Intensity distribution and integrated intensity in Laue cases. (84m:82099b)
 Kelley, C. T. Approximate methods for the solution of the Chandrasekhar H -equation. (84b:65051)
 Kopackova, Marie On periodic solution of a nonlinear beam equation. (Russian and Czech summaries) (84d:35011)
 Lachowicz, Mirosław On the local existence and uniqueness of solution of initial value problem for the Enskog equation. (Russian summary) (84c:82101)
 Latyshev, V. N. (with Tupchiev, V. A.) Asymptotic expansion of the solution of the neutron transport equation in the case of a small mean free path. (Russian) (84m:82121)
 Maksudov, F. G. (with Rasulov, T. M.) Solution of problems for a nonlinear system of integro-differential equations that characterizes the process of displacement of petroleum from strata by mineral solutions. (Russian) (84m:35007)
 Malikova, A. Sh. See Barinova, T. Ya., (84h:73013)
 Marsden, Jerrold E. (with Weinstein, Alan) The Hamiltonian structure of the Maxwell-Vlasov equations. (84b:82037)
 Matsumo, Yoshimasa Recurrence formula and conserved quantity of the Benjamin-Ono equation. (84c:35132)
 Maz'ya, V. G. See Zargaryan, S. S., (84g:31003)
 van der Mee, C. V. M. Positivity and monotonicity properties of transport equations with spatially dependent cross sections. (84m:82123)
 Mimura, Masayasu (with Nagai, Toshitaka) Differential equations of biological models. (Japanese) (84d:92007)
 Mitropol'skii, Yu. A. (with Berezovskii, A. A.; Danilevich, Ya. B.; Plotnitskii, T. A.) The method of integral equations on impedance surfaces in problems of low-frequency electrodynamics. (Russian) (84g:78019)
 Movlyankulov, Kh. Asymptotic representation of solutions of nonlinear equations of viscoelasticity. (Russian) (84k:73026)
 Nagai, Toshitaka Some nonlinear degenerate diffusion equations with a nonlocally convective term in ecology. (84d:35075)
 See also Mimura, Masayasu, (84d:92007)
 Nicolaenko, Basil See Caffisch, Russel E., (84d:82022)
 Nieuwenhuizen, T. M. See Hendriks, E. M., (84f:76056)
 Nishida, Takaaki Asymptotic behaviour of solutions of the Boltzmann equation. (84k:76068)
 Nishigori, Takeo Space-time memory functions and solution of nonlinear evolution equations. (84g:35154)
 Pachpatte, B. G. See Singare, V. M., (84d:26014)
 Palczewski, A. Local existence theorem for the Boltzmann equation in L_1 . (84h:82047)
 Pao, C. V. Comparison and stability of solutions for a neutron transport problem with temperature feedback. (84c:82036)
 Pauling, John M. Criticality estimates for neutron transport in a slab with generalized reflecting boundary conditions. (84b:82072)
 Pettersson, Rolf Existence theorems for the linear, space-inhomogeneous transport equation. (84m:82126)
 Plotnitskii, T. A. See Mitropol'skii, Yu. A.; et al., (84g:78019)
 Plyashkevich, V. Yu. The method of spherical harmonics for the transport equation. (Russian) (84h:82069)
 Pozio, M. Assunta Some conditions for global asymptotic stability of equilibria of integro-differential equations. (84m:35114)
 Rasulov, T. M. See Maksudov, F. G., (84m:35007)
 Saleidinov, K. I. Asymptotic behavior of the solutions of equations of radiation transport theory. (Russian) (84h:45019)
 Selekhman, N. A. Maximal algebra of symmetry of a system of integro-differential equations. (Russian. English summary) (84j:45036)
 Siewert, C. E. (with Dunn, W. L.) Radiation transport in plane-parallel media with nonuniform surface illumination. (German summary) (84m:85014)
 Singare, V. M. (with Pachpatte, B. G.) On some basic partial integral inequalities and their applications. (84d:26014)
 Spiga, G. See Boffi, V. C., (84f:82055); (84h:82069) and (84f:76055)
 Stanković, Bogoljub (with Takači, Djurdjica) Equation of oscillation of a viscoelastic bar. II. (Serbo-Croatian summary) (84d:73037)
 Takači, Djurdjica See Stanković, Bogoljub, (84d:73037)
 Tupchiev, V. A. See Latyshev, V. N., (84m:82121)
 Ukai, Seiji On the exterior problem to a linearized Boltzmann equation with the reverse reflection boundary condition. (84c:82018)
 (with Asano, Kiyoshi) On the Cauchy problem of the Boltzmann equation with a soft potential. (84h:82048)
 Viganotti, C. See Colli Franzone, P.; et al., (84j:92017)
 Webb, G. F. The semigroup associated with nonlinear age dependent population dynamics. (84g:92038)
 Nonlinear age-dependent population dynamics in L^1 . (84h:92024)
 Weinstein, Alan See Marsden, Jerrold E., (84b:82037)
 Zargaryan, S. S. (with Maz'ya, V. G.) Singularities of solutions of a system of equations of potential theory for Zaremba's problem. (Russian. English summary) (84g:31003)
 Zhang, Yang Zhong The asymptotic propagation function and the dispersion relation in RQL theory of plasma. (Chinese. English summary) (84c:82018)

45Lxx Approximation of solutions

45L05 Theoretical approximation of solutions

- Alymbaev, A. T. Numerical-analytic method of investigation of autonomous systems of integro-differential equations. (Russian) (84c:45023)
 Dushkov, P. N. On a method for the approximate solution of nonlinear singular integro-differential equations. (Russian) (84h:45022)
 Dzhushev, I. Solution of an initial value problem for a class of semiexplicit nonlinear loaded integro-differential equations. (Russian) (84h:45023)
 Egorova, M. I. Study of the solvability and construction of an approximate solution of some problems for a system of equations. (Russian) (84j:45053)
 Gabitov, I. R. See Imanaliev, M. I., (84d:45032)
 Imanaliev, M. I. (with Gabitov, I. R.) On a method of approximating generalized solutions of a Volterra integral equation of the first kind. (Russian) (84d:45032)
 Kadushin, V. P. On approximate solution of nonlinear singular integro-differential equations. (Russian) (84f:45017)
 Kagiwada, Harriet H. (with Kalaba, Robert E.) An initial value method for the nonlinear integral equation $F(u(t), t, \lambda) = \lambda \int_0^t k(t, y, u(y)) dy$. (84j:45054)
 Kalaba, Robert E. See Kagiwada, Harriet H., (84j:45054)
 Kas'yanov, V. I. Optimization of direct methods of solution of singular integral equations and Riemann boundary value problems. (Russian) (84m:45034)
 Kovalenko, E. V. Approximate solution of a type of integral equation of elasticity theory and mathematical physics. (Russian. English and Armenian summaries) (84b:45017)
 Matisina, E. A. See Matisina, N. V., (84j:45055)
 Matisina, N. V. (with Matisina, E. A.) A variant of averaging of a problem of Cauchy type. (Ukrainian. Russian summary) (84j:45055)
 Mel'nik, Yu. I. See Zaliznyak, S. N.; et al., (84d:45034)
 Moore, R. E. A generalization of the method of upper and lower solutions for integral equations. (84c:45010)
 Musina, S. S. Two-sided approximations of some integro-differential equations. (Russian) (84d:45033)
 Musuriliev, T. Approximate solution of integro-differential equations of elliptic type by the variant method of partial exterior linearization. (Russian) (84b:45018)

- Nédélec, J.-C. Integral equations with nonintegrable kernels. **84i:45011**
- Omarov, T. E. Investigation of a singular integral equation of Volterra type in weight spaces. (Russian. English and Azerbaijani summaries) **84j:45056**
- Pidilpenko, Yu. K. See Zaliznyak, S. N.; et al., **84d:45034**
- Polyakov, R. V. An application of splines to the solution of two-dimensional integral equations. (Russian) **84m:45035**
- Raikov, N. S. Approximate solution of a singular integro-differential equation of elasticity theory. (Russian. English and Bulgarian summaries) **84j:45057a**
- Sarygulov, K. S. Approximate solution of a class of ordinary integro-differential equations by the finite element method. (Russian) **84m:45036**
- Savelova, T. I. The relation of A. N. Tikhonov's regularization method for certain equations of convolution type to the solution of boundary value problems. (Russian) **84m:45037**
- Srazhadinov, A. Regularization of Volterra integral equations of the first kind. (Russian) **84i:45024**
- Regularization of integral equations of Abel type. (Russian) **84f:45018**
- Ungiadze, A. V. Approximate solution of a class of singular integral equations with generalized Cauchy kernels. (Russian. English and Georgian summaries) **84f:45019**
- Zaliznyak, S. N. (with Mel'nik, Yu. I.; Pidilpenko, Yu. K.) On an approximate solution of integral equations of potential theory. (Russian) **84d:45034**

secondary classifications:

- Arnold, Douglas N. A spline-trigonometric Galerkin method and an exponentially convergent boundary integral method. **(84m:65117)**
- Bainov, D. D. See Sarafova, G. Kh., **(84a:45009)**
- Baldino, R. R. An integral equation approximation of the mixed problem for the Laplacian in \mathbb{R}^n . **(84c:35039)**
- Chaléat, Raymond See D'Ambrosio, U.; et al., **(84h:93036)**
- Chashechin, O. N. Regularization of Volterra operator equations of the first kind in a scale of Banach spaces. (Russian) **(84j:45007)**
- D'Ambrosio, U. (with Chaléat, Raymond; Mangeron, D.; Shimbo, Masaru) Integral equations method in studies concerning certain nonlinear self-controlled systems with hereditary and polywave or polyvibrating operators. **(84h:93036)**
- Donig, J. The domain dependence of dominant Fredholm eigenvalues for the Helmholtz operator. **(84i:35044)**
- Gaifullina, L. P. Application of splines to approximate solution of integral equations. (Russian) **(84h:65115)**
- Gol'dshtein, R. V. (with Shifrin, E. I.) Plane crack of an arbitrary discontinuity in a bounded elastic body. **(84g:73063)**
- Gospodinov, M. G. A numerical-analytic method of investigation of a class of periodic systems of first-order integro-differential equations. (Bulgarian. English and Russian summaries) **(84j:45048)**
- Guseinov, E. A. Justification of the projection method for an integral equation of the first kind with a logarithmic singularity of the kernel. (Russian. English and Azerbaijani summaries) **(84h:65128)**
- Imanaliyev, M. I. (with Petrova, L. B.) Approximation of the generalized solution of a two-dimensional Fredholm integral equation of the first kind and convolution type. (Russian) **(84m:45007)**
- Jain, D. L. (with Kanwal, R. P.) Solutions of potential problems in composite media by integral equation techniques. III. Three-dimensional problems. **(84d:31004)**
- Kanwal, R. P. See Jain, D. L., **(84d:31004)**
- Krivoshchin, L. E. Solution of a class of partial integro-differential equations with semiexplicit integral boundary conditions. (Russian) **(84m:45031)**
- Mangeron, D. See D'Ambrosio, U.; et al., **(84h:93036)**
- Omurov, Taalibek Approximate solution of an initial value problem for a class of semiexplicit nonlinear integro-differential equations. (Russian) **(84h:45016)**
- Petrova, L. B. See Imanaliyev, M. I., **(84m:45007)**
- Saadabaev, A. Approximate solution of a Fredholm integral equation of the first kind in the space of continuous functions. (Russian) **(84d:45005)**
- Sarafova, G. Kh. (with Bainov, D. D.) A numerical-analytic method of investigating countable systems of periodic integro-differential equations. (Russian. English and Bulgarian summaries) **(84a:45009)**
- Seichuk, V. N. See Zolotarevskii, V. A., **(84j:45020)**
- Shifrin, E. I. See Gol'dshtein, R. V., **(84g:73063)**
- Shimbo, Masaru See D'Ambrosio, U.; et al., **(84h:93036)**
- Zolotarevskii, V. A. (with Seichuk, V. N.) The collocation method for solving singular integral equations along a Lyapunov contour. (Russian) **(84j:45020)**

45L10 Numerical approximation of solutions [For numerical analysis, see 65R20.]

- Kas'yanov, V. I. Approximate solution of singular integral equations. II. (Russian) **84i:45024**
- Raikov, N. S. On the approximate solution of a singular integro-differential equation of elasticity theory. (Russian. English and Bulgarian summaries) **84j:45057b**

secondary classifications:

- Ahn, Hyun J. On random transverse vibrations of a rotating beam with a tip mass: method of integral equations. **(84g:73026)**
- Baker, Christopher T. H. An introduction to the numerical treatment of Volterra and Abel-type integral equations. **(84g:65160)**
- Cahlon, Baruch (with Nachman, Louis J.) Numerical solutions of a perturbed Chandrasekhar H -equation. **(84h:85003)**
- Caron, A. Approximations of finite parts and numerical solutions of singular integral equations. **(84i:65113)**
- Ermakov, S. M. Summation of series connected with integral equations. (Russian. English summary) **(84m:45003)**

- Golberg, Michael A. Galerkin's method for operator equations with nonnegative index—with application to Cauchy singular integral equations. **(84m:65071)**
- Graham, Ivan G. Galerkin methods for second kind integral equations with singularities. **(84d:65090)**
- Gutknecht, Martin H. Numerical experiments on solving Theodoresen's integral equation for conformal maps with the fast Fourier transform and various nonlinear iterative methods. **(84c:65054)**
- Haftmann, Rolf Über die Quadraturformelmethode zur Lösung singularer Integralgleichungen. [The quadrature formula method for the solution of singular integral equations] **(84h:45008)**
- Horiček, J. (with Sasakawa, T.) Method of continued fractions with application to atomic physics. **(84h:81126)**
- Ioakimidis, Nikolaos I. Further convergence results for the weighted Galerkin method of numerical solution of Cauchy-type singular integral equations. **(84g:65164)**
- Junghanns, Peter Kollokationsverfahren zur näherungsweise Lösung singularer Integralgleichungen mit unstetigen Koeffizienten. [Collocation methods for the approximate solution of singular integral equations with discontinuous coefficients] **(84h:65131)**
- Kelley, C. T. Approximation of solutions of some quadratic integral equations in transport theory. **(84j:85007)**
- Khutornyanski, N. M. Boundary integral and integro-differential equations of the second kind for the fundamental mixed problem of elasticity theory. (Russian) **(84g:73021)**
- Markowich, Peter A. (with Renardy, Michael) A nonlinear Volterra integro-differential equation describing the stretching of polymeric liquids. **(84d:45026)**
- Moss, William F. The two-dimensional oscillating airfoil: a new implementation of the Galerkin method. **(84g:45005)**
- Nachman, Louis J. See Cahlon, Baruch, **(84h:85003)**
- Renardy, Michael See Markowich, Peter A., **(84d:45026)**
- Sasakawa, T. See Horiček, J., **(84h:81126)**
- Sarruk, M. P. ★Двухмерные задачи упругости для тел с трещинами. (Russian) [Two-dimensional elasticity problems for bodies with cracks] **(84c:73073)**
- Uba, P. Iterative solution of an integral equation with a weakly singular kernel. (Russian. English summary) **(84h:65117)**
- Vultovich, B. A numerical-analytic method of investigation of integro-differential equations. (Ukrainian. Russian summary) **(84i:65118)**

45L99 None of the above, but in this section

secondary classifications:

- Barataliev, K. B. On the theory of variational inequalities. (Russian) **(84m:49019)**
- O'fshanskii, V. P. Integral equations of the bending of shallow shells. (Russian) **(84c:73052)**

45Mxx Qualitative behavior

45M05 Asymptotics

- Gripenberg, Gustaf Asymptotic solutions of some nonlinear Volterra integral equations. **84a:45011**
- Iskandarov, S. Boundedness of solutions of first-order nonlinear integro-differential equations of Volterra type. (Russian) **84d:45035**
- Asymptotic behavior of solutions of nonlinear integral equations of Volterra type. (Russian) **84d:45036**
- Kakishov, K. K. Asymptotic methods in the theory of branching of periodic solutions of singularly perturbed systems of integro-differential equations with several small parameters multiplying the highest derivatives. (Russian) **84m:45038**
- Karakostas, George Causal operators and topological dynamics. **84h:45025a**
- Levin, J. J. Synthesis of solutions of integral equations. **84j:45058**
- Rose, L. R. F. Asymptotic analysis of the Cooke-Noble integral equation. **84a:45012**
- Saleidinov, K. I. Asymptotic behavior of the solutions of equations of radiation transport theory. (Russian) **84h:45019**
- Srazhadinov, A. On the asymptotic behavior of singularly perturbed Volterra equations and its application to the establishment of sufficient conditions for the existence and uniqueness of solutions of Volterra equations of the first kind. (Russian) **84j:45059**
- Wang, Ting Fu A condition of asymptotic behaviour of certain vibration system. **84j:45060**

secondary classifications:

- Akhmedov, T. M. (with Veliev, E. I.) Solution of a class of paired integral equations in problems of diffraction theory. (Russian. English summary) **(84j:45033)**
- Karakostas, George The effect of seasonal variations to the delay population equation. **(84d:92032)**
- Levin, J. J. Some synthesis problems for integral equations. (See **84h:45002**)
- Londen, Stig-Olof On the asymptotics of some Volterra equations with locally finite measures and large perturbations. (See **84b:34002**)
- Marcus, Moshe (with Mizel, Victor) Limiting equations for problems involving long range memory. **(84j:54029)**
- Misra, Niyati See Parhi, N., **(84g:45003)**
- Mizel, Victor See Marcus, Moshe, **(84j:54029)**
- Parhi, N. (with Misra, Niyati) On oscillatory and nonoscillatory behaviour of solutions of Volterra integral equations. **(84g:45003)**
- Veliev, E. I. See Akhmedov, T. M., **(84j:45033)**
- Yamada, Yoshio On a certain class of semilinear Volterra diffusion equations. **(84h:92062)**

45M10 Stability theory

- Karakostas, George Uniform asymptotic stability of causal operator equations. **84h:45025b**
- Krivoshein, L. E. (with Leung, K. V.; Mangeron, D.; Oğuztöreli, M. Namik) Sur certains systèmes intégraux différentiels non linéaires aux opérateurs hyperboliques et aux autorégulations dans les limites d'intégration. (English summary) [Some nonlinear integro-differential systems with hyperbolic operators and self-regulators in the limits of integration] **84g:45013**
- Leung, K. V. See Krivoshein, L. E.; et al. **84g:45013**
- Mangeron, D. See Krivoshein, L. E.; et al. **84g:45013**
- Oğuztöreli, M. Namik See Krivoshein, L. E.; et al. **84g:45013**
- Sopronyuk, F. O. A means of investigating the asymptotic stability of solutions of integral equations with small parameters. (Russian) **84d:45037**

secondary classifications:

- Burton, T. A. Volterra equations with small kernels. **(84m:45009)**
- Cooke, Kenneth L. (with Kaplan, James L.; Sorg, M.) Stability of a functional-differential equation for the motion of a radiating charged particle. **(84k:78009)**
- Gripenberg, Gustaf Stability of periodic solutions of some integral equations. **(84h:34102)**
- Kaplan, James L. See Cooke, Kenneth L.; et al. **(84k:78009)**
- Matsenko, V. G. ★ Анализ некоторых непрерывных моделей динамики возрастной структуры популяции. (Russian) [Analysis of some continuous models of the dynamics of the age-size structure of populations] **(84a:92051)**
- Sorg, M. See Cooke, Kenneth L.; et al. **(84k:78009)**

45M99 None of the above, but in this section

- Foltyńska, Izabela On the oscillatory solution of certain nonlinear integral equation. **84j:45061**
- Iskandarov, S. See Pakhyrov, Z. **84d:45038**
- Lietuviets, O. I. Analyticity of the solution of an operator equation. (Russian) **84b:45020**
- Pakhyrov, Z. (with Iskandarov, S.) Boundedness of solutions of second-order linear integro-differential equations of Volterra type. (Russian) **84d:45038**

secondary classifications:

- Bainov, D. D. See Khristova, S. G., **(84d:26012)**
- Cushing, J. M. Bifurcation of time periodic solutions of the McKendrick equations with applications to population dynamics. **(84g:92028)**
- Dzhuraev, M. See Imanaliev, M. I., **(84d:45004)**
- Gyllenberg, Mats Nonlinear age-dependent population dynamics in continuously propagated bacterial cultures. **(84f:92037)**
- Imanaliev, M. I. (with Dzhuraev, M.) Generalized solution of a system of integral equations of Fredholm type of the first kind. (Russian) **(84d:45004)**
- Iskandarov, S. Boundedness of solutions of a class of second-order nonlinear integro-differential equations of Volterra type. (Russian) **(84m:45010)**
- Khalilov, M. S. (with Shamilov, A. Kh.) Solvability of a parametric problem for integral equations with deviating argument in some function spaces. (Russian. English and Azerbaijani summaries) **(84g:45006)**
- Khristova, S. G. (with Bainov, D. D.) Integral inequalities for functions of many variables. **(84d:26012)**
- Lui, Roger Existence and stability of travelling wave solutions of a nonlinear integral operator. **(84f:45010)**
- A nonlinear integral operator arising from a model in population genetics. I. Monotone initial data. **(84h:45012a)**
- A nonlinear integral operator arising from a model in population genetics. II. Initial data with compact support. **(84h:45012b)**
- Shamilov, A. Kh. See Khalilov, M. S., **(84g:45006)**
- Tsalyuk, Z. B. An estimate for the solution of the Volterra integral equation. (Russian) **(84h:45006)**
- Vef, Yu. A. Power asymptotic behavior of solutions of integro-differential equations of Volterra type. (Russian) **(84d:45027)**
- Young, Eutiquio C. On Bellman-Bihari integral inequalities. **(84d:26015)**

45N05 Abstract integral equations, integral equations in abstract spaces

- Aizicovici, Sergiu On the asymptotic behaviour of solutions of Volterra equations in Hilbert space. **84e:45012**
- Carr, R. W. Integrable resolvent operators for an abstract Volterra equation in Hilbert space. (See **84h:45002**)
- Chen, Goong (with Grimmer, Ronald) Integral equations as evolution equations. **84j:45062**
- Grimmer, Ronald (with Zeman, Marvin) Nonlinear Volterra integro-differential equations in a Banach space. **84i:45012**
- See also Chen, Goong. **84j:45062**
- Hönig, Chaim Samuel The adjoint equation of a linear Volterra Stieltjes-integral equation with a linear constraint. **84c:45011**
- Equations intégrales généralisées et applications. [Generalized integral equations and applications] **84m:45039**
- Lighthourne, James H., III Nonlinear retarded perturbation of a linear evolution system. **84c:45012**
- Malec, Miloslav Nonlinear Volterra-type equation in Banach space. (Russian summary) **84i:45013**
- Muszyński, Jerzy Investigations of a certain "homogeneous" integral equation in a Banach space. (Russian) **84f:45020**

- Orlicz, Władysław (with Szufla, Stanisław) On some classes of nonlinear Volterra integral equations in Banach spaces. (Russian summary) **84b:45021**
- Rao, D. R. K. Qualitative theory of functional integral equations in Banach spaces. **84m:45040**
- Szufla, Stanisław An existence theorem for integral equations in Banach spaces. (Russian summary) **84c:45025**
- See also Orlicz, Władysław. **84b:45021**
- Zeman, Marvin See Grimmer, Ronald. **84i:45012**

secondary classifications:

- Asanov, A. Regularization of a Volterra operator equation of the first kind. (Russian) **(84a:45001)**
- Chaschin, O. N. Regularization of Volterra operator equations of the first kind in a scale of Banach spaces. (Russian) **(84j:45007)**
- Gripenberg, Gustaf On a nonlinear integral equation modelling an epidemic in an age-structured population. **(84j:92035)**
- Jędrzyka, Tadeusz Marian An estimation of the solution of Volterra's integral equation for vector-valued functions with values in some function spaces. **(84m:45011)**
- Marcati, Pierangelo Some considerations on the mathematical approach to nonlinear age dependent population dynamics. **(84j:92039)**
- Polyzou, Wayne Construction of $(JJ^*)^{-1}$ in the Chandler-Gibson reaction theory. **(84i:81102)**
- Ragimkhanov, R. K. On the question of the existence of upper and lower solutions of the Hammerstein integral inclusion. (Russian) **(84m:47082)**
- Rzepecki, Bogdan On some classes of Volterra integral equations in Banach space. **(84b:45003)**
- Triebel, Hans Mapping properties of abstract integral operators. Applications. **(84a:47065)**

45P05 Integral operators [See also 47Axx, 47Bxx, 47G05.]

- Bazaliĭ, B. V. (with Shelepov, V. Yu.) The spectral potential of a double layer on a curve of bounded revolution. (Russian) **84d:45039**
- Cherkasov, A. I. (with Sadygov, Sh. M.) A type of completely continuous singular operator. (Russian) **84b:45022**
- Costabel, Martin On the algebra generated by singular integral operators with piecewise continuous coefficients. **84j:45063**
- Grünbaum, F. Alberto Differential operators commuting with convolution integral operators. **84b:45023**
- Kalitin, A. S. (with Milovidov, S. P.) An interpolation theorem for an integral operator with partial integrals. (Russian) **84d:45040**
- Karapetyants, N. K. Integral operators with coordinate-homogeneous kernels. (Russian. English and Georgian summaries) **84j:45064**
- Milovidov, S. P. See Kalitin, A. S., **84d:45040**
- Nersisyan, A. B. The structure of resolvents of certain integral operators. (Russian. English and Armenian summaries) **84e:45013**
- Nurekenov, T. K. The Lipschitz criterion for Uryson operators. (Russian) **84m:45041**
- Oinarov, R. (with Pshaeva, G. Zh.) Criterion for the Lipschitz property of Hammerstein operators that commute with shifts. (Russian) **84f:45021**
- Pshaeva, G. Zh. See Oinarov, R., **84f:45021**
- Romanov, A. V. Sufficient conditions for positive definiteness of radial functions in domains of \mathbb{R}^n . (Russian) **84d:45041**
- Sadygov, Sh. M. See Cherkasov, A. I., **84b:45022**
- Selekhan, N. A. On the symmetry of certain integro-differential equations. (Russian) **84j:45065**
- Shelepov, V. Yu. See Bazaliĭ, B. V., **84d:45039**

secondary classifications:

- Agrawal, S. S. See Vrentas, J. S.; et al., **(84b:76068)**
- Clancey, Kevin F. (with Gohberg, Israel) ★ Factorization of matrix functions and singular integral operators. **(84b:47016)**
- Fang, Ai Nong On integral operator and (nonlinear mixed) boundary value problem. **(84b:30048)**
- Faour, Nazih S. Fredholm behaviour of a class of singular integral operators. (Arabic summary) **(84f:47058)**
- Gohberg, Israel See Clancey, Kevin F., **(84b:47016)**
- Kapanadze, R. V. Some properties of integral operators. (Russian. English and Georgian summaries) **(84i:47067)**
- Mkhitarjan, S. M. Two spectral relations for integral operators on a semi-infinite interval and their application to mixed problems. **(84m:73095)**
- Narayanan, R. See Vrentas, J. S.; et al., **(84b:76068)**
- Power, S. C. Fredholm theory of piecewise continuous Fourier integral operators on Hilbert space. **(84m:47067)**
- Saitoh, Saburo Integral transforms in Hilbert spaces. **(84a:47064)**
- Sinaiiskii, E. S. On the almost Chebyshevian approximation to certain operators of the hereditary theory of elasticity. **(84h:73019)**
- Vrentas, C. M. See Vrentas, J. S.; et al., **(84b:76068)**
- Vrentas, J. S. (with Vrentas, C. M.; Narayanan, R.; Agrawal, S. S.) Integral equation formulation for buoyancy-driven convection problems. **(84b:76068)**
- Zargaryan, S. S. Integral equations of plane elasticity for multiply connected domains with corners. **(84a:73005)**

46-XX FUNCTIONAL ANALYSIS [For manifolds modeled on topological linear spaces, see 57N20, 58Bxx.]

46-01 Elementary exposition, textbooks

- Akilov, G. See Kantorovich, L. V., **84k:46001**
- (Averbukh, V. I.) See Hutson, V. C. L.; et al., **84m:46001**
- (Dombrovskii, M.) See Kolmogorov, A. N.; et al., **84i:46002**

- (Embarek, Djilali) See Kantorovich, L. V.; et al., 84k:46001a; 84k:46001b and Kirillov, A. A.; et al., 84k:46002
- Fomin, S. V. See Kolmogorov, A. N., 84k:46002
- Gubenko, B. V. See Sadovnichii, V. A.; et al., 84k:46003
- Göpfert, Alfred (with Riedrich, Thomas) ★Funktionalanalysis. (German) [Functional analysis] 84k:46001
- Gvishiani, A. D. See Kirillov, A. A., 84k:46002
- Hengartner, Walter (with Lambert, Marcel; Reischer, Corina) ★Introduction à l'analyse fonctionnelle. (French) [Introduction to functional analysis] 84k:46001
- Hutson, V. C. L. (with Pym, John S.) ★Приложения функционального анализа и теории операторов. (Russian) [Applications of functional analysis and operator theory] 84m:46001
- Kantorovich, L. V. (with Akilov, G.) ★Analyse fonctionnelle. Tome 1. (French) [Functional analysis. Vol. 1] 84k:46001a
- (with Akilov, G.) ★Analyse fonctionnelle. Tome 2. (French) [Functional analysis. Vol. 2] 84k:46001b
- Kirillov, A. A. (with Gvishiani, A. D.) ★Théorèmes et problèmes d'analyse fonctionnelle. (French) [Theorems and problems of functional analysis] 84k:46002
- See also Hutson, V. C. L.; et al., 84m:46001
- Kolmogorov, A. N. (with Fomin, S. V.) ★Elementos da teoria das funções e de análise funcional. (Portuguese) [Elements of the theory of functions and functional analysis] 84k:46002
- Lambert, Marcel See Hengartner, Walter; et al., 84k:46001
- Limaye, Balmohan Vishnu ★Functional analysis. 84k:46001
- Lyubishkin, V. A. See Sadovnichii, V. A., 84k:46003
- Owusu-Ansah, Twum A brief introduction to the theory of distributions. (See 84d:47002)
- (Pluzhnikova, N. I.) See Hutson, V. C. L.; et al., 84m:46001
- Pym, John S. See Hutson, V. C. L., 84m:46001
- Reischer, Corina See Hengartner, Walter; et al., 84k:46001
- Riedrich, Thomas See Göpfert, Alfred, 84k:46001
- Sadovnichii, V. A. (with Lyubishkin, V. A.) ★Геометрия гильбертова пространства и три принципа функционального анализа. (Russian) [Geometry of Hilbert space and three principles of functional analysis] 84k:46003
- Taldykin, A. T. ★Элементы прикладного функционального анализа. (Russian) [Elements of applied functional analysis] 84k:46004

secondary classifications:

- Beauzamy, Bernard ★Introduction to Banach spaces and their geometry. (84g:46017)
- Choquet-Bruhat, Yvonne (with DeWitt-Morette, Cécile; Dillard-Bleick, Margaret) ★Analysis, manifolds and physics. (84a:58002)
- DeWitt-Morette, Cécile See Choquet-Bruhat, Yvonne; et al., (84a:58002)
- Dillard-Bleick, Margaret See Choquet-Bruhat, Yvonne; et al., (84a:58002)
- Gelbaum, Bernard R. ★Problems in analysis. (84b:00006)
- Gol'dshtein, V. M. See Vodop'yanov, S. K., (84c:46037)
- Halmos, Paul Richard ★A Hilbert space problem book. (84c:47001)
- Hervé, Michel ★Les fonctions analytiques. (French) [Analytic functions] (84h:30001)
- James, Robert C. Bases in Banach spaces. (84h:46019)
- Khalehulla, S. M. ★Counterexamples in topological vector spaces. (84a:46002)
- Mikhailov, V. P. ★Дифференциальные уравнения в частных производных. (Russian) [Partial differential equations] (84f:35002)
- Pap, Endre ★Funktionalna analiza. (Serbo-Croatian) [Functional analysis] (84m:46002)
- Prugovečki, Eduard ★Quantum mechanics in Hilbert space. (84k:81005)
- Roubine, Elie ★Distributions—signal. (French) [Distribution theory and signal theory] (84h:94002)
- Simmons, George F. ★Introduction to topology and modern analysis. (84b:54002)
- Thayer, Francisco Javier ★Notes on partial differential equations. (84b:35001)
- ★Théorie spectrale. (French) [Spectral theory] (84c:47001)
- Vodop'yanov, S. K. (with Gol'dshtein, V. M.) ★Пространства Соболева и специальные классы отображений. (Russian) [Sobolev spaces and special classes of mappings] (84c:46037)
- Wloka, Joseph ★Partielle Differentialgleichungen. (German) [Partial differential equations] (84a:35002)

46-02 Advanced exposition (research surveys, monographs, etc.)

- Colombeau, Jean-François ★Differential calculus and holomorphy. 84i:46005
- Pap, Endre ★Funktionalna analiza. (Serbo-Croatian) [Functional analysis] 84m:46002

secondary classifications:

- Dubinskii, Yu. A. The algebra of infinite-order differential operators and pseudodifferential equations with an analytic symbol. (Russian) (84d:3501b)
- An algebra of pseudodifferential operators with analytic symbols and its application to mathematical physics. (Russian) (84d:35001a)
- (Lizorkin, P. I.) See Pietsch, Albrecht, (84c:47002)
- (Miroshin, N. V.) See Pietsch, Albrecht, (84c:47002)
- Păltineanu, Gavril ★Elemente de teoria aproximării funcțiilor continue. (Romanian) [Elements of approximation theory of continuous functions] (84i:46038)
- Pietsch, Albrecht ★Операторные идеалы. (Russian) [Operator ideals] (84c:47002)

46-03 Historical (must also be assigned at least one classification number from Section 01)

- Siegmund-Schultze, Reinhard Die Anfänge der Funktionalanalysis und ihr Platz im Umwälzungsprozess der Mathematik um 1900. [The beginnings of functional analysis and its place in the revolution of mathematics around 1900] 84c:46001
- Sz.-Nagy, Béla Some lattice properties of the space L^2 . 84d:46001

secondary classifications:

- Antosik, Piotr The papers of Roman Sikorski in the theory of distributions. (Polish) (84j:01073d)
- Dieudonné, Jean History of functional analysis. (84i:01070)
- Dorofeeva, A. V. Schmidt's introduction of the language of Euclidean geometry in the space l^2 . (Russian. English summary) (84h:01039)
- (Feijó Barroso, Anna Amália) See Nachbin, Leopoldo, (84m:01037b)
- (Fréchet, Maurice) See Taylor, Angus E., (84j:01077)
- Itô, Yūji See Yosida, Kōsaku, (84c:01088)
- Kadison, Richard V. Operator algebras—the first forty years. (84a:46120)
- (Kakutani, Shizuo) See Yosida, Kōsaku; et al., (84c:01088)
- (Kerimov, M. K.) See Volterra, Vito, (84h:01097)
- Köthe, Gottfried Toeplitz and the theory of sequence spaces. (84j:01057)
- (Kuznetsov, P. I.) See Volterra, Vito, (84h:01097)
- Lützen, Jesper ★The prehistory of the theory of distributions. (84f:01036)
- Medeiros, L. A. Some aspects of the evolution of the concept of derivative. (Portuguese) (84g:01086)
- Monna, A. F. Volterra et les fonctions de lignes: un centenaire. [Volterra and functions of lines: a centenary] (84h:01051)
- Nachbin, Leopoldo Aspects of the recent development of functional analysis in Brazil. (Portuguese) (84m:01037b)
- Pelczyński, Aleksander Roman Sikorski in functional analysis and a little beyond it. (Polish) (84j:01073e)
- (Sikorski, Roman) See Antosik, Piotr, (84j:01073d) and Pelczyński, Aleksander, (84j:01073e)
- Taylor, Angus E. A study of Maurice Fréchet. I. His early work on point set theory and the theory of functionals. (84j:01077)
- (Toeplitz, Otto) See Köthe, Gottfried, (84j:01057)
- Volterra, Vito ★Теория функционалов, интегральных и интегро-дифференциальных уравнений. (Russian) [Theory of functionals and of integral and integro-differential equations] (84h:01097)
- See also Monna, A. F., (84h:01051)
- (Whittaker, Edmund) See Volterra, Vito, (84h:01097)
- Yosida, Kōsaku (with Itô, Yūji) Award of Academy-Imperial Prize to Shizuo Kakutani. (Japanese) (84c:01088)
- 50 years of functional analysis. (Japanese) (84k:01052)

Bibliography:

- Fréchet, Maurice René See Taylor, Angus E., (84j:01077)
- Volterra, Vito See Volterra, Vito, (84h:01097)

Biography:

- Fréchet, Maurice René See Taylor, Angus E., (84j:01077)
- Volterra, Vito See Volterra, Vito, (84h:01097)

46-04 Explicit machine computation and programs (not the theory of computation or programming)

46-06 Proceedings, conferences, etc.

- (Arsene, Gr.) See Operator algebras and group representations, 84m:46003 and 84m:46004
- (Bachar, John M.) See Radical Banach algebras and automatic continuity, 84c:46001
- (Bade, William G.) See Radical Banach algebras and automatic continuity, 84c:46001
- (Barroso, Jorge Alberto) See Functional analysis, holomorphy and approximation theory, 84k:46001
- (Beauzamy, Bernard) See Seminar: Geometry of Banach spaces, 84m:46006
- (Blei, Ron C.) See Banach spaces, harmonic analysis, and probability theory, 84i:46006
- (Butković, Davor) See Functional analysis, 84c:46002
- (Curtis, Philip C., Jr.) See Radical Banach algebras and automatic continuity, 84c:46001
- (Dales, H. Garth) See Radical Banach algebras and automatic continuity, 84c:46001
- (Kraljević, Hrvoje) See Functional analysis, 84c:46002
- (Krivine, Jean-Louis) See Seminar: Geometry of Banach spaces, 84m:46006
- (Kurepa, Svetozar) See Functional analysis, 84c:46002
- (Lin, Bor Luh) See Proceedings: Research workshop on Banach space theory, 84j:46001
- (Maurey, Bernard) See Seminar: Geometry of Banach spaces, 84m:46006
- (Pietsch, Albrecht) See Banach space theory and its applications, 84h:46001
- (Popa, Nicolae) See Banach space theory and its applications, 84h:46001
- (Ruess, Wolfgang M.) See Proceedings: Conferences on vector measures and integral representations of operators and on functional analysis/Banach space geometry, 84m:46005
- (Sidney, Stuart J.) See Banach spaces, harmonic analysis, and probability theory, 84c:46006
- (Singer, Ivan) See Banach space theory and its applications, 84h:46001
- (Strătilă, Ș.) See Operator algebras and group representations, 84m:46003 and 84m:46004
- (Thomas, Marc P.) See Radical Banach algebras and automatic continuity, 84c:46001
- (Verona, Andrei) See Operator algebras and group representations, 84m:46003 and 84m:46004
- (Voiculescu, Dan) See Operator algebras and group representations, 84m:46003 and 84m:46004
- Banach space theory and its applications ★Banach space theory and its applications. 84h:46001
- Banach spaces, harmonic analysis, and probability theory ★Banach spaces, harmonic analysis, and probability theory. 84i:46006
- Bucharest ★Banach space theory and its applications. 84h:46001
- C*-algebras and K-theory ★C*-algebras and K-theory. 84h:46002

Conference:

- Analysis** ★ Banach spaces, harmonic analysis, and probability theory. 84i:46006
Functional Analysis ★ Functional analysis. 84i:46002
Functional analysis/Banach space geometry ★ Proceedings of the conferences on vector measures and integral representations of operators, and on functional analysis/Banach space geometry. 84m:46005
Operator algebras and group representations ★ Operator algebras and group representations. Vol. I. 84m:46003
 ★ Operator algebras and group representations. Vol. II. 84m:46004
Radical Banach Algebras and Automatic Continuity ★ Radical Banach algebras and automatic continuity. 84c:46001
Vector measures and integral representations of operators ★ Proceedings of the conferences on vector measures and integral representations of operators, and on functional analysis/Banach space geometry. 84m:46005
Dubrovnik ★ Functional analysis. 84i:46002
Essen ★ Proceedings of the conferences on vector measures and integral representations of operators, and on functional analysis/Banach space geometry. 84m:46005
Functional analysis ★ Functional analysis. 84i:46002
Functional analysis, holomorphy and approximation theory ★ Functional analysis, holomorphy and approximation theory. 84b:46001
Iowa City, Iowa ★ Proceedings of research workshop on Banach space theory. 84j:46001
Long Beach, Calif. ★ Radical Banach algebras and automatic continuity. 84c:46001
Neptun ★ Operator algebras and group representations. Vol. I. 84m:46003
 ★ Operator algebras and group representations. Vol. II. 84m:46004
Operator algebras and group representations ★ Operator algebras and group representations. Vol. I. 84m:46003
 ★ Operator algebras and group representations. Vol. II. 84m:46004
Paris ★ Séminaire de géométrie des espaces de Banach. (French) [Seminar on the geometry of Banach spaces] 84m:46006

Proceedings:

- Conferences on vector measures and integral representations of operators and on functional analysis/Banach space geometry** ★ Proceedings of the conferences on vector measures and integral representations of operators, and on functional analysis/Banach space geometry. 84m:46005
Research workshop on Banach space theory ★ Proceedings of research workshop on Banach space theory. 84j:46001
Radical Banach algebras and automatic continuity ★ Radical Banach algebras and automatic continuity. 84c:46001
Rio de Janeiro ★ Functional analysis, holomorphy and approximation theory. 84b:46001
Seminar:
Functional Analysis and Numerical Methods ★ Seminar of Functional Analysis and Numerical Methods. 84c:46003
Functional Analysis, Holomorphy and Approximation Theory ★ Functional analysis, holomorphy and approximation theory. 84b:46001
Geometry of Banach spaces ★ Séminaire de géométrie des espaces de Banach. (French) [Seminar on the geometry of Banach spaces] 84m:46006
Romanian-GDR, Banach space theory and its applications ★ Banach space theory and its applications. 84i:46001
Storrs, Conn. ★ Banach spaces, harmonic analysis, and probability theory. 84i:46006
Symposium:
 C^* -algebras and K -theory ★ C^* -algebras and K -theory. 84i:46002
Workshop:
Banach space theory ★ Proceedings of research workshop on Banach space theory. 84j:46001

secondary classifications:

- (Apostol, Constantin) See Invariant subspaces and other topics. (84a:47001)
 (Belley, Jean-Marc) See Measure theory and its applications. (84k:28001)
 (Brudnyi, Yu. A.) See Studies in the theory of functions of several variables. (84g:00009)
 (Douglas, Ronald G.) See Invariant subspaces and other topics. (84a:47001)
 (Dubois, Jacques) See Measure theory and its applications. (84k:28001)
 (Mandrekar, Vidyadhar) See Prediction theory and harmonic analysis. (84f:60004)
 (Masani, Pesl) See Prediction theory and harmonic analysis. (84f:60004)
 (Mauceri, Giancarlo) See Harmonic analysis. (84k:42001)
 (Morales, Pedro) See Measure theory and its applications. (84k:28001)
 (Owusu-Ansah, Twum) See Proceedings: International Symposium in West Africa on Functional Analysis and its Applications. (84d:47002)
 (Ricci, Fulvio) See Harmonic analysis. (84k:42001)
 (Salehi, Habib) See Prediction theory and harmonic analysis. (84f:60004)
 (Shtraus, A. V.) See Functional analysis. (84i:47002)
 (Sz. Nagy, Béla) See Invariant subspaces and other topics. (84a:47001)
 (Voiculescu, Dan) See Invariant subspaces and other topics. (84a:47001)
 (Weiss, Guido) See Harmonic analysis. (84k:42001)

Conference:

- Harmonic analysis** ★ Harmonic analysis. (84k:42001)
Measure theory and its applications ★ Measure theory and its applications. (84k:28001)
Operator Theory ★ Invariant subspaces and other topics. (84a:47001)
Cortona ★ Harmonic analysis. (84k:42001)
Functional analysis ★ Функциональный анализ. Вып. 19. (Russian) [Functional analysis. No. 19] (84i:47002)
Harmonic analysis ★ Harmonic analysis. (84k:42001)
Harmonic analysis: study group on translation-invariant Banach spaces ★ Analyse harmonique: groupe de travail sur les espaces de Banach invariants par translation. (French) [Harmonic analysis: study group on translation-invariant Banach spaces] (84c:43001)
Herculane ★ Invariant subspaces and other topics. (84a:47001)
Inequalities of operators and related topics ★ Inequalities of operators and related topics. (Japanese) (84m:47002)

- Invariant subspaces and other topics** ★ Invariant subspaces and other topics. (84a:47001)
Kumasi ★ Proceedings of the Second International Symposium in West Africa on Functional Analysis and its Applications. (84d:47002)
Measure theory and its applications ★ Measure theory and its applications. (84k:28001)
Prediction theory and harmonic analysis ★ Prediction theory and harmonic analysis. (84f:60004)
Proceedings:

- International Symposium in West Africa on Functional Analysis and its Applications** ★ Proceedings of the Second International Symposium in West Africa on Functional Analysis and its Applications. (84d:47002)
Sherbrooke, Que. ★ Measure theory and its applications. (84k:28001)
Studies in the theory of functions of several variables ★ Исследования по теории функций многих действительных переменных. (Russian) [Studies in the theory of functions of several real variables] (84g:00009)
Symposium:
Inequalities of operators and related topics ★ Inequalities of operators and related topics. (Japanese) (84m:47002)
West Africa, Functional Analysis and its Applications ★ Proceedings of the Second International Symposium in West Africa on Functional Analysis and its Applications. (84d:47002)
Timişoara ★ Invariant subspaces and other topics. (84a:47001)

46Axx Topological linear spaces

- Amurăriței, Gh.** Sets in topological vector space. (Romanian. English summary) 84f:46002
Khalechulla, S. M. ★ Counterexamples in topological vector spaces. 84a:46002
Valdivia, Manuel ★ Topics in locally convex spaces. 84i:46007

46A05 Locally convex spaces

- Canela, Miguel A.** Caractérisation duale des espaces de Mazur. [Dual characterization of Mazur spaces] 84b:46002
Feizullayev, R. B. Construction of a topological isomorphism of locally convex spaces by means of an algebra of continuous homomorphisms. (Russian. English and Azerbaijani summaries) 84k:46003
Kąkol, Jerzy Some remarks on Baire-like spaces. 84g:46001
Yamamoto, Sadayuki On the surjectivity of linear maps on locally convex spaces. 84a:46003
 secondary classifications:
Agase, S. B. See Krishna, S. V., (84k:47042)
Bulut, E. Almost summability in certain linear topological spaces. (84b:40006)
Canela, Miguel A. Caractérisation duale de propriétés séquentielles d'espaces localement convexes. [Dual characterization of sequential properties of locally convex spaces] (84a:46007)
Gómez Gil, Javier A characterization of the local convexity of the bw-topology. (Spanish) (84a:46030)
Harksen, Jakob Charakterisierung lokalkonvexer Räume mit Hilfe von Tensornormtopologien. [Characterization of locally convex spaces by means of tensor norm topologies] (84b:46089)
Krishna, S. V. (with Agase, S. B.) Duality mappings and monotone mappings in locally convex spaces. (84k:47042)
Mennicken, Reinhard Perturbations of semi-Fredholm operators in locally convex spaces. (84j:47015)
Pombo, Dinamérico P., Jr. Polynomial classification of locally convex spaces. (Portuguese. English summary) (84b:46051)
Simpson, James E. Dilations on locally convex spaces. (84j:47007)
Výborný, Rudolf Mean value theorems and a Taylor theorem for vector valued functions. (84c:46046)

46A06 Metrizable topological linear spaces and their duals (F -, DF -spaces, etc.)

- Naidu, S. V. R.** See Sastry, K. P. R., 84b:46003 and 84b:46003
Sastry, K. P. R. (with Naidu, S. V. R.) Uniform convexity and strict convexity in metric linear spaces. 84b:46003
 (with Naidu, S. V. R.) Proximity and ball convexity in metric linear spaces. 84b:46003
Zarnadze, D. N. Strictly regular Fréchet spaces. (Russian) 84j:46002

secondary classifications:

- De Grande-De Kimpe, Nicole** Non-Archimedean Fréchet spaces generalizing spaces of analytic functions. (84j:46104)
Junek, Heinz Linear operators in (F)-spaces. (84j:47076)
Jurzak, Jean-Paul Unbounded operator algebras and DF -spaces. (84j:47078)
Sidney, Stuart J. Exposed points for duals of separable Fréchet spaces. (84k:46009)
Vogt, Dietmar Ein Isomorphiesatz für Potenzreihenräume. [An isomorphism theorem for power series spaces] (84a:46019)

46A07 Barrelled spaces

- Bonet, José** See Pérez Carreras, Pedro, 84b:46004
Kąkol, Jerzy Some remarks on countable codimensional subspaces of topological vector spaces. 84b:46005
Pérez Carreras, Pedro (with Bonet, José) Remarks and examples concerning suprabarrelled and totally barreled spaces. 84b:46004

secondary classifications:

- Mendoza, José Barreledness conditions in $S(\Sigma; E)$ and $B(\Sigma; E)$. (Spanish. English summary) (84a:46083)
 A barreledness criterion for $C_p(E)$. (84b:46006)
 Necessary and sufficient conditions for $C(X; E)$ to be barreled or infrabarreled. (84f:46046)

46A09 Bornological spaces

- Kąkol, Jerzy On subspaces and products of some topological linear spaces. 84b:46006
 Omoto, Chikaharu Fuzzy bornological spaces. 84b:46008

secondary classifications:

- Ferrera, Juan Spaces of weakly continuous functions. (84b:46025)
 Kriegel, A. Die richtigen Räume für Analysis im Unendlich-Dimensionalen. (English summary) [The "right" spaces for analysis in infinite dimensions] (84c:46044)
 Marquina, Antonio (with Schmets, Jean) On bornological $c_0(E)$ spaces. (84f:46013)
 Schmets, Jean See Marquina, Antonio, (84f:46013)

46A10 Locally bounded topological linear spaces

46A12 Spaces defined by special inductive or projective limits (LF-, nuclear, Schwartz, Silva spaces, etc.) [See also 46M10, 46M40.]

- Antoine, Jean-Pierre (with Karwowski, Witold) Countably Hilbert spaces and partial inner product spaces. (Russian summary) 84f:46003
 Apiola, Heikki Characterization of subspaces and quotients of nuclear $L_p(\alpha, \infty)$ -spaces. 84m:46007
 Bellenot, Steven F. (with Dubinsky, Ed) Fréchet spaces with nuclear Köthe quotients. 84g:46002
 Berndorf, Andreas A result on equicontinuous sets of operators on nuclear Fréchet spaces related to the bounded approximation property. 84b:46007
 Bosch, C. (with Kučera, Jan; McKennon, Kelly) Dual characterization of the Dieudonné-Schwartz theorem on bounded sets. 84m:46008
 See also Kučera, Jan, 84b:46005
 Dineen, Seán (with Meise, Reinhold G.; Vogt, Dietmar) Caractérisation des espaces de Fréchet nucléaires dans lesquels tous les bornés sont pluriplulaires. (English summary) [Characterization of the nuclear Fréchet spaces in which every bounded set is pluripolar] 84b:46004
 Dubinsky, Ed On (LB)-spaces and quotients of Fréchet spaces. 84g:46003
 See also Bellenot, Steven F., 84g:46002
 Holmström, Lasse A note on countably normed nuclear spaces. 84j:46003
 Karwowski, Witold See Antoine, Jean-Pierre, 84f:46003
 Ketonen, Timo (with Nyberg, Kaisa) Twisted sums of nuclear Fréchet spaces. 84d:46002
 Kučera, Jan (with Bosch, C.) Dieudonné-Schwartz theorem on bounded sets in inductive limits. II. 84b:46005
 See also Bosch, C.; et al., 84m:46008
 McKennon, Kelly See Bosch, C.; et al., 84m:46008
 Meise, Reinhold G. See Dineen, Seán; et al., 84b:46004
 Mennicken, Reinhard (with Möller, Manfred) Well located subspaces of LF-spaces. 84g:46004
 Möller, Manfred See Mennicken, Reinhard, 84g:46004
 Moscatelli, Vincenzo Bruno New examples of nuclear Fréchet spaces without bases. 84g:46005
 Nelimarkka, Esa The approximation property and locally convex spaces defined by the ideal of approximable operators. 84g:46006
 Nyberg, Kaisa See Ketonen, Timo, 84d:46002
 Vogt, Dietmar An example of a nuclear Fréchet space without the bounded approximation property. 84m:46009
 See also Dineen, Seán; et al., 84b:46004

secondary classifications:

- Alcántara, Julio Order properties of a class of tensor algebras. (84b:46088)
 Atzmon, Aharon An operator without invariant subspaces on a nuclear Fréchet space. (84b:47003)
 Bierstedt, Klaus-D. (with Meise, Reinhold G.; Summers, William H.) A projective description of weighted inductive limits. (84g:46037)
 Dubinsky, Ed Approximation properties in nuclear Fréchet spaces. (84g:46012)
 Nonlinear analysis in different kinds of Fréchet spaces. (84f:58015)
 Fernández Castillo, M. On the existence of functions with a given asymptotic expansion and a given natural holomorphy domain. (Spanish. English summary) (84m:30056)
 Kąkol, Jerzy On inductive limits of topological algebras. (84f:46064)
 Kriegel, A. Die richtigen Räume für Analysis im Unendlich-Dimensionalen. (English summary) [The "right" spaces for analysis in infinite dimensions] (84c:46044)
 Meise, Reinhold G. See Bierstedt, Klaus-D.; et al., (84g:46037)
 Nyberg, Kaisa Complemented subspaces of products of power series spaces. (84c:46006)
 Summers, William H. See Bierstedt, Klaus-D.; et al., (84g:46037)
 Zarnadze, D. N. Representations of the topology of spaces of basic and generalized functions. (Russian) (84d:46050)
 Strictly regular Fréchet spaces. (Russian) (84j:46002)

46A14 Spaces defined by compactness properties (Montel spaces, etc.)

secondary classifications:

- Nelimarkka, Esa The approximation property and locally convex spaces defined by the ideal of approximable operators. (84g:46006)

46A15 Other topological linear spaces

- Arias de Reyna Martínez, Juan Normed barely Baire spaces. 84c:46004
 Cho, Yeol Je (with Park, Bae Hun; Park, Keun Saeng) Strictly 2-convex linear 2-normed spaces. 84g:46007
 Diminnie, Charles R. (with White, Albert G., Jr.) 2-norms generated by seminorms on the space of bivectors. 84b:46009
 Freese, Raymond W. (with Gähler, Siegfried) Remarks on semi-2-normed spaces. 84b:46008
 Gähler, Siegfried See Freese, Raymond W., 84b:46008
 Hudzik, H. (with Musielak, Julian; Urbanski, R.) Linear operators in modular spaces. 84j:46004
 Khan, Ahmad See Siddiqi, Atauliah, 84g:46008
 Musielak, Julian See Hudzik, H.; et al., 84j:46004
 Nakamura, Akihiro On the relation between the compatible linear topologies and their bases in F -spaces. 84f:46004
 Narang, Tushi Das Corrigendum: "Unicity theorem and strict convexity of metric linear spaces" [Tamkang J. Math. 11 (1980), no. 1, 49-51; MR 82g:46012]. 84c:46005
 Park, Bae Hun See Cho, Yeol Je; et al., 84g:46007
 Park, Keun Saeng See Cho, Yeol Je; et al., 84g:46007
 Siddiqi, Atauliah (with Khan, Ahmad) Certain problems in quasi-2-normed spaces. 84g:46008
 Toure, Mamadouha Contribution aux espaces dénombrablement modulaires. [Contribution to countably modular spaces] 84d:46003
 Turpin, Philippe Représentation fonctionnelle des espaces vectoriels topologiques. (English summary) [Functional representation of topological vector spaces] 84a:46004
 Urbanski, R. See Hudzik, H.; et al., 84j:46004
 Washihara, Masako Banach's theorems in ranked vector spaces. 84b:46006
 Waszak, Aleksander On convergence in some two-modular spaces. 84f:46005
 White, Albert G., Jr. See Diminnie, Charles R., 84b:46009
 Yang, Yin The radial topology on a linear space. (Chinese. English summary) 84b:46009

secondary classifications:

- Bastero, J. l^p -subspaces of stable p -Banach spaces, $0 < p < 1$. (84c:46021)
 Diminnie, Charles R. (with White, Albert G., Jr.) A characterization of 2-inner product spaces. (84b:46031)
 Hadžić, Olga On equilibrium point in topological vector spaces. (84c:47057)
 Kąkol, Jerzy On inductive limits of topological algebras. (84f:46064)
 On subspaces and products of some topological linear spaces. (84b:46006)
 Kalton, N. J. An example in the theory of bilinear maps. (84j:46093)
 Krbeč, M. Modular interpolation spaces. I. (German and Russian summaries) (84b:46056)
 de las Oblas-L. y Nasarre, M. Carmen Nucleus and strict nucleus of a sequence of subspaces of $G(H)$. (Spanish) (84j:46035)
 Okano, Hattuo A unified treatment of nonstar convergences. (84a:54006)
 Pap, Endre Contributions to functional analysis on convergence spaces. (84i:54007)
 Peetre, Jaak Locally analytically pseudoconvex topological vector spaces. (84a:46066)
 White, Albert G., Jr. A new characterization of strict 2-convexity. (84g:46036)
 See also Diminnie, Charles R., (84b:46031)

46A20 Duality theory

- Floret, Klaus The precompactness-lemma. 84b:46007

secondary classifications:

- Bourdaud, Gérard Quelques aspects de la dualité en analyse fonctionnelle. [Some aspects of duality in functional analysis] (84c:46072)
 Canela, Miguel A. Caractérisation duale des espaces de Mazur. [Dual characterization of Mazur spaces] (84b:46002)
 Kusraev, A. G. Boolean-valued analysis of the duality of extended modules. (Russian) (84f:03045)
 Sun, Yong Sheng Duality theorems for the width numbers of some functional classes. (84c:41028)
 Zarnadze, D. N. Duality theorems in metric locally convex spaces. (Russian) (84j:41043)

46A22 Extension and lifting of functionals and operators [See also 46M10.]

- Biebler, Karl-Ernst Extension theorems in modules over semifields. 84a:46005
 Dierolf, S. See Roelcke, W., 84f:46006
 Ding, Guang Gui The resonance theorem for the family of convex functionals. (Chinese) 84a:46006
 Roelcke, W. (with Dierolf, S.) On the three-space-problem for topological vector spaces. 84f:46006
 Snipes, Ray F. Sequential separation theorems and S -locally convex topological vector spaces. 84f:46007

secondary classifications:

- Chen, Dao Qi A sufficient condition for the uniqueness of the support functional. (Chinese) (84a:46027)
 Mustăța, Costică On the extension problem with prescribed norm. (84f:46027)
 Yasugi, Mariko The Hahn-Banach theorem and a restricted inductive definition. (84m:03095)

46A25 Reflexivity and semi-reflexivity

- Radenović, Stojan A note on locally convex spaces. (Serbo-Croatian. French summary) 84d:46004
 Sekovanov, V. S. d -reflexive locally convex spaces. (Russian) 84d:46005

46A30 Open mappings and closed graph theorems and completeness (including B_* , B_* -completeness)

- Baker, C. W. A closed graph theorem for Banach bundles. **84b:46010**
 Bunyav, M. M. On the closed graph theorem. (Russian) **84j:46005**
 Efimova, T. A. Quasi-Suslin spaces and the Borel graph theorem. (Russian. English summary) **84g:46009**
 Hitchcock, A. G. Categorical anatomy of closed graph and open mapping theorems. **84i:46010**
 Kusnarev, A. G. Closed graph and open mapping theorems for convex correspondences. (Russian) **84e:46006**
 Popoola, O. Incomplete range spaces. **84g:46010**
 Saarimäki, Mikko Counterexamples to the algebraic closed graph theorem. **84g:46011**
 Shneperman, L. B. The Banach-Dunford theorem for continuous relations. (Russian. English summary) **84m:46010**

secondary classifications:

- Saks, Árpád On the continuity of quotient multipliers. (**84c:46050**)
 Washihara, Masako Banach's theorems in ranked vector spaces. (**84b:46006**)

46A32 Spaces of linear operators

- Canela, Miguel A. Caractérisation duale de propriétés séquentielles d'espaces localement convexes. [Dual characterization of sequential properties of locally convex spaces] **84e:46007**
 Ruess, Wolfgang M. (with Stegall, Charles P.) Extreme points in duals of operator spaces. **84e:46007**
 Stegall, Charles P. See Ruess, Wolfgang M., **84e:46007**

secondary classifications:

- Baker, J. M. Reflexivity of operator spaces. (**84g:47038**)
 Collins, Heron S. (with Ruess, Wolfgang M.) Duals of spaces of compact operators. (**84i:47062**)
 Martin Peinador, Elena The weak summability dominion of a sequence S of the Hilbert space in relation with the set of linear bounded operators. (**84f:47024**)
 Pap, Endre Contributions to functional analysis on convergence spaces. (**84i:54007**)
 Ruess, Wolfgang M. See Collins, Heron S., (**84i:47062**)

46A35 Summability and bases

- Chalov, P. A. See Zakharyuta, V. P., **84c:46004**
 Dragilev, M. M. On the continuability of absolute bases. (Russian) **84c:46002**
 Compactly regular bases in nonnuclear Köthe spaces. (Russian) **84c:46003**
 Dubinsky, Ed Approximation properties in nuclear Fréchet spaces. **84g:46012**
 Floret, Klaus Norms and bases in some locally convex spaces. (See **84m:46005**)
 Orseppan, R. I. Addendum: "Unconditional summability in linear spaces" [Comment. Math. Special Issue 2 (1979), 259–276; MR 80j:46012]. (Russian) **84f:46008**
 Zakharyuta, V. P. (with Chalov, P. A.) A criterion for quasiequivalence of absolute bases in an arbitrary F -space. (Russian) **84c:46004**

secondary classifications:

- Gootman, Elliot C. Subrepresentations of direct integrals and finite volume homogeneous spaces. (**84m:22009**)
 Kolk, E. On the summability of subsequences and permutations. II. (Russian. German summary) (**84g:40007**)
 Orłyski, Augustyn Unconditional bases in $l_p \oplus l_q$, $0 < p < q < 1$. (**84f:46017**)

46A40 Ordered topological linear spaces, vector lattices [See also 06F20, 46B30.]

- Abramovich, Yu. A. (with Geiler, V. A.) On a question of Fremlin concerning order bounded and regular operators. **84b:46008**
 Bakhtin, I. A. Normality of h -extremal cones. (Russian) **84m:46011**
 Bakhtin, V. I. The structure of K -minihedral cones in a finite-dimensional space. (Russian) **84a:46008**
 Bakhtina, A. A. (with Bogachev, B. M.) Inclusion of the class of almost minihedral cones in the class of pseudominihedral cones. (Russian) **84j:46006**
 Becker, Richard Edouard Sur les mesures coniques localisables. [Localizable conical measures] **84a:46009a**
 Une structure uniforme faible remarquable, sur les cônes faiblement complets. [A notable weak uniform structure on weakly complete cones] **84a:46010a**
 Une structure uniforme faible remarquable sur les cônes faiblement complets. (English summary) [A notable weak uniform structure on weakly complete cones] **84a:46010b**
 Représentation des mesures coniques. [Representation of conical measures] **84a:46011**
 Sur les mesures coniques localisables. (English summary) [Localizable conical measures] **84a:46009b**
 Bogachev, B. M. See Bakhtina, A. A., **84j:46006**
 Borwein, Jonathan M. (with Sims, Brailey) Nonexpansive mappings on Banach lattices. **84f:46009**
 Geiler, V. A. See Abramovich, Yu. A., **84b:46008**
 Gnlika, Stanisław (with Stachowiak-Gnlika, Danuta) Remarks on additive adjoints. I. **84i:46011a**
 Indith, Mentzel A coseparator in a category of cones. **84c:46004**
 Koldunov, A. V. Solution of an old problem of the theory of partially ordered spaces. (Russian) **84a:46012**

- Levichev, A. V. Letter to the editors: "Some conditions under which a preorder is determined by a cone" [Sibirsk. Mat. Zh. **22** (1981), no. 5, 116–126; MR 83a:46019]. (Russian) **84c:46005**
 Luschgy, Harald (with Thomsen, Wolfgang) Extreme points in the Hahn-Banach-Kantorovič setting. **84c:46005**
 Mekler, A. A. (with Sokolovskaya, N. F.) Subspaces in Nakano's sense of conditionally complete vector lattices. (Russian) **84j:46007**
 Németh, A. B. Summation criteria for regular cones with applications. **84f:46010**
 Near to minimality in ordered vector spaces. **84a:46013**
 Popovici, I. Mircea Some locally convex spaces. (Romanian. English summary) **84j:46008**
 Potocký, Rastislav On a property of Riesz spaces. (Russian summary) **84a:46014**
 Reidel, Norbert Spektraltheorie in geordneten Vektorräumen. [Spectral theory in ordered vector spaces] **84i:46012**
 Schmidt, Garfield C. A characterization of normed M -spaces. **84a:46015**
 Sims, Brailey See Borwein, Jonathan M., **84f:46009**
 Sokolovskaya, N. F. See Mekler, A. A., **84j:46007**
 Stachowiak-Gnlika, Danuta Remarks on additive adjoints. II. **84i:46011b**
 See also Gnlika, Stanisław, **84i:46011a**
 Synnatschke, J. Über eindimensionale Elemente halbgeordneter Algebren. [On one-dimensional elements of partially ordered algebras] **84i:46013**
 Thomsen, Wolfgang See Luschgy, Harald, **84c:46005**
 Tofan, Doina Spaces of continuous linear operators. (Romanian. English summary) **84m:46012**
 Varshavskaya, E. V. Normal sets of cones. (Russian) **84j:46009**
 Yamamuro, Sadyuki On linear operators on ordered Banach spaces. **84b:46011**

secondary classifications:

- Adamski, Wolfgang Some characterizations of Daniell lattices. (**84i:46051**)
 Alcántara, Julio Order properties of a class of tensor algebras. (**84b:46088**)
 Bakhtin, I. A. (with Sobolev, V. I.; Shcherbin, V. M.) Nonreducibility of the (u, v) -derivative to the Fréchet derivative. (Russian) (**84d:46060**)
 Cristescu, Romulus Relations d'ordre dans les espaces d'opérateurs. [Order relations in operator spaces] (**84a:47048**)
 Flösser, H.-O. Smooth functionals on lattices of continuous functions. (**84f:46030**)
 Gordon, E. I. K -spaces in Boolean-valued models of the theory of sets. (Russian) (**84c:03091**)
 Hofmann, Gerald Ein hinreichendes Kriterium für die Normalität von Kegeln in Tensoralgebren und einige Anwendungen. [A sufficient criterion for the normality of cones in tensor algebras and some applications] (**84a:46119**)
 Jameson, G. J. O. (with Pinkus, A.) Positive and minimal projections in function spaces. (**84f:46031**)
 Komuro, Naoto See Koshi, Shozo, (**84m:46014**)
 Koshi, Shozo (with Komuro, Naoto) A generalization of the Fenchel-Moreau theorem. (**84m:46014**)
 Kuzhen'kin, S. N. Monotone sublinear projectors in K -spaces. (Russian) (**84b:47064**)
 Lipceki, Z. Extensions of positive operators and extreme points. III. (**84b:47046a**)
 (with Thomsen, Wolfgang) Extensions of positive operators and extreme points. IV. (**84b:47046b**)
 Min, Kyung Chan Exponential laws for ordered "topological" vector spaces. (**84f:18016**)
 Pinkus, A. See Jameson, G. J. O., (**84f:46031**)
 Popa, Irina Properties of the $\alpha(E, E')$ -topology and criteria for $\alpha(E, E')$ -compactness in concrete function spaces. (Romanian. English summary) (**84j:46031**)
 Robinson, Derek W. (with Yamamuro, Sadyuki) Addition of an identity to an ordered Banach space. (**84f:46026**)
 Shcherbin, V. M. See Bakhtin, I. A.; et al., (**84d:46060**)
 Sobolev, V. I. See Bakhtin, I. A.; et al., (**84d:46060**)
 Thomsen, Wolfgang See Lipceki, Z., (**84b:47046b**)
 Trias Pairó, Joan Boolean algebras and lattice isometries in Riesz spaces. (Catalan. English summary) (See **84i:03003**)
 Xiong, Hong Yun Characterizations of the completely regular topological spaces X for which $C(X)$ is a dual ordered vector space. (**84b:46033**)
 Yamamuro, Sadyuki See Robinson, Derek W., (**84f:46026**)
 Zobov, G. N. Relations of various classes of wedges in normed spaces. (Russian) (**84b:46024**)

46A45 Sequence spaces (including Köthe sequence spaces)

- Abu-Jaradeh, Nafez D. On the union and intersection of $L(f)$ spaces. (Arabic summary) **84j:46010**
 Agarwal, Ratan P. (with Srivastava, Rajiv K.) A remark on a certain space of sequences. **84d:46006**
 Antosik, Piotr On convergences in spaces of sequences. **84b:46009**
 Bhatia, S. See Choudhary, B.; et al., **84d:46008**
 Biersiedt, Klaus-D. (with Meise, Reinhold G.; Summers, William H.) Köthe sets and Köthe sequence spaces. **84f:46011**
 Chandrasekhara Rao, K. Cesàro spaces of analytic sequences. II. **84d:46007**
 Cheney, E. W. (with Franchetti, C.) Minimal projections of finite rank in sequence spaces. **84b:46010**
 Choudhary, B. (with Somasundaram, D.; Bhatia, S.) A note on FK -spaces containing Γ . **84d:46008**
 De Grande-De Kimpe, Nicole Operators factoring through a generalized sequence space; applications. **84b:46011**
 Drewnowski, L. (with Nawrocki, M.) On the Mackey topology of Orlicz sequence spaces. **84b:46012**
 Florencio Lora, Miguel A sufficient condition for the nuclearity of certain echelon spaces. (Spanish) **84a:46016**
 Franchetti, C. See Cheney, E. W., **84b:46010**
 García Lafuente, José María Espaces de séries de puissances non localement convexes. [Not locally convex spaces of power series] **84e:46008**

- Gupta, Manjul (with Kamthan, P. K.) On matrix transformations. **84j:46013**
 See also Kamthan, P. K.; et al., **84f:46012**
- Hernández, Francisco L. Une certaine classe universelle d'espaces d'Orlicz des suites avec poids. [A certain universal class of Orlicz sequence spaces with weights] **84a:46017**
- Holmström, Lasse Universal classes of nuclear Köthe spaces with a continuous norm. **84a:46018**
- Kamińska, Anna Flat Orlicz-Musiela sequence spaces. (Russian summary) **84b:46013**
- Kamthan, P. K. (with Sofi, M. A.) Operators of type S_p and the associated nuclearity. **84c:46009**
 The behaviour of transformations on sequence spaces. **84g:46014**
 (with Gupta, Manjul; Sofi, M. A.) λ -bases and their applications. **84f:46012**
 See also Gupta, Manjul, **84g:46013**
- Kashirin, V. V. Isomorphic imbeddings of factor-spaces of generalized spaces of power series. (Russian) **84j:46011**
- Kondakov, V. P. Subspaces with a basis in dense spaces of sequences. (Russian) **84j:46012**
- López Fernández-Asenjo, F. F. (with Pérez-Cacho García, S.; Pérez Gómez, A.) Completion of a space of recurrent sequences. (Spanish) **84j:46013**
- Marquina, Antonio (with Schmets, Jean) On bornological $c_0(E)$ spaces. **84f:46013**
- Meise, Reinhold G. See Bierstedt, Klaus-D.; et al., **84f:46011**
- Mendoza, José A barrelledness criterion for $C_0(E)$. **84c:46006**
- Mityagin, Boris Non-Schwartzian power series spaces. **84h:46014**
- Musiela, Julian (with Waszak, Aleksander) On Orlicz sequence spaces with application to two-modular spaces. **84i:46014**
- Nawrocki, M. See Drewnowski, L., **84h:46012**
- Nurlu, Zafer Basic sequences in some regular Köthe spaces. **84d:46009**
- Nyberg, Kaisa Complemented subspaces of products of power series spaces. **84c:46006**
- Pérez-Cacho García, S. See López Fernández-Asenjo, F. F.; et al., **84j:46013**
- Pérez Gómez, A. See López Fernández-Asenjo, F. F.; et al., **84j:46013**
- Schmets, Jean See Marquina, Antonio, **84f:46013**
- Sirajudeen, S. M. Matrix transformations of some generalized sequence spaces into semiperiodic sequence space. (Turkish summary) **84h:46012**
- Sofi, M. A. See Kamthan, P. K., **84c:46009** and **84f:46012**
- Somasundaram, D. See Choudhary, B.; et al., **84d:46008**
- Srivastava, Rajiv K. See Agarwal, Ratan P., **84d:46006**
- Stroyan, K. D. Infinitesimal analysis of ℓ^∞ in its Mackey topology. **84m:46013**
- Summers, William H. See Bierstedt, Klaus-D.; et al., **84f:46011**
- Swartz, Charles The Schur lemma for bounded multiplier convergent series. **84h:46015**
- Tishchenko, S. V. Integral representations of exponentially convex functions on some spaces of sequences. (Russian) **84c:46007**
- Vogt, Dietmar Charakterisierung der Unterräume eines nuklearen stabilen Potenzreihenraumes von endlichem Typ. (English summary) [Characterization of the subspaces of a nuclear stable power series space of finite type] **84d:46010**
 Ein Isomorphismietheorem für Potenzreihenräume. [An isomorphism theorem for power series spaces] **84a:46019**
- Waszak, Aleksander See Musiela, Julian, **84i:46014**
- Wu, Cong Xin (with Zhao, Lin Sheng) The bounded variation functions of order 2 on the sequence spaces. (Chinese. English summary) **84b:46016**
- Ye, Yi Ning Packing spheres in Orlicz sequence spaces. (Chinese. English summary) **84a:46020**
- Zhao, Lin Sheng See Wu, Cong Xin, **84b:46016**

secondary classifications:

- Ahmad, Z. U. (with Saraswat, S. K.) Matrix transformations between sequence spaces. **(84j:40013)**
- Apiola, Heikki Characterization of subspaces and quotients of nuclear $L_p(a, \infty)$ -spaces. **(84m:46007)**
- Buntinas, Martin Approximation by Abel means and Tauberian theorems in sequence spaces. **(84a:40002)**
- Cembranos, Pilar Some properties of the Banach space $c_0(E)$. (Spanish. English summary) **(84a:46045)**
- Dragilev, M. M. On the continuability of absolute bases. (Russian) **(84c:46002)**
 Compatibly regular bases in nonnuclear Köthe spaces. (Russian) **(84c:46003)**
- Kangro, G. General properties of summability factors. (Russian. English summary) **(84f:40004)**
- Lami Dozo, Enrique Asymptotic centers in particular spaces. **(84g:47049)**
- Maddox, I. J. FK spaces which include strongly summable sequences. **(84d:40010)**
- Meise, Reinhold G. (with Vogt, Dietmar) An interpretation of τ_ω and τ_2 as normal topologies of sequence spaces. **(84h:46053)**
 (with Vogt, Dietmar) Analytic isomorphisms of infinite-dimensional polydiscs and an application. (French summary) **(84h:46056)**
- Pietsch, Albrecht Tensor products of sequences, functions, and operators. **(84c:46075)**
- Pilipović, Stevan The kernel theorem for some spaces. (Serbo-Croatian summary) **(84d:46053)**
 A note on the spaces of \mathcal{Q}_l -type: q -dimensional case. **(84g:46060)**
- Rakov, S. A. The Banach-Saks exponent of some Banach spaces of sequences. (Russian) **(84c:46018)**
- Saraswat, S. K. See Ahmad, Z. U., **(84j:40013)**
- Sirajudeen, S. M. See Somasundaram, D., **(84m:40010)**
- Somasundaram, D. (with Sirajudeen, S. M.) Matrix transformations of some generalized sequence spaces and convolution of summability methods. **(84m:40010)**
- Vogt, Dietmar Sequence space representations of spaces of test functions and distributions. **(84f:46048)**
 See also Meise, Reinhold G., **(84h:46053)** and **(84h:46056)**

46A50 Compactness in topological linear spaces

- Montesinos Santalucía, Vicente A note on Krein's theorem. (Spanish. English summary) **84c:46008**

secondary classifications:

- Canela, Miguel A. Caractérisation duale des espaces de Mazur. [Dual characterization of Mazur spaces] **(84b:46002)**
- Gruber, Peter M. (with Tichy, Robert Franz) Isometries of spaces of compact or compact convex subsets of metric manifolds. **(84b:52008)**
- Tichy, Robert Franz See Gruber, Peter M., **(84b:52008)**
- 46A55 Convexity, Choquet theory [See also 52A07.]
- Batty, C. J. K. Maximal measures on tensor products of compact convex sets. **84c:46010**
- Kohmban, Josef Verallgemeinerte konvexe Funktionen und das Prinzip der lokalen Beschränktheit. [Generalized convex functions and the local boundedness principle] **84i:46015**
- Komuro, Naoto See Koshi, Shozo, **84m:46014**
- Koshi, Shozo (with Komuro, Naoto) A generalization of the Fenchel-Moreau theorem. **84m:46014**
- Neumann, Michael Mathias A maximality theorem concerning extreme points. **84j:46014**
- Sidney, Stuart J. Exposed points for duals of separable Fréchet spaces. **84c:46009**
- Takeo, Fukiko On the second dual of a simplex space. **84f:46014**
- Talagrand, Michel Three convex sets. **84j:46015**
- von Weizsäcker, Heinrich (with Winkler, Gerhard) On the extremal decomposition in noncompact sets of measures. (See **84h:82005**)
- Winkler, Gerhard See von Weizsäcker, Heinrich, (See **84h:82005**)
- Wittmann, Rainer Shilov points and Shilov boundaries. **84g:46015**

secondary classifications:

- Bair, Jacques Strict separation of several convex sets. **(84b:52006)**
- Becker, Richard Edouard Sur les mesures coniques localisables. (English summary) [Localizable conical measures] **(84a:46009b)**
 Sur la représentation des formes ≥ 0 sur les espaces de fonctions. [Representation of forms ≥ 0 on function spaces] **(84a:46049)**
- Ding, Guang Gui Some properties of quasibounded functionals. (Chinese) **(84c:46044)**
- Glicksberg, Irving A controlled approach to Liapounoff convexity. **(84h:28015)**
- Lima, Ásvald (with Olsen, G. H.; Uttersrud, Ulf) Intersections of M -ideals and G -spaces. **(84c:46015)**
- Lotz, H. P. (with Porta, Horacio) On extreme points. **(84a:46033)**
- Naimpally, S. A. (with Singh, Kanahya L.; Whitfield, J. H. M.) Fixed points and close-to-normal structure in locally convex spaces. **(84h:47073)**
- Olsen, G. H. See Lima, Ásvald; et al., **(84c:46015)**
- Porta, Horacio See Lotz, H. P., **(84a:46033)**
- Pykacz, J. Affine Maczyński logics on compact convex sets of states. **(84m:81034)**
- Raja, Ion On a measure-theoretical concept of convexity. **(84c:46020)**
- Singh, Kanahya L. See Naimpally, S. A.; et al., **(84h:47073)**
- Takeo, Fukiko On the spectrum of positive operators in simplex spaces. **(84m:47048)**
- Uttersrud, Ulf See Lima, Ásvald; et al., **(84c:46015)**
- Whitfield, J. H. M. See Naimpally, S. A.; et al., **(84h:47073)**

46A99 None of the above, but in this section

- Fourneau, René Automorphism groups of lattices of closed convex sets. **84a:46021**
- Gajda, Z. On H -smooth and H -convex sets in linear spaces. (Serbo-Croatian summary) **84i:46016**
- Gromov, V. P. Series of the type of Dirichlet series in locally convex spaces. (Russian) **84g:46016**
- Kats, M. P. Continuity of universally measurable linear mappings. (Russian) **84j:46016a**
 Correction to: "Continuity of universally measurable linear mappings". (Russian) **84j:46016b**
- Wu, Cong Xin Fuzzy linear topological spaces. III. (Chinese. English summary) **84f:46015**

secondary classifications:

- Bardaro, Carlo (with Gori Cocchieri, Candida) Properties of some second-order seminorms. (Italian) **(84c:49020)**
- Breen, Marilyn k -dimensional intersections of convex sets and convex kernels. **(84f:52006)**
- Dubois, C. (with Jongmans, F.) Invitation à la gestion des stocks de cônes. (English summary) [Invitation to the inventory control of cones] **(84h:52004)**
- Eggbe, Leo Weak and strong convergence of amarts in Fréchet spaces. **(84j:60060)**
- Franzoni, Tullio Some properties of invariant distances on convex cones. **(84h:32034)**
- Gori Cocchieri, Candida See Bardaro, Carlo, **(84c:49020)**
- Jongmans, F. See Dubois, C., **(84h:52004)**
- Junek, Heinz Factorization of operators mapping (F) -spaces into (DF) -spaces. (German and Russian summaries) **(84d:47038)**
- Kalton, N. J. (with Roberts, James W.) Pathological linear spaces and submeasures. **(84d:28018)**
- Kharazishvili, A. B. An application of the Baire property. (Russian. English and Georgian summaries) **(84h:54038)**
- Kusraev, A. G. (with Kutateladze, S. S.) Analysis of subdifferentials by means of Boolean valued models. (Russian) **(84a:47068)**
- Kutateladze, S. S. See Kusraev, A. G., **(84a:47068)**
- López Fernández-Asenjo, F. F. On the strong commutability theorem of Schwarz. (Spanish) **(84m:26016)**
- Morris, Sidney A. Varieties of topological groups: a survey. **(84c:22005)**
- Musiela, Julian Modular approximation by a filtered family of linear operators. **(84c:46028)**
- Nedogibchenko, G. V. (with Savel'ev, L. Ya.) Inductive limits of directed sets of continuous measures. (Russian) **(84d:28016)**

- Nel, L. D. Bornological L_1 -functors as Kan extensions and Riesz-like representations. (84j:46095)
- Obukhovskii, V. V. (with Skalaetskii, A. G.) Some theorems on the extension and quasiextension of continuous mappings. (Russian) (84a:54027)
- Roberts, James W. See Kalton, N. J., (84d:28018)
- Savel'ev, L. Ya. See Nedogibchenko, G. V., (84d:28016)
- Serb, Ioan On the multivalued metric projection in normed vector spaces. (84d:41062)
- Skalaetskii, A. G. See Obukhovskii, V. V., (84a:54027)
- Sulk, Ingolf On convergence in spaces of matrix summations. (84m:40017)
- Sydow, Walter On hom-functors and tensor products of topological vector spaces. (84j:46096)
- Turinici, Mihai Constant and variable drop theorems on metrizable locally convex spaces. (84c:47050)

46Bxx Normed linear spaces and Banach spaces {For function spaces, see 46Exx.}

- Beauzamy, Bernard ★Introduction to Banach spaces and their geometry. 84g:46017

46B05 Topology in terms of the norms

- Bellet, Steven F. The J -sum of Banach spaces. 84a:46022
- Cremers, Heinz (with Kadetka, Dieter) A note on compactness in Banach spaces. 84c:46007
- Kadetka, Dieter See Cremers, Heinz, 84c:46007
- Le Van Hot Martingale representation in reflexive Banach spaces. 84g:46018
- Meixner, W. Eine neue Ungleichung für symmetrische skalare Normen. (German summary) [A new inequality for symmetric scalar norms] 84i:46017

secondary classifications:

- Indumathi, V. Proximinal subspaces of finite codimension in general normed linear spaces. (84g:41032)

46B10 Duality and reflexivity

- Bastero, J. A restricted form of the theorem of Maurey-Pisier for the cotype in p -Banach spaces. (French summary) 84d:46011
- Bellet, Steven F. Transfinite duals of quasireflexive Banach spaces. 84b:46013
- Dubois, R.-M. Complexifications d'espaces de Banach réels et dissipativité. [Complexifications of real Banach spaces and dissipativity] 84c:46008
- van Dulst, D. (with Pach, A. J.) On flatness and some ergodic super-properties of Banach spaces. 84m:46015
- Finet, Catherine Deux transfinis. (English summary) [Transfinite duals] 84c:46011
- Godefroy, Gilles Nouvelles classes d'espaces de Banach à préduel unique (d'après G. Godefroy et M. Talagrand). [New classes of Banach spaces with unique preduel (after G. Godefroy and M. Talagrand)] 84a:46023
- (with Talagrand, Michel) Espaces de Banach représentables. (English summary) [Representable Banach spaces] 84g:46019
- Parties admissibles d'un espace de Banach. Applications. [Admissible subsets of a Banach space. Applications] 84m:46016
- Kadets, V. M. Stability of the property of superreflexivity. (Russian) 84b:46014
- Kolomý, Josef Duality mapping and geometry of Banach spaces. 84c:46018
- Li, Rong Lu The second dual spaces of normed linear spaces. (Chinese. English summary) 84c:46019
- Lima, Ásvald (with Uttersrud, Ulf) Centers of symmetry in finite intersections of balls in Banach spaces. 84f:46016
- Odell, E. Remarks on the separable dual problem. (See 84j:46001)
- Pach, A. J. See van Dulst, D., 84m:46015
- Plichko, A. N. Totality of a set of weak* Φ -approximable functionals. (Russian. English summary) 84i:46020
- Schachermayer, Walter Norm attaining operators and renormings of Banach spaces. 84c:46012
- Talagrand, Michel See Godefroy, Gilles, 84g:46019
- Uttersrud, Ulf See Lima, Ásvald, 84f:46016
- Wójciewicz, Marek On the James space $J(X)$ for a Banach space X . 84b:46017

secondary classifications:

- Baker, J. M. Reflexivity of operator spaces. (84g:47038)
- Godun, B. V. On Markushevich bases. (Russian) (84b:46015)

46B15 Summability and bases

- Ahmad, Khalil See Jain, Pawan Kumar, 84b:46016; 84b:46017 and 84m:46017
- Arazy, Jonathan On stability of unitary matrix spaces. 84c:46009
- Bastero, J. l^p -subspaces of stable p -Banach spaces, $0 < p \leq 1$. 84i:46021
- Carothers, N. L. (with Flinn, Patrick) Embedding l_p^n in $l_{p,q}^n$. 84b:46018
- Flinn, Patrick See Carothers, N. L., 84b:46018
- Godun, B. V. On Markushevich bases. (Russian) 84b:46015
- Bounded and unbounded complete biorthogonal systems in a Banach space. (Russian) 84d:46012
- Biorthogonal systems in spaces of bounded functions. (Russian) 84j:46017
- Jain, Pawan Kumar (with Ahmad, Khalil) Certain characterisations of Schauder decompositions in Banach spaces. 84b:46016
- (with Ahmad, Khalil) Best approximation in Banach spaces with Schauder decompositions. 84m:46017
- (with Ahmad, Khalil; Maskey, S. M.) A note on boundedly complete decomposition of a Banach space. 84b:46017
- James, Robert C. Bases in Banach spaces. 84b:46019

- Kotlyar, B. D. The Banach-Saks property and rate of convergence. (Russian) 84c:46010
- Maskey, S. M. See Jain, Pawan Kumar, et al., 84b:46017
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- Plans, Antonio (with Reyes, Andrés) On the geometry of sequences in Banach spaces. 84i:46022
- Plichko, A. N. Fundamental biorthogonal systems and projection bases in Banach spaces. (Russian) 84i:46023
- Reyes, Andrés See Plans, Antonio, 84i:46022
- Slepchenko, A. N. Some generalized bases of Banach spaces. (Russian) 84b:46020
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- Sequences in Banach spaces. 84c:46010
- Completeness in convex sense in Banach spaces. 84m:46018
- Tomaszewski, B. Two remarks on the Khintchine-Kahane inequality. 84g:46020
- Volintiru, Constantin An observation on separable Banach spaces with nonseparable duals. (Romanian. English summary) 84i:46024

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- Fonf, V. P. See Kadets', M. I., (84j:46022)
- Jain, Pawan Kumar (with Kapoor, N. M.) T -bases in non-Archimedean Banach spaces. (84j:46015)
- Kadets', M. I. (with Fonf, V. P.) Two theorems on the massiveness of the boundary in a reflexive Banach space. (Russian) (84j:46022)
- Kamel, Elzaburo Majorization in finite factors. (84j:46086)
- Kapoor, N. M. See Jain, Pawan Kumar, (84j:46015)
- Soomer, V. Summability, defined by a sequence of matrices, and almost summability in a Banach space. (Russian. English summary) (84c:40010)
- Swartz, Charles The Schur lemma for bounded multiplier convergent series. (84b:46015)

46B20 Geometry and structure

- Amir, Dan (with Mach, Jaroslav; Saatkamp, Klaus) Existence of Chebyshev centers, best n -nets and best compact approximants. 84b:46022
- Argyros, Spiros A. (with Tsarpalias, Athanasios) Isomorphic embeddings of $l^1(\Gamma)$ into subspaces of $C(\Omega)$. 84a:46024
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- Behrends, Ehrhard How to obtain vector-valued Banach-Stone theorems by using M -structure methods. 84c:46012
- Bernal, Javier (with Sullivan, Francis E.) Multidimensional volumes, super-reflexivity and normal structure in Banach spaces. 84g:46021
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- Bourgain, Jean Remarks on the double dual of a Banach space. 84a:46025
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- Dacunha-Castelle, Didier A survey on exchangeable random variables in normed spaces. 84b:46018
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- Figiel, T. On a recent result of G. Pisier. (Russian summary) 84b:46013
- Fitzpatrick, Simon (with Reznick, Bruce) Skewness in Banach spaces. 84a:46029
- Fonf, V. P. Polyhedral Banach spaces. (Russian) 84j:46018
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- Giel, C. (with Cleaver, C.) Packing spheres in C_p spaces. 84j:46019
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- Godefroy, Gilles Application à la dualité d'une propriété d'intersection de boules. [Application to duality of an intersection property of balls] 84c:46013
- Godini, G. Rough and strongly rough norms on Banach spaces. 84d:46015
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- Heinrich, Stefan The isomorphic problem of envelopes. **84b:46025**
 (with Mankiewicz, P.) Applications of ultrapowers to the uniform and Lipschitz classification of Banach spaces. **84b:46026**
 (with Henson, C. Ward; Moore, L. C., Jr.) Elementary equivalence of L_1 -preduals. **84j:46021**
- Henson, C. Ward (with Moore, L. C., Jr.) The Banach spaces $l_p(n)$ for large p and n . **84g:46026**
 See also Heinrich, Stefan; et al., **84j:46021**
- Hernandez, Roberto Espaces L^p , factorisation et produits tensoriels dans les espaces de Banach. (English summary) [L^p spaces, factorization and tensor products in Banach spaces] **84e:46014**
- Holstein, Ralf A sequence characterization of subspaces of $L_1(\mu)$ and quotient spaces of $C(K)$. **84i:46030**
- Izumino, Saichi Khalil's theorem and a property of uniformly convex spaces. **84c:46013**
- Jarchow, Hans On Hilbert-Schmidt spaces. **84d:46017**
- Johnson, William B. (with Schechtman, Gideon) Embedding l_p^n into l_1^n . **84a:46031**
- Kadets, M. I. The connection between several convexity properties of the unit sphere of a Banach space. (Russian) **84c:46014**
 (with Fonf, V. P.) Two theorems on the massiveness of the boundary in a reflexive Banach space. (Russian) **84j:46022**
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- König, Hermann (with Lewis, D. R.; Lin, P. K.) Finite-dimensional projection constants. **84c:46014**
- Kutateladze, S. S. A criterion for a Hilbert space. (Russian) **84a:46032**
- Lewis, D. R. See König, Hermann; et al., **84c:46014**
- Lima, Ásvald (with Olsen, G. H.; Uttersrud, Ulf) Intersections of M -ideals and G -spaces. **84c:46015**
- Lin, P. K. See König, Hermann; et al., **84c:46014**
- Lotz, H. P. (with Porta, Horacio) On extreme points. **84a:46033**
- Mach, Jaroslav See Amir, Dan; et al., **84b:46022**
- Mankiewicz, P. See Heinrich, Stefan, **84b:46026**
- Massa, Silvio Some remarks on Opial spaces. (Italian summary) **84m:46020**
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- Milman, Vitali D. Some remarks about embeddings of l_1^n in finite-dimensional spaces. **84d:46018**
- Moore, L. C., Jr. See Henson, C. Ward, **84g:46026** and Heinrich, Stefan; et al., **84j:46021**
- (Muthukumar, S.) See Narang, Tulsí Das, **84a:46034**
- Narang, Tulsí Das A remark on: "A note on the semicontinuity properties of the farthest point map" [Indian J. Pure Appl. Math. **11** (1980), no. 10, 1293-1296; MR 82b:46023] by G. S. Rao and S. Muthukumar. **84a:46034**
- Odinec, Vladimir P. On a property of reflexive Banach spaces with a transitive norm. **84i:46031**
- Olsen, G. H. See Lima, Ásvald; et al., **84c:46015**
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- Pajor, Alain Plongement de l_1^n dans les espaces de Banach complexes. (English summary) [Embeddings of l_1^n in complex Banach spaces] **84g:46024**
- Parrington, J. R. On nearly uniformly convex Banach spaces. **84c:46017a**
 Corrigenda to: "On nearly uniformly convex Banach spaces". **84c:46017b**
- Pisier, Gilles K -convexity. **84c:46015**
 Quotients of Banach spaces of cotype q . **84d:46019**
 On the dimension of the l_p -subspaces of Banach spaces, for $1 < p < 2$. **84a:46035**
- Polak, T. (with Sims, Brailey) A Banach space which is fully 2-rotund but not locally uniformly rotund. **84b:46019**
- Ponomareva, A. I. On the generalization of the "2-sun" concept. (Russian) **84b:46020**
- Porta, Horacio See Lotz, H. P., **84a:46033**
- Queffelec, Hervé Le théorème de Dvoretzky. [Dvoretzky's theorem] **84g:46027**
- Rakov, S. A. The Banach-Saks exponent of some Banach spaces of sequences. (Russian) **84c:46018**
- (Rao, Geetha S.) See Narang, Tulsí Das, **84a:46034**
- Rao, T. S. S. R. K. Characterizations of some classes of L_1 -preduals by the Alfsen-Effros structure topology. **84d:46020**
- Raynaud, Yves Espaces de Banach superstables, distances stables et homéomorphismes uniformes. (English summary) [Superstable Banach spaces, stable distances and uniform homeomorphisms] **84j:46024**
- Reinov, O. I. On a class of Hausdorff compact and GSG Banach spaces. **84a:46036**
 Banach spaces without the approximation property. (Russian) **84m:46021**
- Reznick, Bruce See Fitzpatrick, Simon, **84a:46029**
- Riddle, Lawrence H. (with Uhl, J. J., Jr.) Martingales and the fine line between Asplund spaces and spaces not containing a copy of l_1 . **84a:46037**
 The geometry of weak Radon-Nikodým sets in dual Banach spaces. **84a:46038**
- Rogalski, Marc Sur la distance de deux espaces de dimension finie, d'après Gluskin. [On the distance of two finite-dimensional spaces in the sense of Gluskin] **84m:46022**
- Rosenthal, H. P. On applications of the boundedness principle to Banach space theory according to J. Bourgain. **84a:46039**
- Ruckle, William H. Absolutely divergent series and Banach operator ideals. **84j:46025**
- Saatkamp, Klaus See Amir, Dan; et al., **84b:46022**
- Schachermayer, Walter The class of Banach spaces, which do not have c_0 as a spreading model, is not L^2 -hereditary. **84e:46015**
- Schechtman, Gideon See Johnson, William B., **84a:46031**
- Schütt, Carsten On the volume of unit balls in Banach spaces. **84a:46040**
- Sen, Dilip Kumar Characterizations of strict convexity. **84b:46021**
- Serb, Ioan A normed space admitting countable multivalued metric projections. **84f:46020a**
 Normed spaces with bounded or compact strongly proximal sets. **84f:46020b**
- Sims, Brailey See Polak, T., **84b:46019** and van Duist, D., **84i:46027**
- Sullivan, Francis E. See Bernal, Javier, **84g:46021**
- Sundaresan, Kondagunta Geometry and nonlinear analysis in Banach spaces. **84g:46028**
- Talagrand, Michel Sur les espaces de Banach contenant $l_1(\tau)$. (English summary) [On Banach spaces containing $l_1(\tau)$] **84d:46021**
- Tsarpalias, Athanasios See Argyros, Spiros A., **84a:46024**
- Uhl, J. J., Jr. See Riddle, Lawrence H., **84a:46037**
- Uttersrud, Ulf See Lima, Ásvald; et al., **84c:46015**
- Valentine, J. E. Some implications of Euclid's Proposition 7. **84m:46023**
- Vlasov, L. P. Elements of the best approximation with respect to subspaces of finite codimension. (Russian) **84b:46022**
- Volkman, Peter Über die Möglichkeit, die Norm eines normierten Raumes aus der Zerlegung in zwei Unterräume mit Hilfe einer Norm des \mathbb{R}^2 zu gewinnen. [On the possibility of obtaining the norm of a normed space from the decomposition in two subspaces with the help of a norm of the \mathbb{R}^2] **84j:46026**
- Whitfield, J. H. M. Smooth bump functions and renormings of Banach spaces: a survey. **84f:46021**
 See also Fabian, M.; et al., **84i:46028**
- Wilansky, A. An extension of Helly's theorem for Banach spaces. **84a:46041**
- Wood, G. V. Maximal symmetry in Banach spaces. **84f:46022**
- Yandarov, V. O. The theory of densely imbedded B-spaces and its applications. (Russian) **84f:46023a**
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- Yin, Hong Sheng Three geometric parameters of normed linear spaces. (Chinese. English summary) **84j:46027**
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- Yorke, A. C. Geometry in quotient reflexive spaces. **84g:46029**
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- Yurges, V. V. Some geometric characteristics of Banach spaces and accretive operators. (Russian) **84j:46028**
- Zippin, M. Small perturbations of metric conditions on projections and structures in the classical Banach spaces. (See **84j:46001**)
- Zizler, V. See Fabian, M.; et al., **84i:46028**

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- Arazy, Jonathan On stability of unitary matrix spaces. **(84c:46009)**
- Balaganskii, V. S. Weak continuity of metric projection on bounded sets in Banach spaces. (Russian) **(84f:41033)**
- Berdyshev, V. I. Metric projection on the class $H(\Omega)$. (Russian) **(84c:41027)**
- Borwein, Jonathan M. (with Sims, Brailey) Nonexpansive mappings on Banach lattices. **(84f:46009)**
- Bourgain, Jean On convergent sequences of continuous functions. **(84c:46018)**
- Chakalov, V. L. Extremal elements of some normed spaces. (Russian) **(84j:46063)**
- Downing, David J. (with Turett, Barry) Some properties of the characteristic of convexity relating to fixed point theory. **(84c:47070)**
- Ferrera, Juan (with Gómez Gil, Javier; Llavona, José G.) On completion of spaces of weakly continuous functions. **(84g:46050)**
- Godefroy, Gilles Nouvelles classes d'espaces de Banach à prédual unique (d'après G. Godefroy et M. Talagrand). [New classes of Banach spaces with unique predual (after G. Godefroy and M. Talagrand)] **(84a:46023)**
- Godun, B. V. On Markushevich bases. (Russian) **(84c:46015)**
- Gómez Gil, Javier (with Llavona, José G.) Polynomial approximation of weakly differentiable functions on Banach spaces. **(84g:46065)**
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- Gordon, Y. (with Reisner, S.) Some geometrical properties of Banach spaces of polynomials. **(84f:46035)**
- Greim, Peter Hilbert spaces have the Banach-Stone property for Bochner spaces. **(84g:46051)**
 Strongly exposed points in Bochner L^p -spaces. **(84f:46044)**
- Hoffmann-Jørgensen, J. Probability and geometry of Banach spaces. **(84f:60013)**
- Hönl, Chaim Samuel Équations intégrales généralisées et applications. [Generalized integral equations and applications] **(84m:45039)**
- Jarosz, Krzysztof A generalization of the Banach-Stone theorem. **(84c:46039)**
- Kapoor, O. P. (with Mathur, Saran Behari) Metric projection bound and the Lipschitz constant of the radial retraction. **(84f:41036)**
- Kawatani, Takeo See Miyazaki, Kenichi; et al., **(84m:47070a)**
- Klee, Victor Dispersed Chebyshev sets and coverings by balls. **(84e:41036)**
- Krichevets, A. N. On the connection between the homological properties of some Banach modules and questions of the geometry of Banach spaces. (Russian. English summary) **(84g:46071)**
- Landes, Thomas Geometry of spheres: on a conjecture of J. J. Schäffer. **(84d:52014)**
- Le Van Hot Generic differentiability of mappings and convex functions in Banach and locally convex spaces. **(84b:58015)**
- Levy, Mireille L'espace d'interpolation réel $(A_0, A_1)_{\theta, p}$ contient l_p . [The real interpolation space $(A_0, A_1)_{\theta, p}$ contains l_p] **(84a:46163)**
- Linde, Werner Operators generating stable measures on Banach spaces. **(84c:60012)**
- Llavona, José G. See Ferrera, Juan; et al., **(84g:46050)** and Gómez Gil, Javier, **(84g:46065)**

- Mamprya, B. I. The stochastic integral of an operator-valued function with respect to a vector-valued Wiener process. (Russian. English and Georgian summaries) (84f:60083)
- Mathur, Saran Behari. See Kapoor, O. P., (84f:41036)
- Miyaura, Suga. See Miyazaki, Kenichi; et al., (84m:47070a)
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- Möller, Helmut Darstellung von G-Räumen durch Schnitte in Bündeln. [Representation of G-spaces by sections in bundles] (84j:46100)
- Oja, Ene Weakly compactly generated tensor products and spaces of operators. (Russian. French and Estonian summaries) (84d:47055)
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- Zhivkov, Nikolai V. Continuity and nonmultivaluedness properties of metric projections and antiprojections. (84d:41065)

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- Bourgain, Jean (with Rosenthal, H. P.) Geometrical implications of certain finite-dimensional decompositions. 84d:46022
- Dinh Quang Lu'u Some examples and theorems related to the R-N-property in Banach spaces. 84d:46023
- van Dulst, D. The asymptotic norming property and martingale convergence. 84j:46029
- Musiał, Kazimierz A characterization of the weak Radon-Nikodým property in terms of the Lebesgue measure. 84c:46043
- Riddle, Lawrence H. (with Saab, Elias; Uhl, J. J., Jr.) Sets with the weak Radon-Nikodým property in dual Banach spaces. 84h:46028
- Rosenthal, H. P. See Bourgain, Jean, 84d:46022
- Saab, Elias On Dunford-Pettis operators. 84c:46016
- Some characterizations of weak Radon-Nikodým sets. 84g:46030
- (with Saab, Paulette) On the Banach space X^{**}/X . (French summary) 84f:46024
- See also Riddle, Lawrence H.; et al., 84c:46028
- Saab, Paulette See Saab, Elias, 84f:46024
- Uhl, J. J., Jr. See Riddle, Lawrence H.; et al., 84h:46028
- Wheeler, Robert F. The retraction property, CCC property, and Dunford-Pettis-Phillips property for Banach spaces. 84f:46025

secondary classifications:

- Chu, Cho Ho On the Radon-Nikodým property in Jordan algebras. (84i:46070)

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- Bourgain, Jean A result on operators on $C[0, 1]$. 84a:46044
- Nouvelles propriétés des espaces L^1/H_0^1 et H^s . [New properties of the spaces L^1/H_0^1 and H^s] 84i:46017
- Cembranos, Pilar Some properties of the Banach space $c_0(E)$. (Spanish. English summary) 84a:46045
- Creekmore, J. Type and cotype in Lorentz $L_{p,q}$ spaces. 84i:46032
- Guerre, Sylvie (with Levy, Mireille) Espaces ℓ^p dans les sous-espaces de L^1 . [ℓ^p -spaces in subspaces of L^1] (See 84m:46006)
- Khalil, Roshdi On some Banach space sequences. 84a:46046
- Leonard, I. E. (with Whitfield, J. H. M.) A classical Banach space: l_∞/c_0 . 84j:46030
- Levy, Mireille See Guerre, Sylvie, (See 84m:46006)
- Schachermayer, Walter Norm attaining operators on some classical Banach spaces. 84g:46031
- Whitfield, J. H. M. See Leonard, I. E., 84j:46030

secondary classifications:

- Arazy, Jonathan Linear-topological classification of matroid C^* -algebras. (84i:46069)
- Bourgain, Jean On the embedding problem of L^1 in L^1/H_0^1 . (84d:46049)
- Ghoussoub, Nassif Positive embeddings of $C(\Delta)$, L_1 , $l_1(\Gamma)$, and $(\Sigma_n \oplus l_\infty^n)_1$. (84m:46024)
- Godini, G. Best approximation in certain classes of normed linear spaces. (84i:41048)
- Iwanik, A. On norm-attaining operators acting from $L^1(\mu)$ to $C(S)$. (84f:47050)
- Kadets', M. I. The connection between several convexity properties of the unit sphere of a Banach space. (Russian) (84c:46014)
- Shekhtman, Boris Why piecewise linear functions are dense in $C[0, 1]$. (84a:41045)
- Interpolation projections and Banach spaces. (84i:41049)
- Stroyan, K. D. Infinitesimal analysis of ℓ^∞ in its Mackey topology. (84m:46013)
- Wolfe, John C. $C(\kappa)$ preserving operators on $C(K)$ spaces. (84a:46055)

46B30 Banach lattices [See also 46A40.]

- Abramovich, Yu. A. (with Yanovskii, L. P.) Application of Rademacher systems to operator characterizations of Banach lattices. 84h:46029
- Ghoussoub, Nassif Positive embeddings of $C(\Delta)$, L_1 , $l_1(\Gamma)$, and $(\Sigma_n \oplus l_\infty^n)_1$. 84m:46024
- Godefroy, Gilles Symétries isométriques. Applications à la dualité des espaces réticulés. (English summary) [Isometric symmetries. Applications to the duality of lattice spaces] 84g:46032
- Miyajima, Shizuo Structure of Banach quasiblattices. 84g:46033
- Nielsen, N. J. The ideal property of tensor products of Banach lattices with applications to the local structure of spaces of absolutely summing operators. 84h:46023
- Popa, Irina Properties of the $o(E, E')$ -topology and criteria for $o(E, E')$ -compactness in concrete function spaces. (Romanian. English summary) 84j:46031
- Reyes, Andrés Asymptotic lattices and its relation with the asymptotic position in Banach spaces. (See 84j:00009)
- Robinson, Derek W. (with Yamamoto, Sadyuki) Addition of an identity to an ordered Banach space. 84f:46026
- Szulga, Jerzy On lattice analogues of absolutely summing constants. 84c:46019
- Talagrand, Michel La structure des espaces de Banach réticulés ayant la propriété de Radon-Nikodým. (English summary) [The structure of Banach lattices having the Radon-Nikodým property] 84g:46034
- Yamamoto, Sadyuki See Robinson, Derek W., 84f:46026
- Yanovskii, L. P. See Abramovich, Yu. A., 84h:46029
- Zobor, G. N. Relations of various classes of wedges in normed spaces. (Russian) 84b:46024

secondary classifications:

- Aliprantis, C. D. (with Burkinshaw, O.) Dunford-Pettis operators on Banach lattices. (84b:47045)
- Burkinshaw, O. See Aliprantis, C. D., (84b:47045)
- Eghe, Leo On sub- and superpramarts with values in a Banach lattice. (84f:60076)
- Godefroy, Gilles Sur les opérateurs compacts réguliers. [Regular compact operators] (84i:47057)
- Heinrich, Stefan (with Nielsen, N. J.; Olsen, G. H.) Order bounded operators and tensor products of Banach lattices. (84a:46154)
- Martignon, Laura Banach lattice algebras with multiplicative modulus and convolution Banach algebras. (84c:46041)
- Nielsen, N. J. See Heinrich, Stefan; et al., (84a:46154)
- Olsen, G. H. See Heinrich, Stefan; et al., (84a:46154)
- Popa, Nicolae Uniqueness of the symmetric structure in $L_p(\mu)$ for $0 < p < 1$. (84g:46045)
- Saab, Elias On Dunford-Pettis operators. (84c:46016)
- Schmidt, Garfield C. A characterization of normed M -spaces. (84a:46015)
- Szulga, Jerzy On lattice summing operators. (84c:47025)
- Yamamoto, Sadyuki On linear operators on ordered Banach spaces. (84h:46011)

46B99 None of the above, but in this section

- Franić, I. Two results in 2-normed spaces. (Serbo-Croatian summary) 84m:46025
- Heinrich, Stefan (with Mankiewicz, P.) Some open problems in the nonlinear classification of Banach spaces. (See 84h:46001)
- Khan, Ahmad Lipschitz 2-operators. 84g:46035
- Mankiewicz, P. See Heinrich, Stefan, (See 84h:46001)
- Mustajica, Costică On the extension problem with prescribed norm. 84f:46027
- Rogalski, Mare Sur le quotient volumique d'un espace de dimension finie. [The volume quotient of a finite-dimensional space] 84j:46032
- Saint-Raymond, Jean Sur le volume des corps convexes symétriques. [On the volume of symmetric convex bodies] 84f:46033
- Vukman, J. Involution on $L(X)$. (Serbo-Croatian summary) 84f:46028
- White, Albert G., Jr. A new characterization of strict 2-convexity. 84g:46036

secondary classifications:

- Arazy, Jonathan Certain Schur-Hadamard multipliers in the spaces C_p . (84i:47061)
- Argyros, Spiros A. (with Mercourakis, S.; Negreponis, Stelios) Analytic properties of Corson-compact spaces. (84i:46035)
- Banaszczyk, Wojciech On the existence of exotic Banach-Lie groups. (84k:22030)
- Cho, Yeol Je (with Park, Bae Hun; Park, Keun Saeng) Strictly 2-convex linear 2-normed spaces. (84g:46007)
- Deutsch, Frank (with Mach, Jaroslav; Saatkamp, Klaus) Approximation by finite rank operators. (84m:47058)
- Dickmeis, Werner (with Nessel, Rolf Joachim) Quantitative Banach-Steinhaus theorems — a survey. (84k:47007)
- Gevirtz, Julian Injectivity of quasi-isometric mappings of balls. (84h:47072)
- Ghoussoub, Nassif (with Saab, Elias) On the range of a basically scattered vector measure. (84f:46060)
- Khan, Ahmad See Siddiqi, Ataulah, (84g:46008)
- López Fernández-Asenjo, F. F. (with Pérez-Cacho García, S.; Pérez Gómez, A.) Completion of a space of recurrent sequences. (Spanish) (84j:46013)
- Mach, Jaroslav See Deutsch, Frank; et al., (84m:47058)
- Martínez Maurica, Javier A note on the extension of continuous linear forms of non-Archimedean normed spaces. (Spanish) (84g:46106)
- Mercourakis, S. See Argyros, Spiros A.; et al., (84i:46035)
- Mikhaleva, L. I. Bounded subsets of non-Archimedean Banach spaces and of their rings of continuous operators. (Russian. English summary) (84d:46114)
- Myjak, Józef Well posed problems in the theory of best approximation. (84a:41043)
- Negreponis, Stelios See Argyros, Spiros A.; et al., (84i:46035)
- Nessel, Rolf Joachim See Dickmeis, Werner, (84k:47007)
- Papini, Pier Luigi Approximation and norm derivatives in real normed spaces. (84a:41044)

- Park, Bae Hun See Cho, Yeol Je; et al., (84g:46007)
 Park, Keun Saeng See Cho, Yeol Je; et al., (84g:46007)
 Pérez-Cacho García, S. See López Fernández-Asenjo, F. F.; et al., (84j:46013)
 Pérez Gómez, A. See López Fernández-Asenjo, F. F.; et al., (84j:46013)
 Ruess, Wolfgang M. (with Stegall, Charles P.) Extreme points in duals of operator spaces. (84c:46007)
 Saab, Elias See Ghousseini, Nassif, (84f:46060)
 Saatkamp, Klaus See Deutsch, Frank; et al., (84m:47058)
 Sen, Dilip Kumar Generalized p -selfadjoint operators on Banach spaces. (84j:47068)
 Šerb, Ioan On the multivalued metric projection in normed vector spaces. (84d:41062)
 Siddiqi, Ataulah (with Khan, Ahmad) Certain problems in quasi-2-normed spaces. (84g:46008)
 Slaby, Marek Convergence of submartingales and amarts in Banach lattices. (Russian summary) (84k:60067)
 Convergence of positive submartingales and pramarts in Banach spaces with unconditional bases. (Russian summary) (84k:60068)
 Stegall, Charles P. See Ruess, Wolfgang M., (84c:46007)
 Szűcs, József Some weak-star ergodic theorems. (84g:46092)
 Vesentini, Edoardo Some aspects of the geometry of bounded domains. (Italian. English summary) (84a:32052)
 Zhivkov, Nikolai V. Plane polygonal approximation of bounded convex sets. (84g:52003)

46Cxx Inner product spaces, Hilbert spaces { For function spaces, see 46Exx. }

46C05 Geometry and topology of the spaces

- Papini, Pier Luigi Inner products and norm derivatives. 84f:46029

secondary classifications:

- Andalafte, Edward Z. (with Freese, Raymond W.) An equilateral four point property which characterizes generalized Euclidean spaces. (84j:51026)
 Engl, Heinz W. (with Kirsch, Andreas) On the continuity of the metric projection onto a convex set subject to an additional constraint. (Italian summary) (84c:52007)
 Fitzpatrick, Simon (with Reznick, Bruce) Skewness in Banach spaces. (84a:46029)
 Freese, Raymond W. See Andalafte, Edward Z., (84j:51026)
 Godini, G. On a problem of H. Berens. (84g:41031)
 Kirsch, Andreas See Engl, Heinz W., (84c:52007)
 Kutateladze, S. S. A criterion for a Hilbert space. (Russian) (84a:46032)
 Miličić, Pavle M. Sur les suites orthonormales dans des espaces normés. [Orthonormal sequences in normed spaces] (84c:46016a)
 Les points extrêmes et les points unis de la boule unité étudiés au moyen du semi-produit scalaire. [Extreme points and points of uniqueness of the unit ball studied by means of the scalar semiproduct] (84c:46016b)
 Reznick, Bruce See Fitzpatrick, Simon, (84a:46029)
 Vukman, J. Involution on $L(X)$. (Serbo-Croatian summary) (84f:46028)

46C10 Other properties of such spaces

- Reyes, Andrés Some properties of a regular sequence in Hilbert space. 84b:46030

secondary classifications:

- Antoine, Jean-Pierre (with Karwowski, Witold) Interpolation theory and refinement of nested Hilbert spaces. (84b:46099a)
 Karwowski, Witold See Antoine, Jean-Pierre, (84b:46099a)
 Kotlyar, B. D. The Banach-Saks property and rate of convergence. (Russian) (84c:46010)
 Porter, William A. Partially ordered Hilbert resolution spaces. (See 84g:93005d)
 Redheffer, Raymond M. (with Volkmann, Peter) Über eine Ungleichung von Schur. (English summary) [On an inequality of Schur] (84m:26028)
 Volkmann, Peter See Redheffer, Raymond M., (84m:26028)

46C99 None of the above, but in this section

- Diminnie, Charles R. (with White, Albert G., Jr.) A characterization of 2-inner product spaces. 84b:46031
 Miličić, Pavle M. Systèmes orthonormaux dans des espaces avec semi-produit scalaire et dans leurs complétés métriques. [Orthonormal systems in scalar semiproduct spaces and in their complete metrics] 84a:46047
 Núñez Jiménez, Manuel (with Revilla Ramos, Miguel Ángel) Acceleration of convergence for weighted means. (Spanish) 84a:46048
 de las Obras-L. y Nasarre, M.^a Carmen Sequential compactness in $G(H)$ and $P(H)$. (Spanish. English summary) 84j:46034
 Preservation of convergences by projection on the limit space. (Spanish. English summary) 84k:46018
 Nucleus and strict nucleus of a sequence of subspaces of $G(H)$. (Spanish) 84j:46035
 The T_i topology and the weak convergences in the geometry of the subspaces of a Hilbert space. (Spanish. English summary) 84j:46036
 New convergences in $G(H)$. (Spanish. English summary) 84j:46037
 Revilla Ramos, Miguel Ángel See Núñez Jiménez, Manuel, 84a:46048
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 Rodman, Leiba On global geometric properties of subspaces in Hilbert space. 84j:46038
 Vukman, J. A characterization of real and complex Hilbert spaces among all normed spaces. 84i:46033
 White, Albert G., Jr. See Diminnie, Charles R., 84b:46031

secondary classifications:

- Antoine, Jean-Pierre (with Karwowski, Witold) Countably Hilbert spaces and partial inner product spaces. (Russian summary) (84f:46003)
 Astaneh, Ali Ansari On uniquely remotal subsets of Hilbert spaces. (84k:41034)
 Brunner, Norbert Sequential compactness and the axiom of choice. (84f:04009)
 Deutsch, Frank Representers of linear functionals, norm-attaining functionals, and best approximation by cones and linear varieties in inner product spaces. (84a:41033)
 Franic, I. Two results in 2-normed spaces. (Serbo-Croatian summary) (84m:46025)
 Gajda, Z. On H -smooth and H -convex sets in linear spaces. (Serbo-Croatian summary) (84i:46016)
 Jannussis, A. D. New interpretation of the scalar product in Hilbert space. (84m:81059)
 Karwowski, Witold See Antoine, Jean-Pierre, (84f:46003)
 Pustylnik, E. I. Permutation-interpolation Hilbert spaces. (Russian) (84c:46077)

46D05 Spaces with indefinite inner product

- Bosznay, Adam P. Remark on a problem of J. Bognár. 84d:46024

secondary classifications:

- Voevodin, V. V. Numerical methods in bilinearly metric spaces. (Russian) (84i:65041)
 Vukman, J. Involution on $L(X)$. (Serbo-Croatian summary) (84f:46028)

46Exx Linear function spaces and their duals [See also 30H05; for function algebras, see 46J10.]

- Khrushchëv, S. V. (with Nikol'skii, N. K.; Pavlov, B. S.) Unconditional bases of exponentials and of reproducing kernels. 84k:46019
 Nikol'skii, N. K. See Khrushchëv, S. V.; et al., 84k:46019
 Pavlov, B. S. See Khrushchëv, S. V.; et al., 84k:46019

secondary classifications:

- Krein, S. G. (with Petunin, Ju. I.; Semenov, E. M.) ★Interpolation of linear operators. (84j:46103)
 Petunin, Ju. I. See Krein, S. G.; et al., (84j:46103)
 Semenov, E. M. See Krein, S. G.; et al., (84j:46103)
 (Szűcs, József) See Krein, S. G.; et al., (84j:46103)

46E05 Lattices of continuous, differentiable or analytic functions

- Becker, Richard Edouard Sur la représentation des formes ≥ 0 sur les espaces de fonctions. [Representation of forms ≥ 0 on function spaces] 84a:46049
 Fedorova, V. P. α -additive and r -additive functionals on lattices of uniformly continuous functions. (Russian) 84a:46050
 Flösser, H.-O. Smooth functionals on lattices of continuous functions. 84f:46030
 Jameson, G. J. O. (with Pinkus, A.) Positive and minimal projections in function spaces. 84f:46031
 Pinkus, A. See Jameson, G. J. O., 84f:46031
 Xiong, Hong Yun Characterizations of the completely regular topological spaces X for which $C(X)$ is a dual ordered vector space. 84b:46033

secondary classifications:

- Monakov-Rogozkin, A. Operators connected with limits. (Russian. English summary) (84h:54015)

46E10 Topological linear spaces of continuous, differentiable or analytic functions

- Andrica, Dorin (with Mărușoia, Nicolae) Cones of holomorphic functions with positive real part. 84b:46034
 Bierstedt, Klaus-D. (with Meise, Reinhold G.; Summers, William H.) A projective description of weighted inductive limits. 84g:46037
 Ferrera, Juan Spaces of weakly continuous functions. 84b:46025
 Govaerts, W. Sequentially continuous linear functionals on spaces of continuous functions. 84a:46051
 Jain, Pawan Kumar (with Singh, Balbir) Characterisations of bounded sets in the space of entire Dirichlet transforms of several complex variables having finite growth. 84b:46035
 Meise, Reinhold G. See Bierstedt, Klaus-D.; et al., 84g:46037
 Mărușoia, Nicolae See Andrica, Dorin, 84b:46034
 Pelczyński, Aleksander Four lectures on translation invariant Banach spaces and Banach spaces of smooth and analytic functions. 84g:46038
 Singh, Balbir See Jain, Pawan Kumar, 84b:46035
 Summers, William H. See Bierstedt, Klaus-D.; et al., 84g:46037
 Yulmukhametov, R. S. A space of analytic functions that have a given growth near the boundary. (Russian) 84b:46025

secondary classifications:

- Börgens, M. (with Meise, Reinhold G.; Vogt, Dietmar) $\Lambda(\alpha)$ -nuclearity in infinite-dimensional holomorphy. (84g:46067)
 Cheney, E. W. See Respass, J. R., Jr., (84b:41030)
 Cremers, Heinz (with Kadelka, Dieter) A note on compactness in Banach spaces. (84c:46007)
 De Grande-De Kimpe, Nicole Non-Archimedean Fréchet spaces generalizing spaces of analytic functions. (84j:46104)
 The non-Archimedean space $\mathcal{C}^\infty(X)$. (84b:46104)
 Kadelka, Dieter See Cremers, Heinz, (84c:46007)

- Komornik, V. A Korovkin-type theorem for locally compact spaces. (84c:41014)
- Maorgoz, L. S. Analytic realization of operators that commute with an operator of generalized differentiation. (Russian) (84j:47051)
- Markaryan, V. N. Functional dimension of spaces of solutions of some classes of hypoelliptic equations. (Russian. English and Armenian summaries) (84d:35033)
- Meise, Reinhold G. A remark on the ported and the compact-open topology for spaces of holomorphic functions on nuclear Fréchet spaces. (84c:46103)
- See also Börgens, M.; et al., (84g:46067)
- Napalkov, V. V. Comparison of topologies in some spaces of entire functions. (Russian) (84d:32004)
- Nautiyal, A. On a space of entire harmonic functions in \mathbb{R}^n . (84f:31006)
- Peltola, Veli-Pirkka Bounded and integrable distributions on open sets. (84b:46038)
- Respass, J. R., Jr. (with Cheney, E. W.) Best approximation problems in tensor-product spaces. (84b:41030)
- Simonshenkov, S. D. The general form of a continuous linear functional on the space of functions that are holomorphic in a generalized ball. (Russian) (84a:32004)
- Sun, Yong Sheng Duality theorems for the width numbers of some functional classes. (84c:41028)
- Vinnitskii, B. V. Conditions for the convergence of sequences in some spaces of analytic functions. (Russian) (84a:30094)
- Vogt, Dietmar See Börgens, M.; et al., (84g:46067)
- Zapata, G. On the approximation of functions in inductive limits. (84d:46048)
- Zeriahi, Ahmed Bases communes dans certains espaces de fonctions harmoniques et fonctions séparément harmoniques sur certains ensembles de \mathbb{C}^n . (English summary) [Common bases in certain spaces of harmonic and separately harmonic functions on certain sets of \mathbb{C}^n] (84i:32020)

46E15 Banach spaces of continuous, differentiable or analytic functions

- Ahern, Patrick (with Jevtić, Miroslav) Duality and multipliers for mixed norm spaces. (84b:46036)
- Aleksandrov, G. A. Equivalent locally uniformly convex renorming of a Banach space of continuous functions on a compact topological group. (Russian) (84i:46034)
- Argyros, Spiros A. (with Mercourakis, S.; Negreponis, Stelios) Analytic properties of Corson-compact spaces. (84b:46035)
- Bogachev, V. A. Differentiation and integration operators in some spaces of entire functions. (Russian) (84i:46036)
- Bolcharev, S. V. Construction of bases in finite-dimensional spaces of functions analytic in the disc. (Russian) (84c:46017)
- Bourgain, Jean On convergent sequences of continuous functions. (84c:46018)
- On weak completeness of the dual of spaces of analytic and smooth functions. (84j:46039)
- Bukhvalov, A. V. (with Danilevich, A. A.) Boundary properties of analytic and harmonic functions with values in a Banach space. (Russian) (84f:46032)
- Cambern, Michael (with Pathak, Vijay D.) Isomorphisms of spaces of differentiable functions. (84a:46052)
- Ch'en, Wu Yung A note on the dual space of Lipschitz spaces $HA(\alpha, p, q)$ of the ball in \mathbb{C}^n . (84b:46026)
- Danilevich, A. A. See Bukhvalov, A. V., (84f:46032)
- Fedorova, V. P. Integral representations of functionals on spaces of uniformly continuous functions. (Russian) (84a:46053)
- Janson, Svante (with Jones, Peter Wilcox) Interpolation between H^p spaces: the complex method. (84c:46021)
- Jevtić, Miroslav See Ahern, Patrick. (84b:46036)
- Jones, Peter Wilcox See Janson, Svante. (84c:46021)
- Kolaski, Clinton J. Isometries of weighted Bergman spaces. (84a:46054)
- Kuo, Ts'ang Hai Note on weakly compactly generated $C(S)$ spaces. (84g:46039)
- Maurey, Bernard Isomorphismes entre espaces H_1 . [Isomorphisms between H_1 spaces] (84b:46027)
- Mercourakis, S. See Argyros, Spiros A.; et al., (84i:46035)
- Negreponis, Stelios See Argyros, Spiros A.; et al., (84i:46035)
- Pathak, Vijay D. See Cambern, Michael. (84a:46052)
- Raşa, Ion On a measure-theoretical concept of convexity. (84b:46020)
- Reich, Edgar On the uniqueness question for Hahn-Banach extensions from the space of ℓ^1 analytic functions. (84g:46040)
- Saab, Paulette The Dunford-Pettis property of some spaces of affine vector-valued functions. (84c:46022)
- Stoilov, Peio Estimates of norms of the Cauchy-Riesz projector on some subspaces of $C(T)$. (Russian. English and Bulgarian summaries) (84c:46021)
- Tsubouchi, Akio Comment on: "A note on completeness of the space of continuous functions" [J. Hokkaido Univ. Ed. Sect. II A 31 (1980/81), no. 2, 61-62; MR 82h:46045]. (84d:46026)
- Wolfe, John C. $C(n)$ preserving operators on $C(K)$ spaces. (84a:46055)
- Yandarov, V. O. Investigation of some classes of function \mathfrak{B} -spaces. (Russian) (84j:46040)

secondary classifications:

- Aleksandrov, A. B. Majorization property for multidimensional Hardy-Stein-Weiss classes. (Russian. English summary) (84c:42030)
- Behrends, Ehrhard How to obtain vector-valued Banach-Stone theorems by using M -structure methods. (84c:46012)
- Berkolaiko, M. Z. The conjugation operator in spaces of continuous functions. (Russian) (84m:47036)
- Bochkarev, S. V. Construction of polynomial bases in finite-dimensional spaces of functions analytic in the disk. (Russian) (See 84a:00012)
- Bosznay, Adam P. A remark on remotal sets. (84b:41049)
- Colzani, Leonardo Fourier transform of distributions in Hardy spaces. (Italian summary) (84c:46042)
- Derzhavets, B. A. Functional calculus of operators $\partial/\partial z_j$ in Banach spaces of entire functions of exponential type of several variables. (Russian) (84m:47037)
- De Souza, Geraldo Soares (with Sampson, Gary) A real characterization of the pre-dual of Bloch functions. (84g:30051)
- Dobrákov, Ivan On Lebesgue pseudonorms on $C_0(T)$. (Russian summary) (84b:47036)
- Fabes, Eugene B. (with Kenig, Carlos E.) On the Hardy space H^1 of a C^1 domain. (84c:42029)
- Feichtinger, Hans G. Banach spaces of distributions defined by decomposition methods and some of their applications. (See 84a:00012)
- Ferrera, Juan An example of a space that is not bw-realcompact. (Spanish) (84a:46028)
- Ginchev, Ivan A problem about set translations on the real line. (84d:26001)
- Gowda, M. Seetharama Nonfactorization theorems in weighted Bergman and Hardy spaces on the unit ball of \mathbb{C}^n ($n > 1$). (84i:32005)
- Heller, G. On a local version of pseudocompactness. (84d:54044)
- Hohub, J. R. Shift basic sequences in the Wiener disc algebra. (84g:46075)
- Jevtić, Miroslav Zeros of functions in $D^{p,\alpha}$ spaces. (84a:30063)
- Kenig, Carlos E. See Fabes, Eugene B., (84c:42029)
- Loch, Horst Abstrakte Hardy-Algebren und Konjugation. [Abstract Hardy algebras and conjugation] (84a:46113)
- Luecking, Daniel H. A technique for characterizing Carleson measures on Bergman spaces. (84c:32025)
- Mägerl, G. On extreme operators. (84c:47046)
- Mueller, Carl A characterization of BMO and BMO $_0$. (84j:42032)
- Nelson, Robert R. Pointwise evaluation of Bochner integrals in Marcinkiewicz spaces. (84i:28011)
- Oshman, E. V. Continuity of the metric projection onto subspaces of finite codimension in $C(Q)$. (Russian) (84c:41038)
- Sampson, Gary See De Souza, Geraldo Soares, (84g:30051)
- Schachermayer, Walter Measurable and continuous linear functionals on spaces of uniformly continuous functions. (84c:46023)
- Shamoyan, F. A. Weak invertibility in some spaces of analytic functions. (Russian. Armenian summary) (84c:30077)
- Takeo, Fukiko On the second dual of a simplex space. (84f:46014)
- Wilson, J. Michael A simple proof of the atomic decomposition for $H^p(\mathbb{R}^n)$, $0 < p \leq 1$. (84i:42036)
- Wood, G. V. Maximal symmetry in Banach spaces. (84f:46022)
- Yandarov, V. O. On the study of generalized Hölder B-spaces. (Russian) (84a:46080)
- Živaljević, Rade A Loeb measure approach to the Riesz representation theorem. (84b:28020)

46E20 Hilbert spaces of continuous, differentiable or analytic functions

- Antoine, Jean-Pierre (with Vause, M.) Partial inner product spaces of entire functions. (French summary) (84c:46056)
- Burbea, Jacob Norm inequalities of exponential type for holomorphic functions. (84j:46041)
- Georgijević, Dušan Orthogonalization of some function systems in a Hilbert space with reproducing kernel. (Serbo-Croatian. German summary) (84a:46057)
- Vause, M. See Antoine, Jean-Pierre. (84c:46056)
- secondary classifications:
- de Branges, Louis Grunsky spaces of analytic functions. (French summary) (84c:30070)
- Coefficient estimates. (84i:30021)
- Burbea, Jacob Inequalities for reproducing kernel spaces. (84a:30017)
- Inequalities for holomorphic functions of several complex variables. (84j:32030)
- Coffman, Charles V. The reproducing kernel space of the clamped plate. (84b:35038)
- Fuglede, Bent Fonctions BLD et fonctions finement surharmoniques. [BLD functions and finely superharmonic functions] (84b:31009)
- Saitoh, Saburo Positive definite Hermitian matrices and reproducing kernels. (84b:15009)
- Wolf, Edwin Functions in the space $R^2(E)$ at boundary points of the interior. (84i:30064)

46E25 Rings and algebras of continuous, differentiable or analytic functions (For Banach function algebras, see 46J10, 46J15.)

- Balashova, G. S. Imbedding theorems of some spaces of infinitely differentiable functions and nonlinear equations with subordinate terms. (Russian) (84c:46037)
- Basit, Bolis Unconditional convergent series and subalgebras of $C_0(X)$. (Italian summary) (84d:46027)
- Păltineanu, Gavril ★Elemente de teoria aproximării funcțiilor continue. (Romanian) [Elements of approximation theory of continuous functions] (84i:46038)

secondary classifications:

- Abel, Mati Some generalizations of the Stone-Weierstrass theorem. (Russian. English summary) (84c:46051)
- Description of the ideals of a topological algebra of continuous functions. (Russian. English summary) (84c:46054)
- Arizmendi Peimbert, Hugo (with Lara, Miguel; Tomás, Francisco) An abstract notion of compact-open topology. (Spanish) (84m:46054)
- Azad, K. K. See Srivastava, Pramila. (84c:54023)
- Burckel, R. B. (with Sacki, Sadahiro) Additive mappings on rings of holomorphic functions. (84i:30063)
- Fourneau, René Idéaux des lattices $C(X)$ et $C^*(X)$. [Ideals of the lattices $C(X)$ and $C^*(X)$] (84b:06013)
- Heinrich, Stefan (with Henson, C. Ward; Moore, L. C., Jr.) Elementary equivalence of L_1 -preduals. (84j:46021)
- Henson, C. Ward See Heinrich, Stefan; et al., (84j:46021)
- Lara, Miguel See Arizmendi Peimbert, Hugo; et al., (84m:46054)
- Moore, L. C., Jr. See Heinrich, Stefan; et al., (84j:46021)
- Prolla, João B. On the Stone-Weierstrass theorem for modules over non-Archimedean valued fields. (84c:46078)

- Saeki, Sadahiro See Burckel, R. B., (84i:30063)
 Srivastava, Pramila (with Azad, K. K.) On C^* -spaces. (84c:54023)
 Tomás, Francisco See Arizmendi Peimbert, Hugo; et al., (84m:46054)

46E27 Spaces of measures [See also 28A33.]

- Darst, Richard B. (with Honargohar, Zorabi) Weak-star convergence in the dual of the continuous functions on the n -cube, $1 \leq n < \infty$. (84c:46058)
 Haase, Hermann Weak compactness in spaces of measures on Boolean algebras. (84f:46033)
 Habre, W. L'espace des mesures $M_0(T)$. [The measure space $M_0(T)$] (84i:46039)
 Honargohar, Zorabi See Darst, Richard B., (84c:46058)
 Khurana, Surjit Singh A topology associated with vector measures. (84c:46019)
 Koumoullis, G. Perfect, μ -additive measures and strict topologies. (84c:46037)
 Schachermayer, Walter Measurable and continuous linear functionals on spaces of uniformly continuous functions. (84c:46023)
 Temam, Roger Approximation de fonctions convexes sur un espace de mesures et applications. (English summary) [Approximation of convex functions on a space of measures, and applications] (84c:46024)
 Zafarani, Jafar A space of vector-valued measures and a strict topology. (84c:46059)

secondary classifications:

- Constantinescu, Corneliu Spaces of measures on topological spaces. (84d:28009)
 Datry, Christian Modules de Banach et algèbres de Segal du type $U^*(S)$. (English summary) [Banach modules and Segal algebras of $U^*(S)$ type] (84i:43002)
 Gardner, R. J. The regularity of Borel measures. (84d:28001)
 Hărdăreanu, Teodor (with Postolică, Vasile) Distributions for set functions. (84c:46086)
 Nougues-Sainte-Beuve, M.-F. Propriétés de mesurabilité dans les espaces de mesures. [Measurability properties in measure spaces] (84c:28004)
 Postolică, Vasile See Hărdăreanu, Teodor, (84c:46086)
 Steerneman, Ton On the total variation and Hellinger distance between signed measures; an application to product measures. (84h:28007)

46E30 Spaces of measurable functions (L^p -spaces, Orlicz spaces, Köthe function spaces, Lorentz spaces, rearrangement invariant spaces, etc.)

- Akisher, G. A. On the imbedding of some classes of functions of several variables in a Lorentz space. (Russian) (84c:46026)
 Embedding of the classes $E_p(\lambda)$ into a Lorentz space. (Russian) (84c:46020)
 Alfaro Garcia, M.ª Pilar An orthonormal basis of $\pi(e^{\theta})$ in the case C. (Spanish. English summary) (84j:46042)
 Alspach, Dale E. Small into isomorphisms on L_p spaces. (84j:46041)
 Axler, Sheldon (with Shields, Allen) Extreme points in VMO and BMO. (84c:46021)
 Baidak, G. I. (with Braverman, M. Sh.; Petunin, Yu. I.) Additivity of dispersion—a characteristic property of the Hilbert space $L_2(\Omega, \mathcal{H}, \mu)$. (Russian) (84j:46043)
 Bassily, N. L. Some properties of the BMO $_0$ -spaces. (Russian) (84c:46034a)
 On the L^p_∞ -spaces with general Young-function. (84f:46034b)
 Bereznoi, E. I. On a theorem of G. Ya. Lozanovskii. (Russian) (84c:46060)
 Berkolaiko, M. Z. (with Rutitskii, Ya. B.) A class of function spaces. (Russian) (84m:46026)
 Bourass, A. (with Truffert, A.) Ensembles fermés décomposables dans les espaces intégraux de type Orlicz. [Decomposable closed sets in integral spaces of Orlicz type] (84c:46027)
 Braverman, M. Sh. On the complementability of subspaces that are generated by independent functions in a symmetric space. (Russian) (84d:46028)
 See also Baidak, G. I.; et al., (84j:46043)
 Brooks, James K. (with Dinculeanu, Nicolae) On weak compactness in the space of Pettis integrable functions. (84j:46042)
 Capon, Michèle Primarité de $L^p(L^r)$, $1 < p, r < \infty$. (English summary) [Primarity of $L^p(L^r)$, $1 < p, r < \infty$] (84f:46040)
 Coron, Jean-Michel La continuité de la symétrisation dans l'ensemble des fonctions positives de $H^1(\mathbb{R})$. (English summary) [The continuity of the symmetrization in the set of positive functions of $H^1(\mathbb{R})$] (84c:46025)
 Dinculeanu, Nicolae See Brooks, James K., (84j:46042)
 Dor, Leonard E. On co-lacunary sequences in L_1 . (84c:46061)
 Dzhumakaeva, G. T. (with Naurzybaev, K. Zh.) Lebesgue-Morrey spaces. (Russian. Kazakh summary) (84c:46022)
 Fehér, Franziska Indices of Banach function spaces and spaces of fundamental type. (84c:46062)
 Ghousoub, Nassif Martingales of increasing functions. (84c:46022)
 Gordon, Y. (with Reisner, S.) Some geometrical properties of Banach spaces of polynomials. (84f:46035)
 Greco, Gabriele H. Completeness of L^p spaces for finitely additive measures. (Italian. English summary) (84d:46029)
 Grzysiewicz, Ryszard On isometric domains of positive operators on Orlicz spaces. (84c:46023)
 Guadalupe Hernandez, Jose Javier Invariant subspaces and H^p spaces with respect to arbitrary measures. (Italian summary) (84m:46028)
 Gustavsson, Jan On interpolation of weighted L^p -spaces and Ovchinnikov's theorem. (84c:46026)
 Harris, C. J. See Valença, J. M. E., (84c:46028)
 Hudzik, H. Uniform convexity of Musielak-Orlicz spaces with Luxemburg's norm. (84m:46029)
 Jach, D. (with Orlicz, Wladyslaw) Some classes on Saks spaces. (84h:46038)
 Kalton, N. J. On spaces of measurable vector-valued functions. (84m:46030)
 Kamińska, Anna (with Pluciennik, Ryszard) Some theorems on compactness in generalized Orlicz spaces with application of the Δ_∞ -condition. (84m:46031)
 On comparison of Orlicz spaces and Orlicz classes. (84m:46032)
 Khoiman, F. See Vul'pe, I. M.; et al., (84i:46036)
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 MacCluer, Barbara D. Interpolation between H^p and L^∞ . (84d:46036)
 Malignarada, Lech Interpolation of Lipschitz operators for the pairs of spaces (L^p, L^∞) and (L^p, c_0) , $0 < p < \infty$. (84j:46044)
 On Hardy's inequality in weighted rearrangement invariant spaces and applications. I, II. (84j:46043)
 Maslyuchenko, V. K. Conditions for the inclusion of intersections and unions of spaces $L_p(\mu)$ with weight. (Russian) (84c:46064)
 Mekler, A. A. Averaged ideal spaces and interpolation between L_∞ and L_1 . (Russian) (84c:46024)
 The averaging operator with respect to a countable partition on a minimal symmetric invariant ideal of the space $L^1(0, 1)$. (Russian. English summary) (84c:46027)
 Milman, Mario Some new function spaces and their tensor products. (84c:46041)
 Musielak, Helena Approximative properties of some Stieltjes integrals in Orlicz spaces. (84j:46045)
 Musielak, Julian Modular approximation by a filtered family of linear operators. (84c:46028)
 Naurzybaev, K. Zh. See Dzhumakaeva, G. T., (84c:46022)
 Németh, J. Necessary conditions for imbedding of classes of functions. (84j:46046)
 Novikov, I. Ya. Sequences of characteristic functions in symmetric spaces. (Russian) (84j:46047)
 Novikov, S. Ya. A characteristic of subspaces of a symmetric space. (Russian) (84h:46039)
 Coty and type of Lorentz function spaces. (Russian) (84d:46031)
 Nowak, Marian On two equalities for Orlicz spaces. (84c:46025a)
 On two equalities for Orlicz spaces of N -functions. (84c:46025b)
 On two linear topologies on Orlicz spaces $L^{p, \psi}$. I. (84h:46040)
 Okikolu, G. O. Inner products and related norms in L^p -spaces and estimates for bounded linear operators. (84j:46048a)
 Minimum value estimates for bounded linear operators in inner product and L^p spaces. (84j:46048b)
 Orlicz, Wladyslaw See Jach, D., (84h:46038)
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 Ovchinnikov, V. I. Interpolation in quasi-Banach Orlicz spaces. (Russian) (84c:46029)
 Pavlov, E. A. Embedding theorems for symmetric spaces. (Russian) (84c:46033)
 Pavlovic, Miroslav Some inequalities in L^p spaces. (Russian) (84c:46065)
 Peetre, Jaak Locally analytically pseudoconvex topological vector spaces. (84c:46066)
 Perz, Franciszek Homogeneous Banach spaces of distributions. (84j:46044)
 Petunin, Yu. I. See Baidak, G. I.; et al., (84j:46043)
 Pluciennik, Ryszard See Kamińska, Anna, (84m:46031)
 Popa, Nicolae Uniqueness of the symmetric structure in $L_p(\mu)$ for $0 < p < 1$. (84f:46045)
 Reisner, S. See Gordon, Y., (84f:46035)
 Rezola, M. Luisa Invariant subspaces in $L^p(\mu)$. (Spanish. French summary) (84d:46032)
 Rogge, L. See Landers, D., (84c:46063)
 Romero, Juan L. When is $L^p(\mu)$ contained in $L^q(\mu)$? (84c:46033)
 Rutitskii, Ya. B. See Berkolaiko, M. Z., (84m:46026)
 Schochetman, I. E. (with Tsui, Sze Kai) On the lattice theory of function seminorms. (84j:46049)
 Seydi, Hamet Sur la convergence faible dans les espaces L^p . (English summary) [Weak convergence in L^p -spaces] (84c:46023)
 Shields, Allen See Axler, Sheldon, (84c:46021)
 Shteinberg, A. M. Renorming of Banach ideal spaces, invariant with respect to a shift. (Russian) (84h:46041)
 Sinha, Rajendra On the inclusion relations between $L^1(\mu)$ and $L^2(\mu)$. (84d:46034)
 Szczepaniak, Jerzy On some modular spaces generated by modulars depending on a parameter. (84c:46026)
 Szeptycki, Paweł On solid spaces of measurable functions. (Russian summary) (84c:46067)
 Tokarev, E. V. Complemented subspaces of symmetric function spaces. (Russian) (84c:46024)
 Truffert, A. See Bourass, A., (84m:46027)
 Tsui, Sze Kai See Schochetman, I. E., (84j:46049)
 Valença, J. M. E. (with Harris, C. J.) Representation of multipliers in L_p spaces. (Portuguese) (84h:46028)
 Vuillermot, Pierre-A. A class of Orlicz-Sobolev spaces with applications to variational problems involving nonlinear Hill's equations. (84c:46025)
 Vul'pe, I. M. (with Ostralkh, D.; Khoiman, F.) The topological structure of a quasimetric space. (Russian) (84f:46036)
 Zaidenberg, M. G. A special representation of isometries of function spaces. (Russian) (84j:46050)

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- Adams, David R. (with Lewis, John L.) On Morrey-Besov inequalities. (84f:46037)
 Allen, G. D. Locally continuous operators. (84j:47048)
 Andersen, Kenneth F. On the transformation of Fourier coefficients of certain classes of functions. II. (84h:42007)
 Appell, Jürgen (with Zabrejko, P. P.) On a theorem of M. A. Krasnosel'skij. (84m:47088)
 Assani, Idris (with Klei, Heinz-Albrecht) Parties décomposables compactes de L^p_∞ . (English summary) [Decomposable compact subsets of L^p_∞] (84h:46058)
 Atencia, E. (with de la Torre, Alberto) A dominated ergodic estimate for L_p spaces with weights. (84f:47005)
 Baker, John Walter (with Pym, John S.; Vasudeva, H. L.) Totally ordered measure spaces and their L^p algebras. (84c:43004)
 Brézis, Haim (with Lieb, Elliott H.) A relation between pointwise convergence of functions and convergence of functionals. (84c:28003)
 Bruckner, Gottfried On a general principle and its application to superposition operators in Orlicz spaces. (84f:47073)
 Buslaev, A. P. (with Magaril-I'yaev, G. G.; Tikhomirov, V. M.) The existence of extremal functions in inequalities for derivatives. (Russian) (84c:41014)
 Carothers, N. L. (with Flinn, Patrick) Embedding l^p_∞ in $l^p_{\sigma, \tau}$. (84h:46018)

- Chalmers, B. L. (with Egger, A. G.; Taylor, G. D.) Convex L^p approximation. (84e:41011)
- Colzani, Leonardo (with Sordani, Paolo M.) L^p norms of certain kernels of the N -dimensional torus. (84e:42008)
- Creekmore, J. Type and cotype in Lorentz $L_{p,\lambda}$ spaces. (84i:46032)
- Darst, R. B. (with Legg, D. A.; Townsend, D. W.) The Pólya algorithm in L_∞ approximation. (84i:41036)
- Dodds, Peter G. (with Schep, Anton R.) Compact integral operators on Banach function spaces. (84d:47039)
- Egger, A. G. See Chalmers, B. L.; et al., (84g:41011)
- Fernández Novoa, J. See Jiménez Guerra, Pedro, (84h:28003)
- Feyel, Denis Ensembles singuliers associés aux espaces de Banach réticulés. (English summary) [Singular sets associated with Banach lattices] (84i:28016)
- Flinn, Patrick See Carothers, N. L., (84h:46018)
- Gnifka, Stanisław (with Stachowiak-Gnifka, Danuta) Remarks on additive adjoints. I. (84i:46011a)
- Guliashev, A. B. Classes with "cancellation" and the integrability of maximal operators. (Russian. English and Georgian summaries) (84m:42033)
- Heinig, Hans P. Interpolation of quasilinear spaces involving weights. (84a:46161)
- Henson, C. Ward (with Moore, L. C., Jr.) The Banach spaces $L_p(n)$ for large p and n . (84g:46026)
- Inglis, Ian R. Weak and strong mapping properties of translation invariant operators. (Italian summary) (84c:42026)
- Jiménez Guerra, Pedro (with Fernández Novoa, J.) Mesures archimédiennes et θ -propriété de Darboux. [Archimedean measures and the θ -property of Darboux] (84h:28003)
- Johnson, William B. (with Schechtman, Gideon) Embedding l_p^n into l_p^n . (84a:46031)
- Jurkat, W. B. (with Sampson, Gary) On weak restricted estimates and endpoints problems for convolutions with oscillating kernels. II. (84c:47040)
- Kazaryan, K. S. On bases and unconditional bases in the spaces $L^p(\mu)$, $1 \leq p < \infty$. (84d:42037)
- Khrushchiv, S. V. Perturbation theorems for bases consisting of exponentials and the Muckenhoupt condition. (Russian) (84j:42043)
- Kislovskaya, N. M. (with Osipov, V. B.) Equivalence in L_1 of permutations of the Haar system. (Russian) (84c:47035)
- Kiel, Heinz-Albrecht See Assani, Idris, (84h:46058)
- Klimov, V. S. Eigenvectors of nonlinear potential operators. (Russian) (84h:47077)
- Krbec, M. Modular interpolation spaces. I. (German and Russian summaries) (84c:46056)
- Leckband, M. A. (with Neugebauer, C. J.) A general maximal operator and the A_p -condition. (84c:42029)
- Legg, D. A. See Darst, R. B.; et al., (84i:41036)
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- Madera, Carla Optimal problems for a certain class of nonlinear Dirichlet problems. (Italian summary) (84h:35050)
- Magariĭ-Ilyayev, G. G. See Buslaev, A. P.; et al., (84c:41014)
- Moore, L. C., Jr. See Henson, C. Ward, (84g:46026)
- Nel, L. D. Riesz-like representation of operators on L_1 by categorical methods. (84d:47054)
- Neugebauer, C. J. See Leckband, M. A., (84c:42029)
- Okiloh, G. O. Jensen-type convex function inequalities involving positive linear operators. (84h:26023)
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- Osipov, V. B. See Kislovskaya, N. M., (84c:47035)
- Oswald, Peter On Schauder bases in Hardy spaces. (84c:42022)
- Pavlov, B. S. The basis property of a system of exponentials and the condition of Muckenhoupt. (Russian) (84j:42042)
- Pym, John S. See Baker, John Walter; et al., (84c:43004)
- Rezola Solana, María Luisa \star Subespacios invariantes y aproximación en espacios de funciones medibles. (Spanish) [Invariant subspaces and approximation in spaces of measurable functions] (84c:47005)
- Rubio de Francia, José Luis (with Torrea Hernández, José L.) Vector extensions of operators in L^p spaces. (84i:47046)
- Salekhov, D. V. The relation between sets of Lebesgue-Banach points and Lebesgue E -points of functions from symmetric spaces. (Russian) (84m:28013)
- Sampson, Gary See Jurkat, W. B., (84c:47040)
- Schechtman, Gideon See Johnson, William B., (84a:46031)
- Schep, Anton R. See Dodds, Peter G., (84d:47039)
- Sedletskii, A. M. Bases of exponentials in L^p spaces. (Russian. English summary) (84d:42015)
- Semenov, E. M. On the boundedness of operators rearranging the Haar system in the spaces E_p . (84j:47052)
- Shtenberg, A. M. Inequalities of weak type for translation-invariant operators. (Russian. English and Georgian summaries) (84c:47041)
- Shvedov, A. S. Existence of an element with given values of best approximations. (Russian) (84h:41051)
- Sordani, Paolo M. See Colzani, Leonardo, (84c:42008)
- Stachowiak-Gnifka, Danuta Remarks on additive adjoints. II. (84i:46011b)
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- Szelmecka, Jerzy On a property of a function belonging to various spaces with mixed norms. (84m:46038)
- Takahashi, Yasuji A remark on Xia's theorem concerning quasi-invariant measures. (84h:28022)
- Taylor, G. D. See Chalmers, B. L.; et al., (84g:41011)
- Temirgaliev, N. Imbedding of classes H_p^α in Lorentz spaces. (Russian) (84j:46061)
- Tikhomirov, V. M. See Buslaev, A. P.; et al., (84c:41014)
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- 46E35 Sobolev spaces and other spaces of "smooth" functions, imbedding theorems, trace theorems
- Adams, David R. (with Lewis, John L.) On Morrey-Besov inequalities. 84f:46037
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- Dzhahralov, A. D. (with Mamedov, R. Sh.) Integral representations for functions from weight spaces by an "exponent" of differential-difference properties for which $n+1$ free vectors are given. (Russian. English and Azerbaijani summaries) 84f:46039
- (with Mamedov, R. Sh.) Integral representation for functions from weighted spaces, and imbedding theorems. (Russian. English and Azerbaijani summaries) 84h:46029
- (with Mamedov, R. Sh.) L_q -estimates from weight spaces that are normed by means of the prescribed set of mixed derivatives. (Russian) 84d:46035
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- Wheeden, Richard L. See Strömberg, Jan-Olov. (84b:30048)
- Wittmann, Rainer Shilov points and Shilov boundaries. (84g:46015)
On the existence of Shilov boundaries. (84m:31012)
- Xiang, Xiao Ling $C^{1+\alpha, (1+\alpha)/2}$ norm estimation and existence and differentiability of solutions of semilinear parabolic equations. (Chinese. English summary) (84c:35083)
- Zakharov, V. K. (with Koldunov, A. V.) Characterization of the σ -covering of a compactum. (Russian) (84c:54038)
- Zwick, D. Characterization of WT-spaces whose derivatives form a WT-space. (84g:41009)

46Fxx Distributions, generalized functions, distribution spaces (For distribution theory on nonlinear spaces, see 58Cxx.)

- Todorov, T. D. Quasi-extended asymptotic functions. (Russian summary) 84a:46085
- Vladimirov, V. S. Generalized functions in mathematical physics. (Russian) 84c:46047
secondary classifications:
- Lützen, Jesper ★The prehistory of the theory of distributions. (84f:01036)
- Owusu-Ansah, Twum A brief introduction to the theory of distributions. (See 84d:47002)

46F05 Topological linear spaces of test functions and distributions

- Bonet, José Representations of the spaces $\mathcal{O}_M(E)$ and $\mathcal{O}_{L^p}(E)$. (Spanish. English summary) 84c:46040
Representations of the spaces $\mathcal{E}^k(V, E)$ and $\mathcal{D}^k(V, E)$. (Spanish. English summary) 84c:46036
- van Eijndhoven, S. J. L. (with de Graaf, J.) Some results on Hankel invariant distribution spaces. 84c:46037
- de Graaf, J. See van Eijndhoven, S. J. L. 84c:46037
- Havárneanu, Teodor (with Postolici, Vasile) Distributions for set functions. 84a:46086
- Meidan, Reuven Hilbert spaces of distributions and generalized stochastic processes. (See 84g:93005c)
- Ortner, Norbert (with Wagner, Peter) Sur quelques propriétés des espaces \mathcal{D}'_{L^p} de Laurent Schwartz. (Italian summary) [Some properties of the spaces \mathcal{D}'_{L^p} of Laurent Schwartz] 84j:46068
- Peltola, Veli-Pirkka Bounded and integrable distributions on open sets. 84b:46038
- Pilipović, Stevan (with Takači, Arpad) The space $\mathcal{C}'(M_p)$ and convolutors. 84g:46053
- Postolici, Vasile See Havárneanu, Teodor. 84a:46086
- de Roeper, J. W. Extensions of ultradifferentiable functions on closed sets. 84g:46054
- Takači, Arpad See Pilipović, Stevan. 84g:46053
- Vogt, Dietmar Sequence space representations of spaces of test functions and distributions. 84f:46048
- Wagner, Peter See Ortner, Norbert. 84j:46068
- Zarnadze, D. N. Representations of the topology of spaces of basic and generalized functions. (Russian) 84d:46050
- Zemanian, Armen H. Time-varying input-output systems whose signals are Banach-space-valued distributions. (See 84g:93005b)
- secondary classifications:
- Braun, W. (with Feichtinger, Hans G.) Banach spaces of distributions having two module structures. (84b:46062)
- Feichtinger, Hans G. See Braun, W. (84b:46062)
- Komatsu, Hikosaburo Theory of kernels for ultradistributions. (84b:46041)
- Kriv'skii, I. Yu. See Lomsadze, Yu. M.; et al. (84i:81052) and (84i:81053)
- Lomsadze, Yu. M. (with Kriv'skii, I. Yu.; Shuba, I. M.) A universal Wightman field. I. (Russian. English summary) (84i:81052)
(with Kriv'skii, I. Yu.) Universal Wightman field. II. (Russian. English summary) (84i:81053)
- McKennon, Kelly (with Novak, David) The algebra of test functions on a locally compact abelian group. (84i:43002)
- Novak, David See McKennon, Kelly. (84i:43002)
- Perz, Franciszek Homogeneous Banach spaces of distributions. (84g:46044)
- Schmeisser, Hans-Jürgen On spaces of functions and distributions with mixed smoothness properties of Besov-Triebel-Lizorkin type. II. Fourier multipliers and approximation representations. (84b:46035)
- Shuba, I. M. See Lomsadze, Yu. M.; et al. (84i:81052)
- Smirnov, V. A. An associative algebra of functionals containing $\delta(x)$ and r^n . (Russian. English summary) (84f:46055)
- Valdivia, Manuel ★Topics in locally convex spaces. (84i:46007)
- Ehrenpreis, Leon (with Kawai, Takahiro) Poisson's summation formula and Hamburger's theorem. 84b:46049
- Fattorini, Hector O. Convergence and approximation theorems for vector-valued distributions. 84f:46049
- Fisher, Brian Singular convolutions of distributions. 84a:46088
A noncommutative neutrix product of distributions. 84g:46056
- (Giurgiu, Victor) See Kees, Wilhelm. 84g:46057
- Hanozret, B. (with Joly, Jean-Luc) Formes multilinéaires sur des sous-espaces de distributions. [Multilinear forms on distribution subspaces] 84f:46050
- Horváth, John Convolution de noyaux hypersinguliers. [Convolution of hypersingular kernels] 84f:46051
- Ivanov, V. K. Multiplication of distributions that have point singularities. (Russian) 84b:46040
- Joly, Jean-Luc See Hanozret, B. 84f:46050
- Kaminski, A. On the convolution of distributions. 84b:46050
Convolution, product and Fourier transform of distributions. 84a:46089
- Kawai, Takahiro See Ehrenpreis, Leon. 84b:46049
- Kees, Wilhelm ★The convolution product and some applications. 84g:46057
- Khrstov, Khristo Ya. (with Damyanov, Bl. P.) Changing of the independent variable in the theory of asymptotic functions. 84c:46038
See also Damyanov, Bl. P. 84c:46039
- Komatsu, Hikosaburo Theory of kernels for ultradistributions. 84b:46041
Ultradistributions. III. Vector-valued ultradistributions and the theory of kernels. 84d:46051
- Korshunov, M. K. Alternative and Leibniz algebras of distributions. (Russian) 84a:46090
- Kučera, Jan (with McKennon, Kelly) Continuity of multiplication of distributors. 84g:46058
- Laubin, P. Sur le wave front set analytique d'une distribution. [The analytic wave front set of a distribution] 84d:46052
- Leptin, Horst (with Müller, Detlef Horst) Schranken für verschränkte Faltungsooperatoren. [Bounds for twisted convolution operators] 84f:46053
Another remark on twisted convolution. 84m:46044
- Li, Ya Qing The products of generalized functions x_+^k and x_-^k . (Chinese. English summary) 84a:46091a
Products of singular generalized functions. (Chinese) 84a:46091b
Products of x_+^k and x_-^k . 84a:46091c
- Lousberg, Pierre On a theorem of composition of differentiable singularities. 84b:46042
- McKennon, Kelly See Kučera, Jan. 84g:46058
- Mikusinski, Piotr Convergence dans l'ensemble des quotients de suites. (English summary) [Convergence in the space of quotients of sequences] 84b:46048
- Müller, Detlef Horst See Leptin, Horst. 84f:46053
- Neagu, Mihai See Cristici, Borislav. 84g:46055
- Oliveira, J. Silva Sur un produit multiplicatif de ultradistributions. (Italian summary) [A multiplicative product of ultradistributions] 84a:46092
- Ortner, Norbert Convolution des distributions et des noyaux euclidiens. [Convolution of distributions and Euclidean kernels] 84f:46052
- Pap, Endre Sequential theory of linear continuous operators. 84g:46059
- Park, Young Sik Fourier ultra-hyperfunctions valued in a Fréchet space. 84a:46093
- Pavlov, A. L. Generalized functions concentrated on a set of measure zero. (Russian) 84c:46039
- Pilipović, Stevan The kernel theorem for some spaces. (Serbo-Croatian summary) 84d:46053
A note on the spaces of \mathcal{Q}' -type: q -dimensional case. 84g:46060
A note on the space \mathcal{Q}'_q . (Serbo-Croatian summary) 84f:46054
(with Takači, Arpad) Solvability of convolution equations in $\mathcal{C}'(M_p)$. (Serbo-Croatian summary) 84b:46051
- Rozanov, Yu. A. A generalized Dirichlet problem. (Russian) 84c:46040
- Shambayati, R. (with Zielezny, Z.) On Fourier transforms of distributions with one-sided bounded support. 84b:46052
- Sharin, V. I. Multiplication of radial distributions. (Russian) 84b:46043
- Shelkovich, V. M. An algebra of distributions with a singular carrier that is a point. (Russian) 84d:46054
- Skórnik, Krystyna On hereditarily periodic distributions. 84a:46094
On tempered integrals and derivatives of nonnegative orders. 84b:46044
- Smirnov, V. A. An associative algebra of functionals containing $\delta(x)$ and r^n . (Russian. English summary) 84f:46055
- Sommen, Fransiscus Hypercomplex Fourier and Laplace transforms. II. 84g:46061
- Song, Guo Zhu See Wang, Sheng Wang; et al. 84j:46070
- Struppa, Daniele C. Systems of convolution equations and LAU-spaces. (Italian summary) 84i:46049
- Szék, Árpád Tempered generalized functions and their Fourier transforms. 84d:46055
- Takači, Arpad See Pilipović, Stevan. 84b:46051
- Tolokonnikov, G. K. On Yu. M. Shirokov's algebras. I. (Russian. English summary) 84a:46095
- Tong, Yu Sun On conditional positive-definite bilinear functionals. (Chinese. English summary) 84a:46096
- Viegas, Francisco Caetano di Sigmaringen dos Santos Integration and differentiation of nonentire order for precontinuous distributions. (Portuguese) 84b:46045
- Vladimirov, V. S. (with Drozhzhinov, Yu. N.; Zav'yalov, B. I.) Tauber-type theorems for generalized functions. (Russian) 84c:46041
- Wang, Jin Ru A mathematical interpretation of the Dirac δ function. 84c:46041
- Wang, Qiao Ling See Wang, Sheng Wang; et al. 84j:46070
- Wang, Sheng Wang (with Song, Guo Zhu; Wang, Qiao Ling) M -topology and some properties of $\mathcal{Q}'_{(M_p)}(\mathbb{R}^n)$ operators. (Chinese. English summary) 84j:46070
- Zav'yalov, B. I. See Vladimirov, V. S.; et al. 84c:46041
- Zielezny, Z. See Shambayati, R. 84b:46052

secondary classifications:

- Aoki, Takashi Growth order of microdifferential operators of infinite order. (84a:58072)
- Artemiadis, Nicolas K. Absolutely convergent Fourier series of distributions. (84c:42009)

- Berenstein, Carlos A. (with Taylor, B. A.; Yger, Alain) Sur les systèmes d'équations différence-différentielles. [On systems of difference-differential equations] (84c:42011)
- Bozhinov, Nikolai S. (with Dimovski, I. Kh.) A convolutional approach to multiplier problem for multiple complex Dirichlet expansions. (84m:32009)
- de Brucq, Denis. See Vasilache, Sergiu, (84c:46083)
- Callias, Constantine J. The heat equation with singular coefficients. I. Operators of the form $-d^2/dx^2 + \kappa/x^2$ in dimension 1. (84m:58136)
- Corwin, Lawrence. Tempered distributions on Heisenberg groups whose convolution with Schwartz class functions is Schwartz class. (84i:22010)
- Cowling, Michael G. A remark on twisted convolution. (84g:42015)
- Dimovski, Ivan Kh. ★ Convolutional calculus. (84d:44001)
- See also Bozhinov, Nikolai S., (84m:32009)
- Drozdzhinov, Yu. N. Linear passive systems of partial differential equations. (Russian) (84c:35035)
- Emamirad, Hassan. Systèmes pseudo-différentiels d'évolution bien posés au sens des distributions de Beurling. [Pseudodifferential evolution systems that are well posed in the sense of Beurling distributions] (84c:35150)
- Estrada, R. (with Kanwal, R. P.) Distributional biharmonic equation. (84f:31010)
- Felix, Rainer. Zentrale Distributionen auf nilpotenten Liegruppen. (English summary) [Central distributions on nilpotent Lie groups] (84g:22021)
- Fenyő, István (with Rusconi, Daniela) On the distributions which satisfy a functional equation. (Italian. English summary) (84d:39012)
- Ferreira, J. Campos. The convergence of distributions at the boundary of a differentiable manifold, and a generalization of the Stokes theorem. (Portuguese) (84f:58022)
- Garnir, H. G. (with Lejeune-Rifaut, E.) Application d'un théorème de Hörmander à l'étude des singularités des problèmes aux limites hyperboliques. (English summary) [Application of a theorem of Hörmander to the study of singularities in hyperbolic boundary value problems] (84i:35099)
- Hoskins, Roy Frank. Infinitesimals, nonstandard analysis and generalised functions. (84j:03139d)
- Jörjcke, Burghard (with Khavin, V. P.) The indeterminacy principle for operators that commute with a shift. II. (Russian. English summary) (84j:47050)
- Kanwal, R. P. See Estrada, R., (84f:31010)
- Kartasheva, L. V. Random degeneration of the symbol of a singular integral equation in the space of generalized functions $S'_{m,\alpha}$. (Russian) (84j:45017)
- Khavin, V. P. See Jörjcke, Burghard, (84j:47050)
- Lavrov, A. M. Ill-posed Cauchy problems and a uniqueness theorem for partial differential equations. (Russian) (84a:35008)
- Léauté, Bernard. Sur la détermination de la "self-force" subie par une charge dans l'espace-temps de Schwarzschild. (English summary) [On the determination of the self-force on a point charge in the Schwarzschild space-time] (84f:83007)
- Lejeune-Rifaut, E. See Garnir, H. G., (84i:35099)
- Mamedov, G. M. The asymptotic value of an approximation of generalized differentiable functions by singular integrals. (Russian) (84d:41057)
- Mantero, Anna Maria. Asymmetry of twisted convolution operators. (84a:47038)
- Mauceri, Giancarlo (with Picardello, Massimo A.; Ricci, Fulvio) Twisted convolution, Hardy spaces and Hörmander multipliers. (84g:42014)
- Nacinovich, Mauro. A remark on differential equations with polynomial coefficients. (Italian summary) (84c:34010)
- Nogin, V. A. Inversion of Bessel potentials. (Russian) (84f:31013)
- Palamodov, V. P. Caustics of wave processes and generalized functions that are connected with singular analytic hypersurfaces. (Russian) (84m:58150)
- Perz, Franciszek. Homogeneous Banach spaces of distributions. (84g:46044)
- Picardello, Massimo A. See Mauceri, Giancarlo; et al., (84g:42014)
- Pilipović, Stevan (with Takači, Arpad) The space $\mathcal{X}'(M_p)$ and convolutors. (84g:46053)
- Ricci, Fulvio. See Mauceri, Giancarlo; et al., (84g:42014)
- de Roeper, J. W. Extensions of ultradifferentiable functions on closed sets. (84g:46054)
- Rusconi, Daniela. See Fenyő, István, (84d:39012)
- Sakurai, Tsutomu. Quasihomogeneous wave front set and fundamental solutions for the Schrödinger operator. (84c:35039)
- Takači, Arpad. See Pilipović, Stevan, (84g:46053)
- Taylor, B. A. See Berenstein, Carlos A.; et al., (84d:42011)
- Vasilache, Sergiu (with de Brucq, Denis) Propriétés de continuité du produit de composition dans des produits tensoriels d'espaces localement convexes. I. Cas des produits tensoriels inductifs. (English summary) [Continuity properties of the composition product in tensor products of locally convex spaces. I. The case of inductive tensor products] (84c:46083)
- Wang, Shu Tang. A generalized number system and its applications. I. (Chinese. English summary) (84j:03141)
- Wiener, Joseph. Distributional and entire solutions of linear functional-differential equations. (84b:34095)
- Yger, Alain. See Berenstein, Carlos A.; et al., (84d:42011)
- Yngvason, Jakob. Translationally invariant states and the spectrum ideal in the algebra of test functions for quantum fields. (84c:81052)
- Zayed, Ahmed I. Generalized functions and orthogonal polynomials on the unit circle. (84c:42026)
- Zemanian, Armen H. Time-varying input-output systems whose signals are Banach-space-valued distributions. (See 84g:93005b)
- 46F12 Integral transforms in distribution spaces [See also 42-XX, 44-XX.]
- Altenberg, Gerd. Bessel-Transformationen in Räumen von Grundfunktionen über dem Intervall $\Omega = (0, \infty)$ und deren Dualräumen. [Bessel transformations in spaces of test functions on the interval $\Omega = (0, \infty)$ and in their dual spaces] 84m:46045
- Brychkov, Yu. A. (with Prudnikov, A. P.) Integral transformations of generalized functions. (Russian) 84g:46062
- Colzani, Leonardo. Fourier transform of distributions in Hardy spaces. (Italian summary) 84c:46042
- Gorbachuk, V. I. Fourier series of periodic ultradistributions. (Russian) 84g:46063
- Malgoude, S. P. (with Saxena, Rajendra K.) A representation of H -transformable generalized functions. 84c:46043
- Pandey, J. N. The Hilbert transform of Schwartz distributions. 84g:46064
- Prudnikov, A. P. See Brychkov, Yu. A., 84g:46062
- Saksena, K. M. Extension of certain integral transforms to generalized functions. 84a:46097
- Saxena, Rajendra K. See Malgoude, S. P., 84c:46043
- secondary classifications:
- Akhaury, S. K. Abelian theorem for a distributional generalized Laplace transform. II. (84b:44003)
- Bajracharya, Bhanu Chandra. On a distributional Poisson transform. (84f:44005)
- Chaudhary, M. S. Hankel type transform of distribution. (84f:44006)
- Dube, L. S. Iterated Stieltjes transform of generalized functions. (See 84a:47002)
- Lisari, O. P. Distributional G -transformation. (84j:44006)
- Olariu, Valter. Theory of distributions and integral transforms. (Romanian. English summary) (84f:44001)
- Pandey, J. N. An extension of the Gelfand-Shilov technique for Hilbert transforms. (84a:44004)
- Pathak, R. S. (with Singh, O. P.) Finite Hankel transforms of distributions. (84a:44005)
- Rao, G. L. N. Complex inversion and representation theory for certain distributional generalized integral transformations. (84f:44009)
- Shambayati, R. (with Zielezny, Z.) On Fourier transforms of distributions with one-sided bounded support. (84b:46052)
- Singh, O. P. See Pathak, R. S., (84a:44005)
- Sinha, Sunil Kumar. The n -dimensional distributional Mellin transformation. (84f:44011)
- Tiwari, A. K. Some theorems on a distributional generalized Stieltjes transform. (84f:44012)
- Verma, T. N. Real inversion formula for the distributional generalized Laguerre transform. (84f:44013)
- Zielezny, Z. See Shambayati, R., (84b:46052)
- 46F15 Hyperfunctions, analytic functionals [See also 32A25, 32A45, 32C35, 58G07.]
- Dineen, Seán. Analytic functionals on fully nuclear spaces. 84c:46042
- Ito, Yoshifumi. On the abstract Cauchy problems in the sense of Fourier hyperfunctions. 84j:46071a
- Fourier hyperfunction semigroups. 84j:46071b
- Meril, Alex. Analytic functionals with unbounded carriers and mean periodic functions. 84c:46050
- Morimoto, Mitsuo. See Sargos, Patrick, 84c:46032
- Nagamachi, Shigeaki. The theory of vector valued Fourier hyperfunctions of mixed type. I, II. 84a:46098
- Sargos, Patrick (with Morimoto, Mitsuo) Transformation des fonctionnelles analytiques à porteurs non compacts. [Transformation of analytic functionals with noncompact carriers] 84c:46032
- Sommen, Fransiscus. Spherical monogenic functions and analytic functionals on the unit sphere. 84c:46033
- Yoshino, Kunio. Lerch's theorem for analytic functional. 84f:46056
- Some examples of analytic functionals and their transformations. 84d:46056
- Zorn, Paul. Analytic functionals and Bergman spaces. 84d:46057
- secondary classifications:
- Anki, Takashi. Invertibility for microdifferential operators of infinite order. (84c:58079)
- Cattabriga, Umberto. Existence of a fundamental solution with singular support contained in a half space and surjectivity of differential operators with constant coefficients. (Italian. English summary) (84c:35033)
- Havas, Peter. See Rosenblum, Arnold; et al., (84c:78018)
- Ito, Yoshifumi. Analytic linear mappings and vector valued hyperfunctions. (84f:46062)
- Kataoka, Kiyomi. On the theory of Radon transformations of hyperfunctions. (84c:58067)
- Kates, Ronald E. See Rosenblum, Arnold; et al., (84c:78018)
- Kobayashi, Takao. Elementary solutions and propagation of singularities for hyperbolic operators with involutive characteristics. (84c:35098)
- Meril, Alex. Symbole holomorphe. [Holomorphic symbol] (84g:32002)
- Qi, Min You. An introduction to Sato's theory of hyperfunctions (one-variable case). II. (Chinese) (84c:58068)
- Rosenblum, Arnold (with Kates, Ronald E.; Havas, Peter) Use of hyperfunctions for classical radiation-reaction calculations. (84c:78018)
- Saburi, Yutaka. Vanishing theorems of cohomology groups with values in the sheaves $\mathcal{O}_{\text{inc}, \varphi}$ and \mathcal{O}_{dec} . (84g:32017)
- Tsuno, Yoshimichi. Integral representation of an analytic functional. (84a:32006)
- Wang, Sheng Wang. Operators of the $\mathcal{D}'_{(M_\lambda)}$ type and their resolvents. (Chinese. English summary) (84b:47041)
- 46F20 Distributions as boundary values of analytic functions [See also 30Exx, 32A40.]
- Ermatov, U. Analytic representation of generalized functions of finite order given on an interval. (Russian. Tajiki summary) 84m:46046
- Estrada, R. (with Kanwal, R. P.) Distributional boundary values of harmonic and analytic functions. 84d:46058
- Kanwal, R. P. See Estrada, R., 84d:46058
- Sommen, Fransiscus. Distributional extension properties of hypercomplex functions. 84f:46057

secondary classifications:

- Carmichael, Richard D. Generalization of H^p functions in tubes. I. (84c:32003)
(with Richters, Stephen P.) Holomorphic functions in tubes which have
distributional boundary values and which are H^p functions. (84g:32004)
Richters, Stephen P. See Carmichael, Richard D., (84g:32004)
Sharin, V. I. Multiplication of radial distributions. (Russian) (84b:46043)
Zayed, Ahmed I. Recoverability of some classes of analytic functions from their boundary
values. (84c:30062)

46F25 Distributions on infinite-dimensional spaces [See also 58C35.]

- Berezans'kii, Yu. M. (with Kondrat'ev, Yu. G.; Samoilenko, Yu. S.) Generalized
functions of an infinite number of variables and their application in spectral theory.
(Russian) 84d:46059
(with Kalyuzhnyi, A. A.) Nuclear spaces of functions on the basis of a
hypercomplex system. (Russian) 84d:46034
Chansolme, Denis On the division of distributions by analytic functions in locally convex
spaces. 84j:46072
Colombeau, Jean-François (with Ponte, S.) An infinite-dimensional version of the
Paley-Wiener-Schwartz isomorphism. 84f:46058
Kalyuzhnyi, A. A. A theorem on the existence of a multiplicative measure. (Russian)
84d:46035
See also Berezans'kii, Yu. M., 84d:46034
Kondrat'ev, Yu. G. Spaces of entire functions of an infinite number of variables
connected with a rigging of Fock space. (Russian) 84d:46043
See also Berezans'kii, Yu. M.; et al., 84d:46059
Ponte, S. See Colombeau, Jean-François, 84f:46058
Samoilenko, Yu. S. See Berezans'kii, Yu. M.; et al., 84d:46059

secondary classifications:

- Berg, H. P. (with Tarski, Jan) Fourier transforms of distributions and associated
Feynman integrals. (84f:81028)
Frolov, N. N. Fundamental solutions of infinite-dimensional differential equations with
constant coefficients. (Russian) (84d:35142)
Krée, Paul Régularité C^∞ des lois conditionnelles par rapport à certaines variables
aléatoires. (English summary) [C^∞ -regularity of a conditional law with respect to some
random variables] (84f:60009)
Kuo, Hui Hsiung On Fourier transform of generalized Brownian functionals. (84d:60099)
Samoilenko, V. G. A second-order selfadjoint elliptic operator with an infinite number of
variables. (Russian) (84i:35135)
Tarski, Jan See Berg, H. P., (84f:81028)
Uglanov, A. V. Division of generalized functions of an infinite number of variables by
polynomials. (Russian) (84j:46077)

46F99 None of the above, but in this section

- Feichtinger, Hans G. Banach spaces of distributions defined by decomposition methods
and some of their applications. (See 84a:00012)

secondary classifications:

- de Brucq, Denis (with Olivier, Christian) Approximations des processus gaussiens
stationnaires, solutions d'équations aux dérivées partielles linéaires. [Approximations
of stationary Gaussian processes, solutions of linear partial differential equations]
(84m:60050)
Colombeau, Jean-François (with Matos, Mário C.) Convolution equations in infinite
dimensions: brief survey, new results and proofs. (84m:46049)
Gesztelyi, E. The application of generalized functions in color recognition. (84b:78003)
Inaba, Hiroshi (with Shioya, Isamu) Generalized random processes on the Sobolev space
 $H_p^s(T)$: their relations to generalized functions. (84m:60051)
Janson, Svante (with Taibleson, Mitchell H.) Calderón's representation theorems.
(Italian. English summary) (84m:46036)
Krée, Paul Régularité C^∞ des lois conditionnelles par rapport à certaines variables
aléatoires. (English summary) [C^∞ -regularity of a conditional law with respect to some
random variables] (84f:60009)
Matos, Mário C. See Colombeau, Jean-François, (84m:46049)
Olivier, Christian See de Brucq, Denis, (84m:60050)
Shioya, Isamu See Inaba, Hiroshi, (84m:60051)
Solov'ev, M. A. A generalization of the Ruelle theorem. (Russian. English summary)
(84j:81066)
Szász, Árpád Hausdorff topologies for the multiplier extensions of admissible vector
modules. (84c:46049)
Taibleson, Mitchell H. See Janson, Svante, (84m:46036)
Wightman, A. S. The choice of test functions in quantum field theory. (84m:81134)

46Gxx Measures, integration, derivative, holomorphy [For integration on infinite-dimensional spaces, see 28C20; for nonlinear functional analysis, see 58-XX, especially 58Cxx.]

secondary classifications:

- Colombeau, Jean-François ★ Differential calculus and holomorphy. (84i:46005)

46G05 Derivatives

- Bakhtin, I. A. (with Sobolev, V. I.; Shcherbin, V. M.) Nonreducibility of the
(u, v)-derivative to the Fréchet derivative. (Russian) 84d:46060

- Bogachev, V. I. Negligible sets and differentiable measures in Banach spaces. (Russian.
English summary) 84b:46046

- Colombeau, Elvira ★ On derivation in super-v-metric spaces. Taylor's formula. 84f:46059
Gómez Gil, Javier (with Llavona, José G.) Polynomial approximation of weakly
differentiable functions on Banach spaces. 84g:46065
Kriegel, A. Die richtigen Räume für Analysis im Unendlich-Dimensionalen. (English
summary) [The "right" spaces for analysis in infinite dimensions] 84c:46044
Le Van Hot On conability of singlevalued mappings. (Czech summary) 84b:46047
Llavona, José G. See Gómez Gil, Javier, 84g:46065
Meise, Reinhold G. (with Vogt, Dietmar) An interpretation of τ_u and τ_v as normal
topologies of sequence spaces. 84b:46053
Preiss, David Gâteaux differentiable Lipschitz functions need not be Fréchet
differentiable on a residual subset. 84b:46054
Romanov, V. A. Algebraic dimensions of linear manifolds of continuous and
differentiable directions of measures in Hilbert space. (Russian) 84d:46061
Shcherbin, V. M. See Bakhtin, I. A.; et al., 84d:46060
Sobolev, V. I. See Bakhtin, I. A.; et al., 84d:46060
Vogt, Dietmar See Meise, Reinhold G., 84b:46053

secondary classifications:

- Astala, Kari On Peano's theorem in locally convex spaces. (84m:34090)
Belyaev, A. A. Solution of the Dirichlet problem in a half space of Hilbert space by
means of potentials. (Russian) (84j:35154)
Colombeau, Jean-François (with Mujica, Jorge) Holomorphic and differentiable
mappings of uniform bounded type. (84b:46055)
Dem'yanov, V. F. (with Rubinov, A. M.) On quasidifferentiable mappings. (German and
Russian summaries) (84j:49015)
Feller, M. N. Infinite-dimensional selfadjoint Laplace-Lévy differential operators.
(Russian) (84m:35115)
Graff, Richard A. (with Ruess, Wolfgang M.) Appropriate locally convex domains for
differential calculus. (84b:58012)
Hasegawa, Yoshihei Lévy's functional analysis in terms of an infinite-dimensional
Brownian motion. I. (84m:60099a)
Lévy's functional analysis in terms of an infinite-dimensional Brownian motion. II.
(84m:60099b)
Ioffe, Alexandre D. Approximate subdifferentials and applications. I. The
finite-dimensional theory. (84m:49029)
Kusraev, A. G. (with Kutateladze, S. S.) Analysis of subdifferentials by means of Boolean
valued models. (Russian) (84a:47068)
Kutateladze, S. S. See Kusraev, A. G., (84a:47068)
Mujica, Jorge See Colombeau, Jean-François, (84b:46055)
Rubinov, A. M. See Dem'yanov, V. F., (84j:49015)
Ruess, Wolfgang M. See Graff, Richard A., (84b:58012)
Samoilenko, V. G. A second-order selfadjoint elliptic operator with an infinite number of
variables. (Russian) (84i:35135)
Stroyan, K. D. Infinitesimal analysis of I^∞ in its Mackey topology. (84m:46013)

46G10 Vector-valued measures and integration [See also 28Bxx, 46B22.]

- Azarnia, N. (with Wright, J. D. Maitland) On the Lyapunoff-Knowles theorem.
84c:46036
Chatterji, S. D. Orthogonally scattered dilation of Hilbert space valued set functions.
84b:46099
Debieve, C. On a Radon-Nikodým problem for vector-valued measures. 84j:46073
Ghoussoub, Nassif (with Saab, Elias) On the range of a basically scattered vector
measure. 84f:46060
Maritz, P. On a theorem of A. A. Lyapunov. 84d:46062
Masani, Pesi The theory of stationary vector-valued measures over \mathbb{R} . 84m:46047
Rodriguez-Salinas, Baltasar Differentiation of vector measures in almost- μ -Lusin spaces.
(Spanish. English summary) 84b:46048
Differentiation of vector measures in topological spaces. (Spanish. English
summary) 84b:46049
Integration of functions with values in a locally convex space with respect to
infinite measures. I, II. (Spanish. English summary) 84j:46074
Rzaev, K. U. Generalization of the Radon-Nikodým theorem. (Russian. English and
Azerbaijani summaries) 84c:46037
Saab, Elias See Ghoussoub, Nassif, 84f:46060
Smith, William V. Spectral measures. I. General theory in a topological vector space.
84d:46063
Wright, J. D. Maitland See Azarnia, N., 84c:46036

secondary classifications:

- Bait, Jürgen (with Hiernmeyer, Wolfgang) On compactness in $L_p(\mu, X)$ in the weak
topology and in the topology $\sigma(L_p(\mu, X), L_p(\mu, X'))$. (84m:46039)
Blondia, C. A Radon-Nikodým theorem for vector valued measures. (84g:28009)
Brook, Cecilia H. Continuity properties of vector measures. (84b:28014)
Choy, Stephen T. L. One-to-one operators on function spaces. (84g:47027)
Dinculeanu, Nicolae (with Ionescu Tulcea, C.) Extensions of certain operators to spaces
of abstract integrable functions. (84b:47035)
Uniform σ -additivity in spaces of Bochner or Pettis integrable functions over a
locally compact group. (84f:28004)
Edgar, G. A. An ordering for the Banach spaces. (84c:46012)
Heble, M. P. Grassmannian helices and operator measures in Hilbert space. (84j:60053)
Hiernmeyer, Wolfgang See Bait, Jürgen, (84m:46039)
Ionescu Tulcea, C. See Dinculeanu, Nicolae, (84b:47035)
Khurana, Surjit Singh Topologies on spaces of vector-valued continuous functions. III.
(French summary) (84j:46064)
de Maria González, José L. Various types of measurability of functions defined from
(Ω, Σ, μ) into a locally convex space E . (Spanish) (84a:28006)

- Palled, Shivappa Veerappa. See Panchapagesan, T. V., (84g:28012)
 Panchapagesan, T. V. (with Palled, Shivappa Veerappa) ★ On vector lattice-valued measures. II. (84g:28012)
 Pavlakos, Panaiotis K. On the space of lattice semigroup-valued set functions. (84f:28008)
 Riddle, Lawrence H. (with Saab, Elias; Uhl, J. J., Jr.) Sets with the weak Radon-Nikodym property in dual Banach spaces. (84h:46028)
 Saab, Elias. On Dunford-Pettis operators. (84c:46016)
 Some characterizations of weak Radon-Nikodym sets. (84g:46030)
 (with Saab, Paulette) On the Banach space X^{**}/X . (French summary) (84f:46024)
 See also Riddle, Lawrence H.; et al., (84h:46028)
 Saab, Paulette. See Saab, Elias, (84f:46024)
 Schachermayer, Walter. On some classical measure-theoretic theorems for non-sigma-complete Boolean algebras. (84d:28015)
 Smith, William V. Spectral measures. II. Characterization of scalar operators. (84g:47031)
 Tikhonov, O. E. Integrable bilinear forms and an integral over an operator-valued measure. (Russian) (84h:46082)
 Uhl, J. J., Jr. See Riddle, Lawrence H.; et al., (84h:46028)
 Zafarani, Jafar. A space of vector-valued measures and a strict topology. (84a:46059)

46G12 Measures and integration on abstract linear spaces [See also 28Cxx.]

- Ansemil, J. M. (with Ponte, S.) Topologies associated with the compact open topology on $\mathcal{C}(U)$. (84a:46101)
 Efimova, E. I. (with Uglanov, A. V.) Green's formula on a Hilbert space. (Russian) (84c:46038)
 Magerl, G. Bilinear maps from $C(X) \times M(X)$ to $M(X)$. (84d:46064)
 Ponte, S. See Ansemil, J. M., (84c:46101)
 Romanov, V. A. Limits of H -continuous measures in Hilbert space. (Russian) (84f:46061)
 Shavgulidze, E. T. The Hahn-Jordan decomposition for smooth measures. (Russian) (84c:46100)
 Smolyanov, O. G. The Gross-Sazonov theorem for sign-variable cylindrical measures. (Russian. English summary) (84j:46075)
 Uglanov, A. V. See Efimova, E. I., (84c:46038)

secondary classifications:

- Berezans'kii, Yu. M. (with Kalyuzhnyi, A. A.) Nuclear spaces of functions on the basis of a hypercomplex system. (Russian) (84c:46034)
 Butsan, G. P. See Karataeva, T. V., (84c:28013)
 Chuprunov, A. N. Measurability of linear functionals. (Russian) (84m:28026)
 Đặng Hùng Thắng. See Nguyễn Duy Tiển, (84h:60006)
 Hertle, Alexander. Gaussian plane and spherical means in separable Hilbert spaces. (84j:28017)
 Kalyuzhnyi, A. A. A theorem on the existence of a multiplicative measure. (Russian) (84c:46035)
 See also Berezans'kii, Yu. M., (84c:46034)
 Karataeva, T. V. (with Butsan, G. P.) A class of Gaussian measures on a space of operators. (Russian) (84c:28013)
 Kharazishvili, A. B. Absolute negligibility of compacta in infinite-dimensional Banach spaces. (Russian. English and Georgian summaries) (84c:28014)
 Kondrat'ev, Yu. G. Spaces of entire functions of an infinite number of variables connected with a rigging of Fock space. (Russian) (84c:46043)
 Lawnczak, Anna T. Gaussian measures on Orlicz spaces and abstract Wiener spaces. (84c:60010)
 Li, Yu Chia. Integral transforms of analytic functions on abstract Wiener spaces. (84j:28021)
 Maeda, Michie. Rotationally invariant cylindrical measures. II. (84m:28025)
 Measurable norms and rotationally quasi-invariant cylindrical measures. (84h:28019)
 Mamporiya, B. I. The stochastic integral of an operator-valued function with respect to a vector-valued Wiener process. (Russian. English and Georgian summaries) (84f:60083)
 Nguyễn Duy Tiển. (with Đặng Hùng Thắng) Mappings of stable cylindrical measures in Banach space. (Russian summary) (84h:60006)
 Rosinski, Jan. On the convolution of cylindrical measures. (Russian summary) (84g:60011)

46G15 Lifting theory [See also 28A51.]

secondary classifications:

- Hasegawa, Yoshihei. Lévy's functional analysis in terms of an infinite-dimensional Brownian motion. III. (84m:60099c)
 Kupka, Joseph. Strong liftings with application to measurable cross sections in locally compact groups. (84g:28006)
 Rodríguez-Salinas, Baltasar. Differentiation of vector measures in almost- μ -Lusin spaces. (Spanish. English summary) (84h:46048)
 Zakharov, V. K. On the hyper-Stonian cover of a compact. (84d:54036)

46G20 Infinite-dimensional holomorphy [See also 32-XX, 58B12, 58C10.]

- Aron, R. M. (with Hervés, C.; Valdivia, Manuel) Weakly continuous mappings on Banach spaces. (84g:46066)
 Börgens, M. (with Meise, Reinhold G.; Vogt, Dietmar) $\Lambda(a)$ -nuclearity in infinite-dimensional holomorphy. (84g:46067)
 Colombeau, Jean-François (with Mujica, Jorge) Holomorphic and differentiable mappings of uniform bounded type. (84h:46055)

- (with Perrot, B.) L'équation $\bar{\partial}$ dans les ouverts pseudo-convexes des espaces DFN. (English summary) [The equation $\bar{\partial}$ in pseudoconvex open subsets of DFN spaces] (84c:46102)
 Dineen, Seán. ★ Complex analysis in locally convex spaces. (84h:46050)
 Drużkowski, Ludwik M. Malgrange-Zerner theorem in infinite-dimensional case. (84c:46065)
 Hervés, C. See Aron, R. M.; et al., (84g:46066)
 Isidro, José-Maria. See Vigué, Jean-Pierre, (84h:46057)
 Kovalév, P. I. A class of holomorphic mappings. (Russian) (84j:46076)
 Llavona, José G. On the density of polynomial subalgebras of weakly differentiable functions. (Spanish) (84d:46066)
 Matos, Mário C. Convolution operators in spaces of uniform nuclear entire functions. (84c:46045)
 Meise, Reinhold G. A remark on the ported and the compact-open topology for spaces of holomorphic functions on nuclear Fréchet spaces. (84c:46103)
 (with Vogt, Dietmar) Analytic isomorphisms of infinite-dimensional polydiscs and an application. (French summary) (84h:46056)
 (with Vogt, Dietmar) Counterexamples in holomorphic functions on nuclear Fréchet spaces. (84m:46048)
 See also Börgens, M.; et al., (84g:46067)
 Mujica, Jorge. See Colombeau, Jean-François, (84h:46055)
 Perrot, B. See Colombeau, Jean-François, (84a:46102)
 Pombó, Dinamérico P., Jr. Polynomial classification of locally convex spaces. (Portuguese. English summary) (84h:46051)
 Schottenloher, Martin. Cartan-Thullen theorem for domains spread over $\mathcal{O}_D^{\text{an}}$ -spaces. (84c:46039)
 Valdivia, Manuel. See Aron, R. M.; et al., (84g:46066)
 Vigué, Jean-Pierre (with Isidro, José-Maria) Sur la topologie du groupe des automorphismes analytiques d'un domaine cercle borné. (English summary) [Topology of the group of analytic automorphisms of a bounded circular domain] (84h:46057)
 Vogt, Dietmar. See Börgens, M.; et al., (84g:46067); Meise, Reinhold G., (84h:46056) and (84m:46048)
 Waelbroeck, Lucien. Galbs, tensor products, and convex-holomorphic mappings. (84h:46052)
 secondary classifications:

- Colombeau, Jean-François (with Ponte, S.) An infinite-dimensional version of the Paley-Wiener-Schwartz isomorphism. (84f:46058)
 Dineen, Seán. Analytic functionals on fully nuclear spaces. (84c:46042)
 Floret, Klaus. Two questions concerning vector-valued holomorphic functions. (84c:30048)
 Galé, José E. Unitary representations corresponding to measures with bounded support in infinite dimensions. (84j:28016)
 Meise, Reinhold G. (with Vogt, Dietmar) An interpretation of τ_u and τ_b as normal topologies of sequence spaces. (84h:46053)
 Nguyen Van Khuê. On meromorphic functions with values in locally convex spaces. (84c:32007)
 Ponte, S. See Colombeau, Jean-François, (84f:46058)
 Schottenloher, Martin. Embedding of Stein spaces into sequence spaces. (84f:32017)
 Spectrum and envelope of holomorphy for infinite-dimensional Riemann domains. (84h:32015)
 Vesentini, Edoardo. Some aspects of the geometry of bounded domains. (Italian. English summary) (84c:32052)
 Complex geodesics. (84c:32037)
 Vogt, Dietmar. See Meise, Reinhold G., (84h:46053)

46G99 None of the above, but in this section

- Adamski, Wolfgang. Some characterizations of Daniell lattices. (84b:46051)
 Assani, Idris (with Klei, Heinz-Albrecht) Parties décomposables compactes de L_E^1 . (English summary) [Decomposable compact subsets of L_E^1] (84h:46058)
 Belyaev, A. A. Integral representation of functions harmonic in a domain of Hilbert space. (Russian. English summary) (84d:46067a)
 The mean value theorem for harmonic functions in a domain of Hilbert space. (Russian. English summary) (84d:46067b)
 Bentkus, Vidmantas-Kastytis Jurgio. Ellipticity of an infinite-dimensional iterated Laplace operator. I. (Russian) (84d:46068a)
 Ellipticity of an infinite-dimensional iterated Laplace operator. II. (Russian. English and Lithuanian summaries) (84d:46068b)
 Caraman, Petru. Module and p -module in an abstract Wiener space. (84h:46059)
 Colombeau, Jean-François (with Matos, Mário C.) Convolution equations in infinite dimensions: brief survey, new results and proofs. (84m:46049)
 Ding, Guang Gui. Some properties of quasibounded functionals. (Chinese) (84c:46044)
 El-Hallabia, Khalifa. Une généralisation du théorème de Banach-Steinhaus. (Spanish summary) [A generalization of the Banach-Steinhaus theorem] (84c:46045)
 Ito, Yoshifumi. Analytic linear mappings and vector valued hyperfunctions. (84f:46062)
 Kalyuzhnyi, A. A. An integral representation of exponentially convex functions. (Russian) (84d:46069)
 Klei, Heinz-Albrecht. See Assani, Idris, (84h:46058)
 Lopotko, O. V. (with Rudinskii, I. I.) An integral representation of even positive definite bounded functions of an infinite number of variables. (Russian) (84d:46070)
 Matos, Mário C. See Colombeau, Jean-François, (84m:46049)
 Rudinskii, I. I. See Lopotko, O. V., (84d:46070)
 Uglanov, A. V. Division of generalized functions of an infinite number of variables by polynomials. (Russian) (84j:46077)
 Výborný, Rudolf. Mean value theorems and a Taylor theorem for vector valued functions. (84c:46046)

secondary classifications:

- Aupetit, Bernard Analytic multivalued functions in Banach algebras and uniform algebras. (84b:46059)
- Bentkus, Vidmantas-Kastytis Jurgio Analyticity of Gaussian measures. (Russian. English summary) (84f:60057)
- Berezans'kii, Yu. M. (with Kondrat'ev, Yu. G.; Samoilenko, Yu. S.) Generalized functions of an infinite number of variables and their application in spectral theory. (Russian) (84d:46059)
- Breckner, Wolfgang W. (with Orbán, Gheorghe) Continuity of generalized convex mappings taking values in an ordered topological linear space. (84m:47089)
- Brook, Cecilia H. The control measure problem and the universal measure topology. (84h:28011)
- Cassier, Gilles Mesures canoniques dans le problème classique des moments. (English summary) [Canonical measures in classical moment problem] (84m:44019)
- Chansolme, Denis On the division of distributions by analytic functions in locally convex spaces. (84j:46072)
- Chiang, Tsu Shu A note on the irreducibility of Lebesgue measure with applications to random walks on the unit circle. (84d:60104)
- Christensen, Jens Peter Reus (with Ressel, Paul) Norm-dependent positive definite functions on B-spaces. (84j:43007)
- Daletskii, A. Yu. Representation of the group of shifts of a nuclear space. (Russian. English summary) (84g:22014)
- Dubinsky, Ed Nonlinear analysis in different kinds of Fréchet spaces. (84f:58015)
- Ferrera, Juan (with Gómez Gil, Javier; Liavona, José G.) On completion of spaces of weakly continuous functions. (84g:46050)
- Frolov, N. N. Fundamental solutions of infinite-dimensional differential equations with constant coefficients. (Russian) (84d:35142)
- On a homeomorphism of Hilbert spaces that is realized by a differential operator. (Russian) (84a:46072)
- Gali, I. M. (with Okb El-Bab, A. S.) Integral representation of exponentially convex functions of infinite number of variables. (Arabic summary) (84j:47029)
- Gardner, R. J. The regularity of Borel measures. (84a:28001)
- Garling, D. J. H. Stable Banach spaces, random measures and Orlicz function spaces. (84m:46019)
- Gómez Gil, Javier See Ferrera, Juan; et al., (84g:46050)
- Górnjak, Janusz (with Makagon, Andrzej; Weron, Aleksander) An explicit form of dilation theorems for semispectral measures. (84k:47006)
- Jajte, Ryszard (with Loeb, Richard I.) Gleason measures and some inner products on the algebra of bounded operators on a Hilbert space. (84d:47060)
- Kahane, Jean-Pierre Hélices et quasi-hélices. [Helices and quasihelices] (84i:43005)
- Kats, M. P. Continuity of universally measurable linear mappings. (Russian) (84j:46016a)
- Correction to: "Continuity of universally measurable linear mappings". (Russian) (84j:46016b)
- Khrennikov, A. Yu. Equations with infinite-dimensional pseudodifferential operators. (Russian) (84m:35116)
- Kondrat'ev, Yu. G. See Berezans'kii, Yu. M.; et al., (84d:46059)
- Král, Josef Potential flows. (See 84i:00016)
- Kusraev, A. G. General formulas of disintegration. (Russian) (84j:47106)
- Kusuoka, Shigeo The nonlinear transformation of Gaussian measure on Banach space and absolute continuity. I. (84j:60015a)
- The nonlinear transformation of Gaussian measure on Banach space and its absolute continuity. II. (84j:60015b)
- Leslie, J. A. A Lie group structure for the group of analytic diffeomorphisms. (84f:58023)
- Li, Yu Chia Parabolic equations on infinite-dimensional spaces. (84d:35143)
- Fundamental solutions for differential equations associated with the number operator. (84k:35140a)
- A correction and some additions to: "Fundamental solutions for differential equations associated with the number operator". (84k:35140b)
- Liavona, José G. See Ferrera, Juan; et al., (84g:46050)
- Loeb, Richard I. See Jajte, Ryszard, (84d:47060)
- Makagon, Andrzej See Górnjak, Janusz; et al., (84k:47006)
- Malyugin, S. A. On Gleason's theorem. (Russian) (84d:46103)
- Martikainen, Olli Convolution of generalized vector measures. (84c:46081)
- Nedogibchenko, G. V. (with Sav'ev, L. Ya.) Inductive limits of directed sets of continuous measures. (Russian) (84d:28016)
- Nikodem, Karimierz Additive set valued functions in Hilbert spaces. (84h:54016)
- Okb El-Bab, A. S. See Gali, I. M., (84j:47029)
- Orbán, Gheorghe See Breckner, Wolfgang W., (84m:47089)
- Palled, Shivappa Veerappa See Panchapagesan, T. V., (84d:47007)
- Panchapagesan, T. V. (with Palled, Shivappa Veerappa) ★ A generalized spectral mapping theorem. (84d:47007)
- Park, Young Sik Fourier ultra-hyperfunctions valued in a Fréchet space. (84a:46093)
- Piech, M. Ann Duality of fundamental solutions of parabolic equations in infinite dimensions. (84h:35159)
- Ressel, Paul See Christensen, Jens Peter Reus, (84j:43007)
- Ruckle, William H. An extension of the Aumann-Shapley value concept to functions on arbitrary Banach spaces. (84d:90123)
- Samoilenko, Yu. S. See Berezans'kii, Yu. M.; et al., (84d:46059)
- Sav'ev, L. Ya. See Nedogibchenko, G. V., (84d:28016)
- Singer, Ivan Minimization of continuous convex functionals on complements of convex subsets of locally convex spaces. (German and Russian summaries) (84f:49021)
- Surrogate conjugate functionals and surrogate convexity. (84m:49035)
- Smolyanov, O. G. Infinite-dimensional pseudodifferential operators and Schrödinger quantization. (Russian) (84d:35144)
- Sundaresan, Kondagunta Geometry and nonlinear analysis in Banach spaces. (84g:46028)
- Takahashi, Yasuji A remark on Xia's theorem concerning quasi-invariant measures. (84h:28022)

Tishchenko, S. V. Integral representations of exponentially convex functions on some spaces of sequences. (Russian) (84k:46007)

Tong, Yu Sun On conditional positive-definite bilinear functionals. (Chinese. English summary) (84a:46096)

Üstünel, Ali Süleyman Stochastic integration on nuclear spaces and its applications. (84h:60109)

Some applications of stochastic integration in infinite dimensions. (84i:60073)

Weron, Aleksander See Górnjak, Janusz; et al., (84k:47006)

46Hxx Topological algebras, normed rings and algebras, Banach algebras (For group algebras, convolution algebras and measure algebras, see 43-XX.)

secondary classifications:

- (Bachar, John M.) See Radical Banach algebras and automatic continuity, (84c:46001)
- (Bade, William G.) See Radical Banach algebras and automatic continuity, (84c:46001)
- (Curtis, Philip C., Jr.) See Radical Banach algebras and automatic continuity, (84c:46001)
- (Dales, H. Garth) See Radical Banach algebras and automatic continuity, (84c:46001)
- Effros, Edward G. On the structure theory of C^* -algebras: some old and new problems. (84g:46076)
- (Thomas, Marc P.) See Radical Banach algebras and automatic continuity, (84c:46001)
- Conference: Radical Banach Algebras and Automatic Continuity ★ Radical Banach algebras and automatic continuity. (84c:46001)
- Long Beach, Calif. ★ Radical Banach algebras and automatic continuity. (84c:46001)
- Radical Banach algebras and automatic continuity ★ Radical Banach algebras and automatic continuity. (84c:46001)

46H05 General theory

- Albrecht, E. (with Dales, H. Garth) Continuity of homomorphisms from C^* -algebras and other Banach algebras. 84i:46063
- Arikan, Nilgün Arens regularity and retractions. 84c:46046
- Aupetit, Bernard Automatic continuity conditions for a linear mapping from a Banach algebra onto a semisimple Banach algebra. 84i:46060
- (with Zemánek, Jaroslav) Local characterizations of the radical in Banach algebras. 84g:46068
- Cedilnik, A. On Banach algebras without zero divisors. (Slovenian summary) 84j:46078
- Dales, H. Garth (with Willis, George A.) Cofinite ideals in Banach algebras, and finite-dimensional representations of group algebras. 84h:46061
- See also Albrecht, E., 84i:46063
- Esterle, Jean Polynomial connections between projections in Banach algebras. 84g:46069
- Grone, Robert (with Johnson, Peter D., Jr.) Spectral radius and seminorms in finite-dimensional algebras. II. 84j:46079
- Johnson, Peter D., Jr. See Grone, Robert, 84j:46079
- Kąkol, Jerzy On inductive limits of topological algebras. 84f:46064
- Kraljević, Hrvoje Rank and index in Banach algebras. 84f:46065
- Limaye, Balmohan Vishnu Noncomplex methods in the theory of real Banach algebras. 84c:46047
- Oudalov, Mohamed Unité et semi-normes dans les algèbres localement convexes. (Spanish summary) [Unit element and seminorms in locally convex algebras] 84f:46066
- Théorèmes de structures et propriétés fondamentales des algèbres localement uniformément A -convexes. (English summary) [Structure theorems and fundamental properties of locally uniformly A -convex algebras] 84g:46070
- Remison, J. F. Conditions related to centrality in a Banach algebra. 84c:46104
- Sinclair, Allan M. ★ Continuous semigroups in Banach algebras. 84b:46053
- Tomluk, B. J. Arens regularity of conjugate Banach algebras with dense socle. 84d:46071
- Willis, George A. See Dales, H. Garth, 84h:46061
- Zemánek, Jaroslav See Aupetit, Bernard, 84g:46068

secondary classifications:

- Okniński, Jan Spectrally finite algebras and tensor products. (84j:16014)
- (Phadke, S. V.) See Sen, Dilip Kumar, (84b:46054)
- Sakarovich, Joel Une application du forcing itéré à un problème sur les homomorphismes d'algèbres de Banach. [An application of iterated forcing to a problem on the homomorphisms of Banach algebras] (84d:03063)
- Sen, Dilip Kumar A note on the paper: "A study of elements of normed algebras by means of special subsets" [Bull. Calcutta Math. Soc. 71 (1979), no. 6, 406-411; MR 82j:46060] by S. V. Phadke and N. K. Thakare. (84b:46054)
- Stedman, Lawrence Banach algebras with one-dimensional radical. (84m:46053)
- Takahasi, Sin-ri Quas centrality of Banach algebras and approximate identity. (84c:46059)
- (Thakare, Nimbakrishna K.) See Sen, Dilip Kumar, (84b:46054)

46H10 Ideals and subalgebras

- Al-Moa'jil, Abdullah H. Elements of the socle of a semisimple Banach algebra. 84c:46047
- Husan, Taqdir Fréchet algebras with bases. 84d:46072
- Kraljević, Hrvoje (with Suljagić, S.; Veselić, K.) Index in semisimple Banach algebras. (Serbo-Croatian summary) 84c:46048
- Suljagić, S. See Kraljević, Hrvoje; et al., 84c:46048
- Veselić, K. See Kraljević, Hrvoje; et al., 84c:46048
- Yood, Bertram One-sided ideals in Banach algebras. 84c:46049

secondary classifications:

- Fritzsche, M. On the existence of dense ideals in LMC^* -algebras. (German and Russian summaries) (84m:46066)

46H15 Representations

secondary classifications:

- Sundberg, Carl (with Wolff, Thomas H.) Interpolating sequences for QA_B . (84c:30078)
 Wolff, Thomas H. See Sundberg, Carl, (84c:30078)

46H20 Structure, classification

- Fragouloupoulou, Maria \ast -semisimplicity of tensor product lmc \ast -algebras. 84c:46048
 (Phadke, S. V.) See Sen, Dilip Kumar, 84b:46054
 Sen, Dilip Kumar A note on the paper: "A study of elements of normed algebras by means of special subsets" [Bull. Calcutta Math. Soc. 71 (1979), no. 6, 406-411; MR 82j:46060] by S. V. Phadke and N. K. Thakare. 84b:46054
 (Thakare, Nimbakrishna K.) See Sen, Dilip Kumar, 84b:46054

secondary classifications:

- Aupetit, Bernard Analytic multivalued functions in Banach algebras and uniform algebras. (84b:46059)
 Ballico, Edoardo (with Ferreira, Arturo V.; Napolitani, Pier Daniele) On first Čech groups H^0 , H^1 of maximal ideal spaces. (Italian summary) (84j:46097)
 Balsam, Zofia On topological divisors of zero and permanently singular elements in two-norm algebras. (84m:46060a)
 On subsets of a two-norm algebra consisting of joint topological divisors of zero. (84m:46060b)
 Dhar, R. K. (with Vasudeva, H. L.) $M(R, X)$ with order convolution. (84b:43003)
 Ferreira, Arturo V. See Ballico, Edoardo; et al., (84j:46097)
 de Guzman, I. P. Annihilator alternative algebras. (84b:17016)
 Hauschild, Wilfried (with Kaniuth, Eberhard; Kumar, Ajay) Ideal structure of Beurling algebras on $[FC]^-$ groups. (84m:22007)
 Jarosz, Krzysztof Perturbations of uniform algebras. (84c:46056)
 Kaniuth, Eberhard See Hauschild, Wilfried; et al., (84m:22007)
 Kumar, Ajay See Hauschild, Wilfried; et al., (84m:22007)
 Napolitani, Pier Daniele See Ballico, Edoardo; et al., (84j:46097)
 Rieffel, Marc A. Dimension and stable rank in the K -theory of C^* -algebras. (84g:46085)
 Vasudeva, H. L. See Dhar, R. K., (84b:43003)

46H25 Normed modules and Banach modules, topological modules (if not placed in 13-XX or 16-XX)

- Behrends, Ehrhard Multiplier representations and an application to the problem whether $A \otimes X$ determines A and/or X . 84m:46050
 Braun, W. (with Feichtinger, Hans G.) Banach spaces of distributions having two module structures. 84b:46062
 Cho, Tae Geun A power factorization theorem in Banach modules. 84c:46105
 Feichtinger, Hans G. See Braun, W., 84b:46062
 Johnson, David Lee (with Lahr, Charles D.) Weak approximate identities and multipliers. 84c:46106
 Kakihara, Yūichirō Hilbert $B(H)$ -modules with applications. III. 84b:46055
 Kim, Yongchan See Lee, Sanghun, 84d:46073
 Krichetevs, A. N. On the connection between the homological properties of some Banach modules and questions of the geometry of Banach spaces. (Russian. English summary) 84g:46071
 Lahr, Charles D. See Johnson, David Lee, 84c:46106
 Lee, Sanghun (with Kim, Yongchan) Double B -centralizers of pre-Hilbert B -modules. 84d:46073
 Podorozhnyi, M. V. Banach modules over a ring of measurable functions. (Russian) 84c:46107
 Romo, John G. Spectral synthesis in Banach modules. II. 84g:46072
 Szász, Arpad On the continuity of quotient multipliers. 84c:46050
 Hausdorff topologies for the multiplier extensions of admissible vector modules. 84c:46049

secondary classifications:

- de Brucq, Denis See Vasilache, Sergiu, (84c:46083)
 Johnson, B. E. Low-dimensional cohomology of Banach algebras. (84k:46054)
 Poguntke, Detlev Einfache Moduln über gewissen Banachschen Algebren: ein Imprimitivitätssatz. [Simple modules over certain Banach algebras: an imprimitivity theorem] (84i:22008)
 Sinclair, Allan M. \ast Continuous semigroups in Banach algebras. (84b:46053)
 Vasilache, Sergiu (with de Brucq, Denis) Propriétés de continuité du produit de composition dans des produits tensoriels d'espaces localement convexes. I. Cas des produits tensoriels inductifs. (English summary) [Continuity properties of the composition product in tensor products of locally convex spaces. I. The case of inductive tensor products] (84c:46083)

46H30 Functional calculus [See also 47A60.]

- Achermans, S. T. M. (with Gerards, A. M. H.) Spectral localization in Banach algebras. 84c:46050a
 On the local spectrum at the identity of a Banach algebra. 84c:46050b
 Aupetit, Bernard (with Zemánek, Jaroslav) Local behavior of the spectrum near algebraic elements. 84b:46063
 Dehghan, Y. Commutative LMC algebras and functional calculus. 84m:46051
 Gerards, A. M. H. See Achermans, S. T. M., 84c:46050a
 Zemánek, Jaroslav See Aupetit, Bernard, 84b:46063

secondary classifications:

- Droste, Bernd Extension of analytic functional calculus mappings and duality by $\bar{\sigma}$ -closed forms with growth. (84c:46056)
 Smith, William V. Spectral measures. I. General theory in a topological vector space. (84d:46063)

46H99 None of the above, but in this section

- Antonyan, S. A. Banach G -algebras. (Russian) 84j:46080
 Barnes, Bruce A. (with Murphy, G. J.; Smyth, M. R. F.; West, T. T.) \star Riesz and Fredholm theory in Banach algebras. 84c:46108
 Bunce, L. J. Type I JB-algebras. 84b:46056
 Cowie, E. R. An analytic characterization of groups with no finite conjugacy classes. 84d:46074
 El-Mallah, Mohamed Lamei \star Sur les algèbres normées non-associatives. (French) [Nonassociative normed algebras] 84d:46075
 Kilambi, Srinivasacharyulu Sur une caractérisation spectrale des algèbres de Banach complexes et alternées. (English summary) [On a spectral characterisation of complex alternative Banach algebras] 84f:46067
 Krupnik, N. Ya. (with Shpigel', E. M.) On the boundedness of a family of homomorphisms. (Russian) 84d:46076
 Murphy, G. J. See Barnes, Bruce A.; et al., 84c:46108
 Shpigel', E. M. See Krupnik, N. Ya., 84d:46076
 Smyth, M. R. F. See Barnes, Bruce A.; et al., 84c:46108
 Stacey, P. J. Type I₂ JBW-algebras. 84b:46057
 West, T. T. See Barnes, Bruce A.; et al., 84c:46108

secondary classifications:

- Abel, Mati A description of closed ideals in algebras of continuous vector-valued functions. (Russian) (84d:46084)
 The extensions of topological spaces depending on cover and its applications. (See 84c:54003)
 Frenkel, Margareta Remarks on equations of Fuchsian type in Banach algebras. I. (Romanian. French summary) (84m:34008a)
 Remarks on Fuchs-type differential equations in Banach algebras. II. (Romanian. French summary) (84m:34008b)
 de Guzmán Molina, I. P. (with Sanz Jiménez, F.) On alternative annihilator and dual algebras. (Spanish) (84d:46087)
 King, W. P. C. Semifinite traces on JBW-algebras. (84d:46110)
 Prolla, João B. On the spectra of topological algebras of functions over valued fields. (84f:46096)
 Sanz Jiménez, F. See de Guzmán Molina, I. P., (84d:46087)
 Symatzschke, J. Über eindimensionale Elemente halbgeordneter Algebren. [On one-dimensional elements of partially ordered algebras] (84i:46013)

46Jxx Commutative Banach algebras and commutative topological algebras

secondary classifications:

- (Bachar, John M.) See Radical Banach algebras and automatic continuity, (84c:46001)
 (Bade, William G.) See Radical Banach algebras and automatic continuity, (84c:46001)
 (Curtis, Philip C., Jr.) See Radical Banach algebras and automatic continuity, (84c:46001)
 (Dales, H. Garth) See Radical Banach algebras and automatic continuity, (84c:46001)
 (Thomas, Marc P.) See Radical Banach algebras and automatic continuity, (84c:46001)
 Conference:
 Radical Banach Algebras and Automatic Continuity \star Radical Banach algebras and automatic continuity. (84c:46001)
 Long Beach, Calif. \star Radical Banach algebras and automatic continuity. (84c:46001)
 Radical Banach algebras and automatic continuity \star Radical Banach algebras and automatic continuity. (84c:46001)

46J05 General theory

- Dales, H. Garth Convolution algebras on the real line. 84m:46052
 Esterle, Jean Elements for a classification of commutative radical Banach algebras. 84b:46064
 Grabiner, Sandy Weighted convolution algebras as analogues of Banach algebras of power series. 84g:46073
 Korobeinik, Yu. F. On a class of linear operators. (Russian) 84d:46077
 Stedman, Lawrence Banach algebras with one-dimensional radical. 84m:46053
 Thomas, Marc P. Closed ideals of $I^1(\omega_i)$ when $\{\omega_i\}$ is star-shaped. 84d:46078
 West, T. T. Removing the interior of the spectrum—Shilov's example. 84f:46068
 Zouakia, F. The theory of Cohen elements. 84f:46069

secondary classifications:

- Altomare, Francesco On the Korovkin approximation theory in commutative Banach algebras. (Italian summary) (84g:41019)
 Bezanilla López, A. Weierstrass infinite products and factorization of entire L -functions on commutative Banach algebras. (Spanish. English summary) (84j:30088)
 Curtis, Philip C., Jr. Derivations in commutative Banach algebras. (84f:46075)
 Dehghan, Y. Commutative LMC algebras and functional calculus. (84m:46051)
 Deshpande, M. V. (with Padhye, S. M.) Collectively compact sets of operators and almost periodic functions. (84b:47056)
 Dutta, M. See Tewari, U. B.; et al., (84c:46082)
 Limaye, Balmohan Vishnu Noncomplex methods in the theory of real Banach algebras. (84c:46047)

Madan, Shobha. See Tewari, U. B.; et al., (84c:46082)

Padhye, S. M. See Deshpande, M. V., (84b:47056)

Sakarovitch, Joel Une application du forcing itéré à un problème sur les homomorphismes d'algèbres de Banach. [An application of iterated forcing to a problem on the homomorphisms of Banach algebras] (84d:03063)

Sánchez-Fernández, C. On the decomposition of an L -analytic function by a simple polynomial in a Banach algebra. (Spanish) (84a:30093)

Taylor, Joseph L. A bigger Brauer group. (84g:13007)

Tewari, U. B. (with Dutta, M.; Madan, Shobha) Tensor products of commutative Banach algebras. (84c:46082)

46J10 Banach algebras of continuous functions, function algebras

Abel, Mati Some generalizations of the Stone-Weierstrass theorem. (Russian. English summary) (84c:46051)

Arizmendi Peimbert, Hugo (with Lara, Miguel; Tomás, Francisco) An abstract notion of compact-open topology. (Spanish) (84m:46054)

Gamelin, Theodore W. (with Lyons, Terry J.) Jensen measures for $R(K)$. (84d:46079)

Glicksberg, Irving Spectra of invariant uniform and transform algebras. (84c:46051)

González, Gilberto See Rajagopalan, M., (84c:46052)

Illarionov, M. A. Local solvability of algebraic equations. (Russian. English summary) (84c:46070)

Kane, Jonathan M. Maximal ideal spaces of U -algebras. (84c:46052)

Kulkarni, S. H. Analytic and harmonic maps into the maximal ideal space of a function algebra. (84j:46081)

Kumagai, Donna The measure spectrum of a uniform algebra and subharmonicity. (84c:46109)

Plurisubharmonic functions associated with uniform algebras. (84c:46053)

Lara, Miguel See Arizmendi Peimbert, Hugo; et al., (84m:46054)

Lyons, Terry J. See Gamelin, Theodore W., (84d:46079)

Madueirova, Andreana S. Isomorphisms of homogeneous algebras of functions on a torus. (Russian) (84c:46052)

A study of some homogeneous algebras of functions on a torus. (Russian)

Nakazi, Takahiko Hardy spaces and Jensen measures. (84c:46110)

O'Farrell, A. G. Restriction algebras. (84b:46058)

Oziashvili, T. S. Decompositions of a ring of functions into a direct sum. (Russian. English and Georgian summaries) (84f:46071)

Rajagopalan, M. (with González, Gilberto) ★ Un álgebra de funciones sobre el conjunto de Cantor. (Spanish) [A function algebra over the Cantor set] (84c:46052)

★ Uniform algebras and scattered spaces. (84c:46053)

Shackel, John R. Continuation of analytic structure in the maximal ideal space of a uniform algebra. (84c:46053)

Stodkowski, Zbigniew A criterion for subharmonicity of a function of the spectrum. (84c:46054)

Suna, Satoshi On completely singular measures orthogonal to Dirichlet algebras. (Japanese) (84b:46065)

Tomás, Francisco See Arizmendi Peimbert, Hugo; et al., (84m:46054)

Valdés Castro, Concepción Sets of interpolation in measure for the algebra $R(X)$. (Spanish) (84d:46080)

Wells, David M. Local uniform approximation by functions in a uniform algebra. (84c:46072)

Younis, Rahman M. Interpolation in strongly logmodular algebras. (84c:46111)

secondary classifications:

Abel, Mati The extensions of topological spaces depending on cover and its applications. (See 84c:54003)

Arzumanyan, V. A. (with Grigoryan, S. A.) Uniform algebras of operator fields. (Russian. English summary) (84m:46089)

Batty, C. J. K. Connected spaces without derivations. (84g:54018)

Behrends, Ehrhard Multiplier representations and an application to the problem whether $A \otimes X$ determines A and/or X . (84m:46050)

Bhaskaran, R. The structure of ideals in the Banach algebra of Lipschitz functions over valued fields. (84f:46095)

Carey, Richard W. (with Pincus, Joel D.) Principal functions, index theory, geometric measure theory and function algebras. (84c:47048)

Carmona Doménech, J. J. A necessary and sufficient condition for uniform

approximation by certain rational modules. (84a:30068)

Grigoryan, S. A. See Arzumanyan, V. A., (84m:46089)

Kalyabin, G. A. Criteria for multiplicativity, and imbedding in C of spaces of Besov-Lizorkin-Triebel type. (Russian) (84i:46044)

Kitover, A. K. Spectral properties of homomorphisms with weight in algebras of continuous functions and their applications. (Russian. English summary) (84i:47045)

Krichevets, A. N. On an algebra $C(\Omega)$ of small global dimension two and its tensor powers. (Russian. English summary) (84g:46104)

Pincus, Joel D. See Carey, Richard W., (84c:47048)

Tanaka, Jun-ichi Quasi-invariant measures and maximal algebras on minimal flows. (84f:28015)

Ufyanov, P. L. An algebra of functions and Fourier coefficients. (Russian) (84j:42039)

Wang, James Li Ming Approximation by rational modules in $Lip\alpha$ norms. (84a:30073)

46J15 Banach algebras of differentiable or analytic functions, H^p -spaces

[See also 30D55, 30H05, 32A35, 32E25, 42B30.]

Aleksandrov, A. B. Essays on nonlocally convex Hardy classes. (84b:46066)

Aupetit, Bernard Analytic multivalued functions in Banach algebras and uniform algebras. (84b:46059)

Bourgain, Jean The nonisomorphism of H^1 -spaces in one and several variables. (84f:46073)

New Banach space properties of the disc algebra and H^∞ . (See 84i:46006)

Bruna, Joaquim Peak sets for holomorphic and Lipschitzian functions. (Catalan)

(84c:46112)

Delbaen, F. Automatic continuity of linear mappings on H^∞ . (84i:46054)

Domar, Yngve A Banach algebra related to the disk algebra. (See 84c:46001)

Grigoryan, S. A. Maximal algebras of generalized analytic functions. (Russian. English and Armenian summaries) (84d:46081)

Hara, Masaru The corona problem on 2-sheeted disks. (84b:46060)

Holub, J. R. Shift basic sequences in the Wiener disc algebra. (84g:46075)

Ivanov, O. V. A theorem of I. M. Gel'fand. (Russian) (84j:46082)

Loch, Horst Abstrakte Hardy-Algebren und Konjugation. [Abstract Hardy algebras and conjugation] (84c:46113)

Luecking, Daniel H. Division in Douglas algebras. (84c:46114)

(with Younis, Rahman M.) Quotients of L^∞ by Douglas algebras and best approximation. (84f:46074)

Nishizawa, Kiyoko On closed subalgebras lying between A and H^∞ . II. (84b:46067)

Rukhsin, S. E. See Vinogradov, S. A., (84d:46083)

Shamoyan, F. A. Description of closed ideals of the algebra \mathcal{N}_∞^n . (Russian) (84d:46082)

Shirokov, N. A. Closed ideals of algebras of type B_∞^n . (Russian) (84b:46061)

Stanton, Charles M. Polydiscs in the spectra of uniform algebras. (84m:46055)

Vernier Piro, Stella Algebras of holomorphic functions and the space V.M.O. (Italian) (84i:46055)

Vinogradov, S. A. (with Rukhsin, S. E.) On the free interpolation of germs of analytic functions in Hardy spaces. (Russian. English summary) (84d:46083)

Younis, Rahman M. See Luecking, Daniel H., (84f:46074)

secondary classifications:

Adachi, Kenzō (with Nishihara, Masaru) Finitely generated ideals in $A^\infty(D)$ in pseudoconvex domains. (84m:32022)

Alexander, Herbert On zero sets for the ball algebra. (84c:32002)

Amar, Eric Sur un problème de W. Rudin concernant les fonctions holomorphes et bornées. (English summary) [On a problem of W. Rudin concerning bounded holomorphic functions] (84c:32006)

Axler, Sheldon (with Shields, Allen) Extreme points in VMO and BMO. (84c:46021)

de Bartolomeis, Paolo (with Tomassini, Giuseppe) Finitely generated ideals in $A^\infty(D)$. (84a:32025)

Blidtner, Jürgen Integral representations of bounded harmonic functions. (See

84i:00016)

Bokharev, S. V. Construction of bases in finite-dimensional spaces of functions analytic in the disc. (Russian) (84c:46017)

Bourgain, Jean Nouvelles propriétés des espaces L^1/H_0^1 et H^∞ . [New properties of the spaces L^1/H_0^1 and H^∞] (84c:46017)

On weak completeness of the dual of spaces of analytic and smooth functions.

(84j:46039)

A theorem on interpolating sequences in the disc. (84g:30036)

Brauer, George Boundary behavior of spaces of analytic functions. (84m:30049)

Bruna, Joaquim On the peak sets for holomorphic Lipschitz functions. (84g:30049)

Burbea, Jacob Norm inequalities of exponential type for holomorphic functions.

(84j:46041)

Chee, P. S. On the extension of H^p -functions in polydiscs. (84g:32005)

Dijk, Petre On a generalized F. Riesz problem. (84m:81162)

Dyn'kin, E. M. Free interpolation by functions with a derivative from H^1 . (Russian. English summary) (84b:30052)

Ernerson, William D. On the spectra of holomorphic function algebras. (84j:32020)

Forness, John Erik (with Øvrelid, N.) Finitely generated ideals in $A(\Omega)$. (French summary) (84b:32019)

Furushima, Mikio Algebras of holomorphic functions. (84b:32020)

Hayes, Sandra The weak Nullstellensatz for finite-dimensional complex spaces.

(84b:32022)

Helton, J. William Non-Euclidean functional analysis and electronics. (84c:94001)

Khavinson, D. Remarks concerning boundary properties of analytic functions of E_p -classes. (84b:30037)

Mayer, Jacques Isometry in spaces of analytic functions with a slowly growing derivative. (Russian) (84j:30091)

Nagnibida, N. I. Equivalence of certain operations in analytic spaces. (Russian. English summary) (84a:30092)

Nishihara, Masaru See Adachi, Kenzō, (84m:32022)

O'Farrell, A. G. Restriction algebras. (84b:46058)

Ortega Aramburu, Joaquín M^a. The algebra of holomorphic functions in the disc that can be continued, together with their derivatives, to a point of the boundary. (Spanish) (84c:46116)

Øvrelid, N. See Forness, John Erik, (84b:32019)

Pelczyński, Aleksander Four lectures on translation invariant Banach spaces and Banach spaces of smooth and analytic functions. (84g:46038)

Rubel, Lee A. Internal-external factorization in Lumer's Hardy spaces. (84m:30055)

Rudin, Walter Möbius-invariant algebras in balls. (84m:32023)

Inner functions in the unit ball of C^n . (84i:32007)

Rudol, Krzysztof Corona theorem for sequences of functions [on a] finitely connected domain. (Russian summary) (84c:30075)

Shields, Allen See Axler, Sheldon, (84c:46021)

Tanaka, Jun-ichi Cocycles and local product decomposition. (84c:43004)

Tolokonnikov, V. A. Interpolating Blaschke products and ideals of the algebra H^∞ . (Russian. English summary) (84c:30038)

Tomassini, Giuseppe See de Bartolomeis, Paolo, (84a:32025)

Uchiyama, Akihito The construction of certain BMO functions and the corona problem. (84d:42022)

(with Wilson, J. Michael) Approximate identities and $H^1(\mathbb{R})$. (84c:42032)

Ullrich, Peter Automorphismen analytischer Banach-Algebren. [Automorphisms of analytic Banach algebras] (84f:30060)

- Wilson, J. Michael See Uchiyama, Akihito, (84c:42032)
 Wolff, Thomas H. Two algebras of bounded functions. (84c:30051)

46J20 Ideals, maximal ideals, boundaries

- Abel, Mati A description of closed ideals in algebras of continuous vector-valued functions. (Russian) 84c:46084
 Description of the ideals of a topological algebra of continuous functions. (Russian. English summary) 84c:46054
 Curtis, Philip C., Jr. Derivations in commutative Banach algebras. 84f:46075
 Grünback, Niels Weighted discrete convolution algebras. 84c:46068
 Il'yarionov, M. A. Extensions and complete reducibility of polynomials over Banach algebras. (Russian. English summary) 84c:46055
 Limaye, Balmohan Vishnu (with Mehta, R. D.; Vasavada, M. H.) Maximal ideal space and Šilov boundary of the tensor product of real Banach algebras. (Serbo-Croatian summary) 84c:46069
 Lion, G. Généralisation d'un problème posé par E. Michael sur les algèbres de Fréchet \ast -symétriques. [Generalization of a problem posed by E. Michael on \ast -symmetric Fréchet algebras] 84c:46115
 Mehta, R. D. See Limaye, Balmohan Vishnu; et al., 84c:46069
 Niestegge, Gerd Extreme spectral states of commutative Banach algebras. 84c:46040
 Ochiai, Hiroji (with Yanagihara, Niro) Homomorphisms and maximal ideals in the algebra of holomorphic functions. 84c:46056
 Ortega Aramburu, Joaquín M^a. The algebra of holomorphic functions in the disc that can be continued, together with their derivatives, to a point of the boundary. (Spanish) 84c:46116
 Thomas, Marc P. Closed ideals and bi-orthogonal systems in radical Banach algebras of power series. 84c:46057
 Approximation in the radical algebra $l^1(\omega_n)$ when (ω_n) is star-shaped. 84c:46058
 Vasavada, M. H. See Limaye, Balmohan Vishnu; et al., 84c:46069
 Yanagihara, Niro See Ochiai, Hiroji, 84c:46056

secondary classifications:

- Bade, William G. Multipliers of weighted l^1 -algebras. (84c:46055)
 Banaschewski, Bernhard The power of the ultrafilter theorem. (84f:03043)
 Domínguez, Jesús M. Non-Archimedean Gel'fand theory. (84d:46113)
 Hara, Masaru The corona problem on 2-sheeted disks. (84b:46060)
 Kanjin, Yūichi On the structure semigroups of L -subalgebras generated by spectral measures. (84c:43002)
 Laursen, K. B. Ideal structure in radical sequence algebras. (84d:46085)
 Shackell, John R. Continuation of analytic structure in the maximal ideal space of a uniform algebra. (84c:46053)

46J25 Representations

- Gurarii, David Burnside type theorems for Banach representations of motion groups and algebras. 84c:46059

secondary classifications:

- Lai, Han Ch'ing Multiplier algebra of C^* -envelope and the C^* -envelope of a multiplier algebra. (84d:46090)

46J30 Subalgebras

46J35 Structure, classification

- Bade, William G. Multipliers of weighted l^1 -algebras. 84c:46055
 Balsam, Zofia On topological divisors of zero and permanently singular elements in two-norm algebras. 84c:46060a
 On subsets of a two-norm algebra consisting of joint topological divisors of zero. 84c:46060b
 Chang, Hong Jean On some algebraic properties of H^1 . 84c:46061
 Corach, Gustavo Algebraic elements in topological algebras. (Spanish. English summary) 84c:46056
 Jarosz, Krzysztof Perturbations of uniform algebras. 84c:46056
 Laursen, K. B. Ideal structure in radical sequence algebras. 84d:46085
 Pugach, L. I. The homological dimension of ideals of function algebras, and analytic structure. (Russian) 84f:46076b
 Projective and flat ideals of function algebras and their connection with analytic structure. (Russian) 84f:46076c
 Homological dimension of Banach algebras of smooth functions. (Russian) 84f:46076a

secondary classifications:

- (Phadke, S. V.) See Sen, Dilip Kumar, (84b:46054)
 Sen, Dilip Kumar A note on the paper: "A study of elements of normed algebras by means of special subsets" [Bull. Calcutta Math. Soc. 71 (1979), no. 6, 406–411; MR 82j:46060] by S. V. Phadke and N. K. Thakare. (84b:46054)
 (Thakare, Nimbakrishna K.) See Sen, Dilip Kumar, (84b:46054)

46J99 None of the above, but in this section

- Allan, G. R. An inequality involving product measures. 84c:46062
 Drost, Bernd Extension of analytic functional calculus mappings and duality by $\bar{\partial}$ -closed forms with growth. 84c:46056
 Gorin, E. A. See Sánchez-Fernández, C., 84c:46063
 Martignon, Laura Banach lattice algebras with multiplicative modulus and convolution Banach algebras. 84c:46041

- Sánchez-Fernández, C. (with Gorin, E. A.) Variant of the implicit function theorem in commutative Banach algebras. (Spanish) 84c:46063
 Willis, George A. The norms of powers of functions in the Volterra algebra. 84c:46064

secondary classifications:

- Bachelis, Gregory F. Some radical quotients in harmonic analysis. (84c:43001)
 Berenstein, Carlos A. (with Taylor, B. A.; Yger, Alain) Sur les systèmes d'équations différence-différentielles. [On systems of difference-differential equations] (84c:42011)
 Blinov, I. N. A B -algebra of almost periodic functions. (Russian) (84c:42022)
 Haase, Hermann Weak compactness in spaces of measures on Boolean algebras. (84f:46033)
 Kitover, A. K. Operators in C^1 that are induced by smooth mappings. (Russian) (84c:47036)
 Llavona, José G. On the density of polynomial subalgebras of weakly differentiable functions. (Spanish) (84d:46066)
 Losert, Viktor w^* -closed subalgebras of $L^\infty(G)$. (84d:43006)
 Maia, Maria Grazia A generalization of certain algebras that appear in systems theory. (Italian) (84f:93017)
 McDonald, John N. Measures on the torus which are real parts of holomorphic functions. (84c:32003)
 Papadopolou, Susanna (with Ritter, Gunter) On integral representation and the Choquet boundary for convolution algebras of measures. (84a:43002)
 Parthasarathy, Krishnan See Tewari, U. B., (84c:43006)
 Rhoades, B. E. (with Sharma, Nand Kishore) Spectral results for some Hausdorff matrices. (84f:40010)
 Ritter, Gunter See Papadopolou, Susanna, (84a:43002)
 Romo, John G. Spectral synthesis in Banach modules. II. (84g:46072)
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- Alberti, Peter M. (with Uhlmann, Armin) ★Stochasticity and partial order. 84i:46057a (with Uhlmann, Armin) ★Stochasticity and partial order. 84i:46057b
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Robertson, A. Guyan Positive extensions of automorphisms of spin factors. **84c:46076**

Saito, Kichi-Suke Invariant subspaces and cocycles in nonselfadjoint crossed products. **84d:46141**

(with Wright, J. D. Maitland) Outer automorphisms of regular completions. **84m:46077**

Størmer, Erling Automorphism groups and invariant states. **84b:46074**

Szűcs, József Some weak-star ergodic theorems. **84g:46092**

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Upmeyer, Harald Derivations and automorphisms of Jordan C^* -algebras. **84a:46142**

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Elliott, George A. (with Zsidó, László) Almost uniformly continuous automorphism groups of operator algebras. **(84b:46084)**

Handelman, David E. Free rank $n+1$ dense subgroups of \mathbb{R}^n and their endomorphisms. **(84b:06019)**

Jones, Vaughan F. R. (with Popa, Sorin) Some properties of MASAs in factors. **(84c:46066)**

Prime actions of compact abelian groups on the hyperfinite type II_1 factor. **(84c:46069)**

Niknam, Assadollah On the domain of an unbounded derivation of a C^* -algebra. **(84c:46060)**

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Batty, C. J. K. Invariant states for strongly positive operators on C^* -algebras. **84g:46093**

Dem'yanenko, G. G. See Golodets, V. Ya., **84m:46078**

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Kawakami, Satoshi (with Kajiwara, Tsuyoshi) Representations of certain non-type I C^* -crossed products. **(84d:22013)**

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Accardi, Luigi (with Cecchini, Carlo) Conditional expectations in von Neumann algebras and a theorem of Takesaki. **84j:46088**

Araki, Huzihiro (with Masuda, Tetsuya) Positive cones and L_2 -spaces for von Neumann algebras. **84b:46082**

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(with Streater, R. F.; Wilde, I. F.) The Itô-Clifford integral. III. The Markov

property of solutions to stochastic differential equations. **84m:46079c**

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Berdikulov, M. A. Spaces L_1 and L_2 for semifinite JBW-algebras. (Russian) **84f:46086**

Cecchini, Carlo See Accardi, Luigi, **84j:46088**

Chilin, V. I. Monotone completeness of semifinite AW^* -algebras. (Russian) **84b:46075**

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Liapunov's theorem. **84m:46080**

Đặng Ngọc Nghiêm A random ergodic theorem in von Neumann algebras. **84b:46076**

Ekhaguerre, G. O. S. On noncommutative stochastic integration. **84b:46083**

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Fack, Thierry (with Skandalis, Georges) Sur les représentations et idéaux de la

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The central limit theorem for a "noncommutative" random process and its

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The central limit theorem in "noncommutative" probability theory. (Russian.

English summary) **84f:46090**

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Ergodic theorems for weight-preserving transformations. (Russian) **84d:46102**

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Hudson, R. L. (with Streater, R. F.) Noncommutative martingales and stochastic

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Inoue, Atsushi A Radon-Nikodým theorem for positive invariant sesquilinear forms on

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Kastler, Daniel On A. Connes' noncommutative integration theory. **84c:46077**

Katavolos, A. Noncommutative L_2 spaces. II. **84b:46077**

Kosaki, Hideki Positive cones associated with a von Neumann algebra. **84b:46085**

T-theorem for L^p -spaces associated with a von Neumann algebra. **84b:46049**

Linear Radon-Nikodým theorems for states on a von Neumann algebra.

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Matveichuk, M. S. A description of finite measures in semifinite algebras. (Russian)

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Renault, Jean N. C^* -algebras of groupoids and foliations. **84c:46068**

Sherstnev, A. N. On the general theory of the measure and integral in von Neumann

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- Stavinoha, Pavel On limits of L_p -norms of linear operators. **84b:46081**
- Stepin, A. M. (with Shukhov, A. G.) The centralizer of diagonalizable states and entropy of automorphisms of W^* -algebras. (Russian) **84d:46104**
- Streater, R. F. See Barnett, C.; et al., **84m:46079a**; **84m:46079b**; **84m:46079c** and Hudson, R. L., **84m:46082**
- Tikhonov, O. E. Spaces of L_p type with respect to a weight on a von Neumann algebra. (Russian) **84a:46145**
- Integrable bilinear forms and an integral over an operator-valued measure. (Russian) **84b:46082**
- Tischer, Jürgen Gleason's theorem for type I von Neumann algebras. **84a:46146**
- Trunov, N. V. L_p spaces associated with a weight on a semifinite von Neumann algebra. (Russian) **84a:46050**
- On the theory of normal weights on von Neumann algebras. (Russian) **84c:46069**
- Wilde, I. F. See Barnett, C.; et al., **84m:46079a**; **84m:46079b** and **84m:46079c**
- Wright, J. D. Maitland See Azarnia, N., **84j:46089**
- Zolotarëv, A. A. L^p spaces with respect to a state on a von Neumann algebra, and interpolation. (Russian) **84c:46070**

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- Azarnia, N. (with Wright, J. D. Maitland) On the Lyapunoff-Knowles theorem. **(84j:46036)**
- Bach, Alexander Measures on Hilbert space and quantum states. **(84m:82032)**
- Connes, Alain A survey of foliations and operator algebras. **(84m:58140)**
- Frigerio, Alberto See Accardi, Luigi; et al., **(84m:82031)**
- Johnson, B. E. Noncommutative generalizations of mathematics. **(84g:46077)**
- Kree, Paul Anticommutative integration and Fermi fields. **(84j:81052)**
- Lewis, John T. See Accardi, Luigi; et al., **(84m:82031)**
- Ocneanu, Adrian A Rohlin type theorem for groups acting on von Neumann algebras. **(84g:46091)**
- Petz, Dénes Locally compact groups: the group von Neumann algebra and duality. (Hungarian) **(84c:22008)**
- Riečan, Beloslav Two notes on the individual ergodic theorem. (See **84m:58002**)
- Rosenberg, Jonathan The role of K -theory in noncommutative algebraic topology. **(84j:46097)**
- Streater, R. F. Quantum stochastic processes. (See **84j:81006**)
- Takai, H. Differentiable structure on nonabelian C^* -algebras. **(84d:46109)**
- Wright, J. D. Maitland See Azarnia, N., **(84j:46036)**
- Wulfsch, Aubrey Factorisation of characteristic functions on noncommutative groups. **(84j:60020)**
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- Araki, Huzihiro (with Choda, Marie) Property T and actions on the hyperfinite II_1 -factor. **84m:46084**
- Arveson, William The harmonic analysis of automorphism groups. **84m:46085**
- Baker, B. Mitchell (with Powers, Robert T.) Product states and C^* -dynamical system of product type. **84f:46091**
- Belavkin, V. P. (with Staszewski, P.) C^* -algebraic generalization of relative entropy and entropy. **84b:46083**
- Besson, O. On the entropy in II_1 von Neumann algebras. **84b:46089**
- Choda, Marie Strong ergodicity and compact operators. **84c:46147**
- See also Araki, Huzihiro, **84m:46084**
- Chu, Cho Ho Crossed products of scattered C^* -algebras. **84d:46105**
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- Đàng Ngọc Nghiêm Dynamical systems and extensions of states on C^* -algebras. **84c:46150**
- Elliott, George A. (with Zsidó, László) Almost uniformly continuous automorphism groups of operator algebras. **84b:46084**
- Evans, Bruce D. C^* -bundles and compact transformation groups. **84a:46148**
- Feldman, Jacob See Connes, Alain; et al., **84b:46090**
- Frigerio, Alberto (with Verri, Maurizio) Long-time asymptotic properties of dynamical semigroups on W^* -algebras. **84b:46091**
- Green, William L. (with Lau, Anthony To Ming) Equicontinuity, fixed-point properties, and automorphisms of von Neumann algebras. **84c:46071**
- Herman, Richard H. (with Rosenberg, Jonathan) Norm-close group actions on C^* -algebras. **84b:46085**
- Izumishi, Akio Derivations in C^* -algebras commuting with compact actions. **84g:46098**
- Iorio, Valeria B. de Magalhães The crossed product of von Neumann algebras for group actions. (Portuguese) **84i:46068**
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- Multiplier algebras of C^* -crossed products and conditional expectations. **84d:46107**
- Jones, Vaughan F. R. A converse to Ocneanu's theorem. **84m:46086**
- Katayama, Yoshikazu Remarks on a C^* -dynamical system. **84c:46072**
- Kishimoto, Akitaka Ideals of C^* -crossed products by locally compact abelian groups. **84b:46086**
- (with Robinson, Derek W.) On unbounded derivations commuting with a compact group of $*$ -automorphisms. **84c:46078**
- Landstad, Magnus B. Compact ergodic groups of automorphisms. **84a:46149**
- Lau, Anthony To Ming See Green, William L., **84c:46071**
- Longo, Roberto Algebraic and modular structure of von Neumann algebras of physics. **84g:46099**
- Ocneanu, Adrian A Rohlin type theorem for groups acting on von Neumann algebras. **84d:46108**

- Ouchi, Moto Action of semigroups on Borel spaces and von Neumann algebras of groupoids of type II_1 . **84b:46092**
- Pedersen, Gert K. Dynamical systems and crossed products. **84a:46151**
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- Derivations of C^* -algebras which are invariant under an automorphism group. **II. 84g:46100b**
- Powers, Robert T. See Baker, B. Mitchell, **84f:46091**
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- Takai, H. Differentiable structure on nonabelian C^* -algebras. **84d:46109**
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- Weiss, Benjamin See Connes, Alain; et al., **84b:46090**
- Zsidó, László See Elliott, George A., **84b:46084**

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- Alcántara, Julio (with Dubin, D. A.) The KMS condition for $*$ -algebras. (See **84j:82002**)
- Arsen'ev, A. A. Invariant measures for classical dynamical systems with infinite phase space. (Russian) **(84j:82006)**
- Bezughyi, S. I. (with Golodets, V. Ya.) Nonamenable groups and their ergodic actions in spaces with a measure. (Russian) **(84d:28028)**
- Connes, Alain Classification des facteurs. [Classification of factors] **(84c:46068)**
- Đàng Ngọc Nghiêm A random ergodic theorem in von Neumann algebras. **(84b:46076)**
- Dubin, D. A. See Alcántara, Julio, (See **84j:82002**)
- Golodets, V. Ya. See Bezughyi, S. I., **(84d:28028)**
- Hamachi, Toshihiro (with Osikawa, Motosige) ★Ergodic groups of automorphisms and Krieger's theorems. **(84d:46099)**
- Hawkins, Jane Non-ITPFI diffeomorphisms. **(84c:58129)**
- Johnson, B. E. Noncommutative generalizations of mathematics. **(84g:46077)**
- Kastler, Daniel Does ergodicity plus locality imply the Gibbs structure? **(84k:82038)**
- (with Takesaki, Masamichi) Group duality and the Kubo-Martin-Schwinger condition. **II. (84g:82008)**
- Kruszyński, Paweł (with Woronowicz, Stanisław L.) A noncommutative Gel'fand-Naimark theorem. **(84b:46068)**
- Majewski, W. A. Remarks on positive semigroups. **(84j:46087)**
- Moore, Calvin C. Ergodic theory and von Neumann algebras. **(84f:22013)**
- Munch, Niels Juul The fixed-point algebra of tensor-product actions of finite abelian groups on UHF-algebras. **(84m:46075)**
- Osikawa, Motosige See Hamachi, Toshihiro, **(84d:46099)**
- Rédei, Miklós On the linear response theory of infinite quantum systems. **(84g:82015)**
- Saito, Kichi-Suke Invariant subspaces and cocycles in nonselfadjoint crossed products. **(84c:46141)**
- Samoilenko, Yu. S. Spectral theory of operator-valued functions and of inductive limits of locally compact groups and their unitary representations. (Russian) **(84b:22012)**
- Takesaki, Masamichi See Kastler, Daniel, **(84g:82008)**
- Woronowicz, Stanisław L. See Kruszyński, Paweł, **(84b:46068)**

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- Araki, Huzihiro Theory of v. Neumann algebras and quantum statistical mechanics. **84j:46090**
- Doplicher, Sergio (with Spera, Mauro) Representations obeying the spectrum condition. **84c:46073**
- Hudson, R. L. (with Streater, R. F.) Itô's formula is the chain rule with Wick ordering. **84m:46088**
- Hugenholtz, N. M. C^* -algebras and statistical mechanics. **84a:46153**
- Sakai, Shôichirô Phase transition free states on UHF algebras. **84j:46091**
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- Streater, R. F. See Hudson, R. L., **84m:46088**

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- Accardi, Luigi A quantum formulation of the Feynman-Kac formula. (See **84k:82005**)
- Araki, Huzihiro A remark on Machida-Namikawa theory of measurement. **(84m:81018)**
- On chemical potential. (See **84k:82005**)
- Belavkin, V. P. (with Staszewski, P.) C^* -algebraic generalization of relative entropy and entropy. **(84b:46083)**
- Buchholz, Detlev The physical state space of quantum electrodynamics. **(84i:81051)**
- Carey, A. L. (with Hurst, C. A.; O'Brien, D. M.) Automorphisms of the canonical anticommutation relations and index theory. **(84c:81022)**
- Cassinelli, G. (with Zanghi, N.) Conditional probabilities in quantum mechanics. **I. Conditioning with respect to a single event. (Italian summary) (84i:81004)**
- Doplicher, Sergio Local aspects of superselection rules. **(84b:81090)**
- Garbaczewski, Piotr Quantization of spinor fields. **III. Fermions on coherent (Bose) domains. (84c:81028)**
- Hispel, Peter D. (with Longo, Roberto) Modular structure of the local algebras associated with the free massless scalar field theory. **(84b:81057)**
- Hofmann, Gerald Topologien auf der Algebra der Testfunktionen der Quantenfeldtheorie. [Topologies on the algebra of test functions of quantum field theory] **(84a:81019)**

- Hudson, R. L. (with Ion, P. D. F.) The Feynman-Kac formula for a canonical quantum-mechanical Wiener process. (84c:82036)
- Hugenholtz, N. M. On the inverse problem in statistical mechanics. (84a:82004)
- Hurst, C. A. See Carey, A. L.; et al. (84c:81022)
- Ion, P. D. F. (with von Waldenfels, W.) Zeitgeordnete Momente des weissen klassischen und des weissen Quantenrauschens. [Time-ordered moments of classical white and quantum white noise] (84m:81209)
- See also Hudson, R. L., (84c:82036)
- Klein, Abel (with Landau, Lawrence J.) Stochastic processes associated with KMS states. (84m:82033)
- Landau, Lawrence J. See Klein, Abel, (84m:82033)
- Longo, Roberto Algebraic and modular structure of von Neumann algebras of physics. (84g:46099)
- See also Hislop, Peter D., (84c:81057)
- Maassen, Hans On the invertibility of Möller morphisms. (84m:82036)
- Majewski, W. A. On the relationship between the reversibility of dynamics and balance conditions. (84j:82032)
- Mishnev, O. G. Algebraic justification of the theory of Dirac transformations and Feynman's formulation of quantum mechanics. (Russian) (84b:81012)
- Morchio, G. (with Strocchi, F.) A nonperturbative approach to the infrared problem in QED: construction of charged states. (84g:81073)
- Narnhofer, Heide On local temperature. (84m:82038)
- O'Brien, D. M. See Carey, A. L.; et al. (84c:81022)
- Petrov, D. A. A note on quantum symmetries as positive transformations. (84m:81037)
- Rieckers, A. Decomposition of the coherence relation in C^* -algebraic many body physics. (84f:82016)
- Roberts, John E. New light on the mathematical structure of algebraic field theory. (84b:81058)
- Sewell, Geoffrey L. W^* -dynamics of infinite quantum systems. (84f:82017)
- Staszewski, P. See Belavkin, V. P., (84b:46083)
- Streater, R. F. Quantum stochastic processes. (See 84j:81006)
- Strocchi, F. See Morchio, G., (84g:81073)
- Summers, Stephen J. Normal product states for fermions and twisted duality for CCR- and CAR-type algebras with application to the Yukawa₂ quantum field model. (84i:81054)
- Verbeure, A. Dissipation and equilibrium. (See 84b:82005)
- von Waldenfels, W. See Ion, P. D. F., (84m:81209)
- Warchall, Henry A. Implementation of automorphism groups in certain representations of the canonical commutation relations. (84g:81025)
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- Zanghi, N. See Cassinelli, G., (84i:81004)
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- Arazy, Jonathan Linear-topological classification of matroid C^* -algebras. 84i:46069
- Arzumanyan, V. A. (with Grigoryan, S. A.) Uniform algebras of operator fields. (Russian. English summary) 84m:46089
- Behncke, Horst Finite-dimensional representations of JB algebras. 84c:46079
- Biktshev, R. A. Spectra of pseudodifferential operators over C^* -algebras. (Russian. English summary) 84j:46092
- Chu, Cho Ho On the Radon-Nikodým property in Jordan algebras. 84i:46070
- Friedman, Yaakov (with Russo, Bernard) Function representation of commutative operator triple systems. 84h:46095
- (with Russo, Bernard) Contractive projections on operator triple systems. 84m:46090
- Grigoryan, S. A. See Arzumanyan, V. A., 84m:46089
- Jajte, Ryszard On curves in von Neumann algebras. (Russian summary) 84c:46080
- King, W. P. C. Semifinite traces on JBW-algebras. 84d:46110
- Landesman, E. M. (with Russo, Bernard) The second dual of a C^* -ternary ring. 84h:46094
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- Russo, Bernard See Landesman, E. M., 84h:46094; Friedman, Yaakov, 84h:46095 and 84m:46090
- Thomas, Erik G. F. The conical measure associated with a commutative C^* -algebra. 84b:46087
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- Apostol, Constantin (with Martin, M.) A C^* -algebra approach to the Cowen-Douglas theory. (84j:47023)
- Araki, Huzihiro (with Juszak, Jean-Paul) On a certain class of \ast -algebras of unbounded operators. (84g:47041)
- Baaj, Saad (with Julg, Pierre) Théorie bivalente de Kasparov et opérateurs non bornés dans les C^* -modules hilbertiens. (English summary) [Bivariant Kasparov theory and unbounded operators on Hilbert C^* -modules] (84m:46091)
- Biktshev, R. A. Spectra of pseudodifferential operators over C^* -algebras. (Russian) (84j:58120)
- Bridges, Douglas S. A constructive look at positive linear functionals on $\mathcal{C}(H)$. (84f:47056)
- Cohen, Joel M. (with De-Michele, Leonede) The radial Fourier-Stieltjes algebra of free groups. (84j:22006)

- Combes, Alain (with Moscovici, Henri) The L^2 -index theorem for homogeneous spaces of Lie groups. (84f:58108)
- (with Moscovici, Henri) Invariant elliptic equations and discrete series representations. (See 84m:46003)
- De-Michele, Leonede See Cohen, Joel M., (84j:22006)
- Dupré, Maurice J. (with Fillmore, Peter A.) Triviality theorems for Hilbert modules. (84h:46096)
- Fillmore, Peter A. See Dupré, Maurice J., (84h:46096)
- French, W. P. (with Luukkainen, Jouni; Price, John F.) The Tannaka-Krein duality principle. (84f:22011)
- Handelman, David E. Rings with involution as partially ordered abelian groups. (84m:16005)
- de la Harpe, Pierre Classical groups and classical Lie algebras of operators. (84d:22034)
- Hawkins, Jane (with Schmidt, Klaus D.) On C^2 -diffeomorphisms of the circle which are of type III₁. (84g:58069)
- Herman, Richard H. Norm close group actions. (See 84m:46003)
- Jajte, Ryszard (with Loeb, Richard I.) Gleason measures and some inner products on the algebra of bounded operators on a Hilbert space. (84d:47060)
- Julg, Pierre See Baaj, Saad, (84m:46091)
- Juszak, Jean-Paul See Araki, Huzihiro, (84g:47041)
- Kasimov, V. A. Kuiper's theorem for the Hilbert module $l_2(A)$. (Russian. English and Azerbaijani summaries) (84m:58012)
- Kawamura, Shinzō Invariant subspaces for shift operators of multiplicity one. (84i:47005)
- Kerov, S. V. See Vershik, A. M., (84a:22016)
- Kholevo, A. S. Generalized imprimitivity systems for abelian groups. (Russian) (84m:22008)
- Kim, Yongchan See Lee, Sanghun, (84d:46073)
- Kubo, Fumio Conditional expectations and operations derived from network connections. (84c:47004)
- Lebedev, A. V. Invertibility of elements in algebras of operators with shift. I. (Russian. English summary) (84b:47053)
- Lee, Sanghun (with Kim, Yongchan) Double B -centralizers of pre-Hilbert B -modules. (84d:46073)
- Liedl, Roman Noncommutative calculus and Pilgerschritt transformation. (84a:22021)
- Loeb, Richard I. See Jajte, Ryszard, (84d:47060)
- Luukkainen, Jouni See French, W. P.; et al., (84f:22011)
- Martin, M. See Apostol, Constantin, (84j:47023)
- Moscovici, Henri See Combes, Alain, (84f:58108) and (See 84m:46003)
- Powers, Robert T. Algebras of unbounded operators. (84a:47059)
- Price, John F. See French, W. P.; et al., (84f:22011)
- Pulmannová, Sylvia Individual ergodic theorem on a logic. (Russian summary) (84f:81010)
- Radjabipour, M. Operator algebras. (Farsi) (See 84i:00019)
- Schmidt, Klaus D. See Hawkins, Jane, (84g:58069)
- Slowikowski, W. Commutative Wick algebras. II. Square integrable martingale algebras and Ito algebras. (84m:46093b)
- Commutative Wick algebras. I. The Bargmann, Wiener and Fock algebras. (84m:46093a)
- Stavinoha, Pavel On limits of L_p -norms of linear operators. (84b:46081)
- Tadić, M. The C^* -algebra of $SL(2, k)$. (Serbo-Croatian summary) (84g:22038)
- Valette, Alain Extensions of C^* -algebras: a survey of the Brown-Douglas-Fillmore theory. (84h:46098)
- Varfolomeev, V. V. The structure of some group C^* -algebras. (Russian) (84j:46102)
- Vershik, A. M. (with Kerov, S. V.) Asymptotic theory of the characters of a symmetric group. (Russian) (84a:22016)
- Wulfssohn, Aubrey Phase-space distributions which are probability distributions. (84c:81016)

46Mxx Categorical methods [See also 18-XX.]

46M05 Tensor products

- Alcántara, Julio Order properties of a class of tensor algebras. 84b:46088
- de Brucq, Denis See Vasilache, Sergiu, 84c:46083
- Dutta, M. See Tewari, U. B.; et al., 84c:46082
- Harsen, Jakob Charakterisierung lokalkonvexer Räume mit Hilfe von Tensornormtopologien. [Characterization of locally convex spaces by means of tensor norm topologies] 84b:46089
- Heinrich, Stefan (with Nielsen, N. J.; Olsen, G. H.) Order bounded operators and tensor products of Banach lattices. 84a:46154
- Kajiser, Sten Multilinear forms on l^p -spaces (according to T. P. Pereira). (See 84m:46006)
- Kalton, N. J. An example in the theory of bilinear maps. 84j:46093
- Khalil, Roshdi Pointwise multipliers. (Arabic summary) 84c:46074
- Krichevets, A. N. Calculation of the global dimension of tensor products of Banach algebras and a generalization of a theorem of Phillips. (Russian) 84g:46103
- On an algebra $\mathcal{C}(\Omega)$ of small global dimension two and its tensor powers. (Russian. English summary) 84g:46104
- Madan, Shobha See Tewari, U. B.; et al., 84c:46082
- Nielsen, N. J. See Heinrich, Stefan; et al., 84a:46154
- Oja, Eve Sur la réflexivité des produits tensoriels et les sous-espaces des produits tensoriels projectifs. [Reflexivity of tensor products and subspaces of projective tensor products] 84i:46071
- Olsen, G. H. See Heinrich, Stefan; et al., 84a:46154
- Pietsch, Albrecht Tensor products of sequences, functions, and operators. 84c:46075
- Tewari, U. B. (with Dutta, M.; Madan, Shobha) Tensor products of commutative Banach algebras. 84c:46082

Vasilache, Sergiu (with de Brucq, Denis) Propriétés de continuité du produit de composition dans des produits tensoriels d'espaces localement convexes. I. Cas des produits tensoriels inductifs. (English summary) [Continuity properties of the composition product in tensor products of locally convex spaces. I. The case of inductive tensor products] **84e:46083**

Waelbroeck, Lucien Les espaces de Banach plats sont ultraplats. [Flat Banach spaces are ultraflat] **84e:46155**

secondary classifications:

Behrends, Ehrhard Multiplier representations and an application to the problem whether $A \otimes X$ determines A and/or X . **(84e:46050)**

Cheney, E. W. See **Respess, J. R., Jr.**, **(84e:41030)**

Cobos, F. See **Villamarín, Manuel-Antonio Fugarolas**, **(84e:47023)**

Collins, Heron S. (with Ruess, Wolfgang M.) Duals of spaces of compact operators. **(84e:47062)**

Friedland, Shmuel (with Robbin, J. W.) Symmetries of tensor products. **(84f:15033)**

Hernández, Roberto Espaces L^p , factorisation et produits tensoriels dans les espaces de Banach. (English summary) [L^p spaces, factorization and tensor products in Banach spaces] **(84e:46014)**

Johnson, David Lee (with Lahr, Charles D.) Weak approximate identities and multipliers. **(84e:46106)**

Krishnamachari, N. S. Tensor product of Fredholm operators on non-Archimedean Banach spaces. **(84j:47014)**

Lahr, Charles D. See **Johnson, David Lee**, **(84e:46106)**

Mägel, G. Bilinear maps from $C(X) \times M(X)$ to $M(X)$. **(84e:46064)**

Martikainen, Olli Convolution of generalized vector measures. **(84e:46081)**

Milman, Mario ★ Some new function spaces and their tensor products. **(84i:46041)**

Nielsen, N. J. The ideal property of tensor products of Banach lattices with applications to the local structure of spaces of absolutely summing operators. **(84e:46023)**

Okniński, Jan Spectrally finite algebras and tensor products. **(84j:16014)**

Respess, J. R., Jr. (with Cheney, E. W.) Best approximation problems in tensor-product spaces. **(84e:41030)**

Robbin, J. W. See **Friedland, Shmuel**, **(84f:15033)**

Ruess, Wolfgang M. See **Collins, Heron S.**, **(84e:47062)**

Shtern, A. I. Factorization and irreducible representations of a direct product of groups. (Russian. English summary) **(84e:22008)**

Tong, Yu Sun Tensor product spaces with indefinite inner products and linear operators on these spaces. (Chinese. English summary) **(84e:47051)**

Turpin, Philippe Représentation fonctionnelle des espaces vectoriels topologiques. (English summary) [Functional representation of topological vector spaces] **(84e:46004)**

Villamarín, Manuel-Antonio Fugarolas (with Cobos, F.) On Schauder bases in the Lorentz operator ideal. **(84e:47023)**

Wrobel, Volker Tensor products of linear operators in locally convex spaces. **(84e:47006)**

Wu, Liang Sen Tensor products of preclosed operators on C^* -algebras. **(84e:46071)**

46M10 Projective and injective objects

secondary classifications:

Indith, Mentzel A coseparator in a category of cones. **(84e:46004)**

46M15 Functors

Bourdaud, Gérard Quelques aspects de la dualité en analyse fonctionnelle. [Some aspects of duality in functional analysis] **84e:46072**

Kajiser, Sten (with Pelletier, Joan Wick) A categorical framework for interpolation theory. **84j:46094**

Mulvey, C. J. (with Pelletier, Joan Wick) The dual locale of a seminormed space. **84e:46052**

Nel, L. D. Bornological L_1 -functors as Kan extensions and Riesz-like representations. **84j:46095**

Pelletier, Joan Wick (with Rosebrugh, Robert) On subcategories of Banach spaces in sheaves. **84e:46051**

Tensor norms and operators in the category of Banach spaces. **84e:46156**

See also **Kajiser, Sten**, **84j:46094** and **Mulvey, C. J.**, **84e:46052**

Rosebrugh, Robert See **Pelletier, Joan Wick**, **84e:46051**

Sydow, Walter On hom-functors and tensor products of topological vector spaces. **84j:46096**

secondary classifications:

Braun, W. (with Feichtinger, Hans G.) Banach spaces of distributions having two module structures. **(84e:46062)**

Bunyav, M. M. On the closed graph theorem. (Russian) **(84j:46005)**

Chien, Mao Ting Duality of C^* -algebra fibre bundles. **(84e:46088)**

Decin, Elena On some examples concerning the wave functor and the scattering theory for discrete time linear and nonlinear systems. (Romanian summary) **(84e:47007)**

Feichtinger, Hans G. See **Braun, W.**, **(84e:46062)**

Hitchcock, A. G. Categorical anatomy of closed graph and open mapping theorems. **(84e:46010)**

Hoffmann, Rudolf-E. Minimal topological completion of ${}_k\text{Ban}_1 \rightarrow {}_k\text{Vec}$. **(84c:18003)**

Hong, S. S. (with Nel, L. D.) Spectral dualities involving mixed structures. **(84c:18005)**

Kováčik, P. I. A class of holomorphic mappings. (Russian) **(84j:46076)**

Min, Kyung Chan Exponential laws for ordered "topological" vector spaces. **(84f:18016)**

Nel, L. D. See **Hong, S. S.**, **(84c:18005)**

Seda, Anthony Karel On the categories $\text{Sp}(X)$ and $\text{Ban}(X)$. **(84e:58009)**

46M20 Methods of algebraic topology (cohomology, sheaf and bundle theory, etc.) [See also 14F05, 18Fxx, 55Rxx.]

Baaj, Saad (with Julg, Pierre) Théorie bivariante de Kasparov et opérateurs non bornés dans les C^* -modules hilbertiens. (English summary) [Bivariant Kasparov theory and unbounded operators on Hilbert C^* -modules] **84m:46091**

Ballico, Edoardo (with Ferreira, Arturo V.; Napolitani, Pier Daniele) On first Čech groups H^0, H^1 of maximal ideal spaces. (Italian summary) **84j:46097**

Cuntz, Joachim K -theory for certain C^* -algebras. II. **84e:46053**

Douglas, Ronald G. On the smoothness of elements of Ext . **84f:46093**

Dupré, Maurice J. (with Fillmore, Peter A.) Triviality theorems for Hilbert modules. **84e:46096**

Ferreira, Arturo V. See **Ballico, Edoardo**; et al., **84j:46097**

Fillmore, Peter A. See **Dupré, Maurice J.**, **84e:46096**

Gierz, Gerhard ★ Bundles of topological vector spaces and their duality. **84e:46076**

Johnson, B. E. Low-dimensional cohomology of Banach algebras. **84e:46054**

Julg, Pierre See **Baaj, Saad**, **84m:46091**

Kasimov, V. A. A property of Hilbert modules and Fredholm operators over C^* -algebras. (Russian. English and Azerbaijani summaries) **84j:46099**

Homotopy properties of the general linear group of the Hilbert module $I_2(A)$. (Russian) **84j:46098**

(Keimel, Klaus) See **Gierz, Gerhard**, **84e:46076**

Möller, Helmut Darstellung von G -Räumen durch Schnitte in Bündeln. [Representation of G -spaces by sections in bundles] **84j:46100**

Napolitani, Pier Daniele See **Ballico, Edoardo**; et al., **84j:46097**

Pimsner, M. (with Popa, Sorin; Voiculescu, Dan) Remarks on ideals of the

Calkin-algebra for certain singular extensions. **84e:46073**

Popa, Sorin See **Pimsner, M.**; et al., **84e:46073**

Rosenberg, Jonathan (with Schochet, Claude) Comparing functors classifying extensions of C^* -algebras. **84j:46101**

The role of K -theory in noncommutative algebraic topology. **84e:46097**

Schochet, Claude Topological methods for C^* -algebras. I. Spectral sequences. **84j:46105a**

Topological methods for C^* -algebras. II. Geometry resolutions and the Künneth formula. **84j:46105b**

See also **Rosenberg, Jonathan**, **84j:46101**

Schochetman, I. E. Generalized group algebras and their bundles. **84f:46094**

Shul'man, V. S. Modules over operator algebras. (Russian) **84e:46055**

Valette, Alain Extensions of C^* -algebras: a survey of the Brown-Douglas-Fillmore theory. **84e:46098**

Varfolomeev, V. V. The structure of some group C^* -algebras. (Russian) **84j:46102**

Voiculescu, Dan See **Pimsner, M.**; et al., **84e:46073**

secondary classifications:

Baker, C. W. A closed graph theorem for Banach bundles. **(84e:46010)**

Baum, Paul (with Douglas, Ronald G.) K homology and index theory. **(84d:58075)**

(with Douglas, Ronald G.) Toeplitz operators and Poincaré duality. **(84m:58139)**

Biktshev, R. A. Spectra of pseudodifferential operators over C^* -algebras. (Russian. English summary) **(84j:46092)**

Chien, Mao Ting Continuous sections of C^* -bundles. **(84e:46061)**

C^* -algebra fibre bundles. **(84j:46082)**

Connes, Alain (with Moscovici, Henri) L^2 -index theory on homogeneous spaces and discrete series representations. **(84e:58076)**

Cuntz, Joachim K -theory for certain C^* -algebras. **(84e:46058)**

The K -groups for free products of C^* -algebras. **(84f:46078)**

Davidson, Kenneth R. Lifting commuting pairs of C^* algebras. **(84e:46078)**

Douglas, Ronald G. See **Baum, Paul**, **(84d:58075)** and **(84m:58139)**

Effros, Edward G. ★ Dimensions and C^* -algebras. **(84e:46042)**

Fack, Thierry (with Skandalis, Georges) Some properties of the C^* -algebra associated with a foliation. **(84e:58077)**

Handelman, David E. Extensions for AF C^* algebras and dimension groups. **(84e:46063)**

de la Harpe, Pierre Classical groups and classical Lie algebras of operators. **(84d:22034)**

Herman, Richard H. (with Rosenberg, Jonathan) Norm-close group actions on C^* -algebras. **(84e:46085)**

Johnson, B. E. Noncommutative generalizations of mathematics. **(84j:46077)**

Ketonen, Timo (with Nyberg, Kaisa) Twisted sums of nuclear Fréchet spaces. **(84e:46002)**

Krichevets, A. N. On the connection between the homological properties of some Banach modules and questions of the geometry of Banach spaces. (Russian. English summary) **(84j:46071)**

Calculation of the global dimension of tensor products of Banach algebras and a generalization of a theorem of Phillips. (Russian) **(84j:46103)**

On an algebra $C(\Omega)$ of small global dimension two and its tensor powers. (Russian. English summary) **(84j:46104)**

Mingo, James A. On the contractibility of the unitary group of the Hilbert space over a C^* -algebra. **(84e:58008)**

Moscovici, Henri See **Connes, Alain**, **(84e:58076)**

Nagamachi, Shigeaki The theory of vector valued Fourier hyperfunctions of mixed type. I, II. **(84e:46098)**

Nyberg, Kaisa See **Ketonen, Timo**, **(84e:46002)**

Pechanec-Dražoň, J. Sheaves of metric lattices. (Russian and Czech summaries) **(84d:54017)**

Embedding of presheaves into dual unit balls. (Russian and Czech summaries) **(84d:54018)**

Phillips, John Automorphisms of C^* -algebra bundles. **(84e:46067)**

Pimsner, M. (with Voiculescu, Dan) K -groups of reduced crossed products by free groups. **(84e:46092)**

Plymen, R. J. The Weyl bundle. **(84e:58058)**

- Pugach, L. I.** The homological dimension of ideals of function algebras, and analytic structure. (Russian) (84f:46076b)
 Projective and flat ideals of function algebras and their connection with analytic structure. (Russian) (84f:46076c)
 Homological dimension of Banach algebras of smooth functions. (Russian) (84f:46076a)
Renault, Jean N. C^* -algebras of groupoids and foliations. (84c:46068)
Rieffel, Marc A. Dimension and stable rank in the K -theory of C^* -algebras. (84g:46085)
Rosenberg, Jonathan See **Herman, Richard H.** (84b:46085)
Seda, Anthony Karel Banach bundles and a theorem of J. M. G. Fell. (84d:22006)
Series, Caroline An application of groupoid cohomology. (84f:22014)
Skandalis, Georges See **Fack, Thierry**. (84c:58077)
Voiculescu, Dan See **Pimsner, M.** (84d:46092)
Zholkevich, G. N. Cohomology of von Neumann algebras. (Russian) (84c:46064)
 C^* -algebras and K -theory ★ C^* -algebras and K -theory. (84h:46002)
 Symposium:
 C^* -algebras and K -theory ★ C^* -algebras and K -theory. (84h:46002)

46M35 Abstract interpolation of topological vector spaces

- Antoine, Jean-Pierre** (with Karwowski, Witold) Interpolation theory and refinement of nested Hilbert spaces. 84h:46099a
 (with Karwowski, Witold) Erratum: "Interpolation theory and refinement of nested Hilbert spaces". 84h:46099b
Asekritova, I. U. The K -functional of the couple $(K_{\theta_0}(\vec{X}), K_{\theta_1}(\vec{X}))$. (Russian) 84h:46100
 On some properties of general approximation spaces. (Russian) 84d:46111
Bertolo, J. I. (with Fernandez, Dicesar Lass) A note on the maximum modulus principle for vector valued function on the polystrip. (French and Romanian summaries) 84a:46157
 (with Fernandez, Dicesar Lass) On the connection between the real and the complex interpolation method for several Banach spaces. 84a:46158
Brillard, A. Sur l'interpolation des opérateurs maximaux monotones. (English summary) [On the interpolation of maximal monotone operators] 84a:46159
Edmunds, David E. See **Teixeira, M. F.** 84c:46084
Fernandez, Dicesar Lass On the duality of interpolation spaces of several Banach spaces. 84b:46090
 See also **Bertolo, J. I.** 84a:46157 and 84a:46158
Gorokhov, E. V. A smoothing approximation process and interpolation theorems. (Russian) 84m:46092
Gustavsson, Jan (with Peetre, Jaak) Properties of the L function. 84a:46160
Heinig, Hans P. Interpolation of quasinormed spaces involving weights. 84a:46161
Janson, Svante On the interpolation of sublinear operators. 84d:46112
Karwowski, Witold See **Antoine, Jean-Pierre**. 84h:46099
Kosaki, Hideki Interpolation theory and the Wigner-Yanase-Dyson-Lieb concavity. 84h:46101
Krbec, M. Modular interpolation spaces. I. (German and Russian summaries) 84c:46056
Krein, S. G. (with Petunin, Ju. I.; Semenov, E. M.) ★ Interpolation of linear operators. 84j:46103
 (with Nikolova, L. I.) A complex interpolation method for a family of Banach spaces. (Russian) 84a:46162
Krepkogorskii, V. L. Two-dimensional K -families. (Russian) 84h:46102
Levy, Mireille L'espace d'interpolation réel $(A_0, A_1)_{\theta, p}$ contient l_p . [The real interpolation space $(A_0, A_1)_{\theta, p}$ contains l_p] 84a:46163
Nikolova, L. I. See **Krein, S. G.** 84a:46162
Peetre, Jaak See **Gustavsson, Jan**. 84a:46160
Petunin, Ju. I. See **Krein, S. G.**; et al. 84j:46103
Pustylnik, E. I. Permutation-interpolation Hilbert spaces. (Russian) 84c:46077
Semenov, E. M. See **Krein, S. G.**; et al. 84j:46103
(Szűcs, József) See **Krein, S. G.**; et al. 84j:46103
Teixeira, M. F. (with Edmunds, David E.) Interpolation theory and measures of noncompactness. 84c:46084

secondary classifications:

- Bereznoi, E. I.** On a theorem of G. Ya. Lozanovskii. (Russian) (84a:46060)
Bui Huy Qui Weighted Besov and Triebel spaces: interpolation by the real method. (84f:46038)
De Souza, Geraldo Soares An interpolation of operators. (84j:46067)
Dragilev, M. M. On the continuability of absolute bases. (Russian) (84c:46002)
Gustavsson, Jan On interpolation of weighted L^p -spaces and Ovchinnikov's theorem. (84c:46026)
Halmos, Paul Richard Quadratic interpolation. (84d:47038b)
Janson, Svante (with Jones, Peter Wilcox) Interpolation between H^p spaces: the complex method. (84c:46021)
Jones, Peter Wilcox See **Janson, Svante**. (84c:46021)
Jurkat, W. B. (with Sampson, Gary) On weak restricted estimates and endpoints problems for convolutions with oscillating kernels. II. (84c:47040)
Kajiser, Sten (with Pelletier, Joan Wick) A categorical framework for interpolation theory. (84j:46094)
Kalitin, A. S. (with Milovidov, S. P.) An interpolation theorem for an integral operator with partial integrals. (Russian) (84d:45040)
Liljström, J. Interpolation of weighted spaces of differentiable functions on \mathbb{R}^d . (84c:46030)
MacCher, Barbara D. Interpolation between H^1 and L^∞ . (84d:46030)
Maligranda, Lech Interpolation of Lipschitz operators for the pairs of spaces (L^p, L^∞) and (l^p, c_0) , $0 < p < \infty$. (84j:46044)
 On Hardy's inequality in weighted rearrangement invariant spaces and applications. I, II. (84g:46043)

- Maslyuchenko, V. K.** Conditions for the inclusion of intersections and unions of spaces $L_p(\mu)$ with weight. (Russian) (84a:46064)
Mekler, A. A. Averaged ideal spaces and interpolation between L_∞ and L_1 . (Russian) (84c:46024)
Milman, Mario ★ Some new function spaces and their tensor products. (84i:46041)
Milovidov, S. P. See **Kalitin, A. S.** (84d:45040)
Nakamura, Akihiro On the relation between the compatible linear topologies and their bases in F -spaces. (84f:46004)
Novikov, S. Ya. A characteristic of subspaces of a symmetric space. (Russian) (84h:46039)
Ovchinnikov, V. I. Interpolation in quasi-Banach Orlicz spaces. (Russian) (84c:46029)
Peetre, Jaak Locally analytically pseudoconvex topological vector spaces. (84a:46066)
Pelletier, Joan Wick See **Kajiser, Sten**. (84j:46094)
Pietsch, Albrecht Eigenvalues of integral operators. II. (84c:47025)
Sampson, Gary See **Jurkat, W. B.** (84c:47040)
Schechter, Eric Interpolation of nonlinear partial differential operators and generation of differentiable evolutions. (84a:34074)
Shleinberg, A. M. Inequalities of weak type for translation-invariant operators. (Russian. English and Georgian summaries) (84c:47041)
Vaughan, D. C. A weighted Hardy space variant of the Marcinkiewicz interpolation theorem. (84c:46036)
Zolotarëv, A. A. L^p spaces with respect to a state on a von Neumann algebra, and interpolation. (Russian) (84c:46070)

46M40 Inductive and projective limits [See also 46A12.]

46M99 None of the above, but in this section

secondary classifications:

- Edgar, G. A.** An ordering for the Banach spaces. (84c:46012)
Handelman, David E. Positive matrices and dimension groups affiliated to C^* -algebras and topological Markov chains. (84c:46058)
de la Harpe, Pierre The real symplectic group of a Hilbert space is essentially simple. (84g:22041)
Hilsum, Michel Opérateurs de signature sur une variété lipschitzienne et modules de Kasparov non bornés. (English summary) [Signature operators on Lipschitz manifolds and unbounded Kasparov modules] (84h:58215)
Jezierski, Jerzy A remark on Dold's fixed-point index-homomorphism. (Russian summary) (84d:55002a)
 The Nielsen relation for fibre maps. (Russian summary) (84d:55002b)
Kriegel, A. Die richtigen Räume für Analysis im Unendlich-Dimensionalen. (English summary) [The "right" spaces for analysis in infinite dimensions] (84c:46044)
Kusraev, A. G. Boolean-valued analysis of the duality of extended modules. (Russian) (84f:03045)
Park, Young Sik Fourier ultra-hyperfunctions valued in a Fréchet space. (84a:46093)
Podorozhnyi, M. V. Banach modules over a ring of measurable functions. (Russian) (84c:46107)
Rieffel, Marc A. Morita equivalence for operator algebras. (84c:46045)
Rodman, Leiba On global geometric properties of subspaces in Hilbert space. (84j:46038)
Slowikowski, W. Commutative Wick algebras. II. Square integrable martingale algebras and Ito algebras. (84m:46093b)
 Commutative Wick algebras. I. The Bargmann, Wiener and Fock algebras. (84m:46093a)
Yngvason, Jakob Translationally invariant states and the spectrum ideal in the algebra of test functions for quantum fields. (84c:81052)
Zettl, Heinrich H. Ideals in Hilbert modules and invariants under strong Morita equivalence of C^* -algebras. (84i:46060)

46N05 Miscellaneous applications of functional analysis

- Slowikowski, W.** Commutative Wick algebras. II. Square integrable martingale algebras and Ito algebras. 84m:46093b
 Commutative Wick algebras. I. The Bargmann, Wiener and Fock algebras. 84m:46093a
 secondary classifications:
Assouad, Patrice Plongements isométriques dans L^1 : aspect analytique. [Isometric embeddings in L^1 : analytic aspect] (84c:52017a)
 Comment on: "Isometric embeddings in L^1 : analytic aspect". (French) (84c:52017b)
 (with Deza, Michel) ★ Metric subspaces of L^1 . (84g:51024)
 Sous-espaces de L^1 et inégalités hypermétriques. (English summary) [L^1 subspaces and hypermetric inequalities] (84g:51025)
(Averbukh, V. I.) See **Hutson, V. C. L.**; et al. (84m:46001)
Bach, Alexander Quantum-mechanical aspects of the theorem of Gleason, Kahane, Żelazko. (84h:81003)
Bensoussan, Alain ★ Stochastic control by functional analysis methods. (84c:93059)
Blackadar, Bruce E. The regular representation of local affine motion groups. (84c:22026)
(Browder, Felix E.) See **Fattorini, Hector O.** (84g:34003)
Carey, A. L. (with Hurst, C. A.; O'Brien, D. M.) Fermion currents in 1+1 dimensions. (84c:81065)
Cattaneo, Gianpiero Canonical embedding of an abstract quantum logic into the partial Baer*-ring of complex fuzzy events. (84c:03076)
Coimbra, Elvira ★ On best approximation in vectorially normed spaces. (84h:41027)

- Daniel, Wojciech On a nonunitary evolution of quantum systems. (84c:81005)
- Deza, Michel See Assouad, Patrice, (84g:51024)
- Dickmeis, Werner (with Nessel, Rolf Joachim) Condensation principles with rates. (84c:41041)
- Dimock, J. (with Kay, Bernard S.) Classical wave operators and asymptotic quantum field operators on curved space-times. (French summary) (84c:81097)
- Ek, Bengt Euclidean quantum fields with spin on an indefinite inner product state space. (84c:81043)
- Nuclearity of the differentiable vectors of continuous spin representations. (84c:22019)
- Enss, Volker (with Simon, Barry) Finite total cross sections in nonrelativistic quantum mechanics. (84c:81112)
- Fattorini, Hector O. ★The Cauchy problem. (84g:34003)
- Feinberg, Martin (with Lavine, R.) Thermodynamics based on the Hahn-Banach theorem: the Clausius inequality. (84f:80001)
- Fickett, James W. Approximate isometries on bounded sets with an application to measure theory. (84d:28019)
- de Figueiredo, Rui J. P. See Zyla, L. V., (84m:93031)
- Grusa, Karl-Ulrich ★Zweidimensionale, interpolierende Lg-Splines und ihre Anwendungen. (German) [Two-dimensional interpolating Lg-splines and their applications] (84m:65008)
- Gudder, Stanley P. ★Stochastic methods in quantum mechanics. (84j:81003)
- Representations of Baer *-semigroups and quantum logics in Hilbert space. (84c:81017)
- Hagedorn, George A. An analog of the RAGE theorem for the impact parameter approximation to three particle scattering. (French summary) (84c:81116)
- Horiuchi, Kazuo A mathematical theory of system fluctuations. (84c:93078)
- Hurst, C. A. See Carey, A. L.; et al., (84c:81065)
- Hutson, V. C. L. (with Pym, John S.) ★Приложения функционального анализа и теории операторов. (Russian) [Applications of functional analysis and operator theory] (84m:46001)
- I'in, V. A. (with Imashev, M. S.; Slavov, D. A.) A renormalization procedure that is recurrent with respect to the number of loops. (Russian. English summary) (84c:81060)
- Imashev, M. S. See I'in, V. A.; et al., (84c:81060)
- Ioffe, Alexandre D. Nonsmooth analysis and the theory of fans. (84m:58014)
- Israel, R. B. Banach algebras and Kadanoff transformation. (See 84c:82005)
- Janssen, A. J. E. M. Bargmann transform, Zak transform, and coherent states. (84c:81041)
- Kakihara, Yūichirō Hilbert $B(H)$ -modules with applications. III. (84c:46055)
- Kay, Bernard S. See Dimock, J., (84c:81097)
- (Kirillov, A. A.) See Hutson, V. C. L.; et al., (84m:46001)
- Lavine, R. See Feinberg, Martin, (84f:80001)
- Löwdin, Per-Olov On operators, superoperators, Hamiltonians, and Liouvillians. (84c:82039)
- Mănzatu, Eufrosina The derivation of constitutive equations for materials with fading memory defined on locally convex spaces. (Romanian. English summary) (84j:73007)
- Muro, Masakazu Singular spectrums of hyperfunctions and Fourier transforms of group invariant measures on singular orbits of prehomogeneous vector spaces. I. (84i:58113)
- Németh, A. B. Summation criteria for regular cones with applications. (84f:46010)
- Nessel, Rolf Joachim See Dickmeis, Werner, (84c:41041)
- O'Brien, D. M. See Carey, A. L.; et al., (84c:81065)
- Oden, John Tinsley (with Reddy, Junuthula Narasimha) ★Variational methods in theoretical mechanics. (84b:73001)
- Ojima, Izumi Gauge fields at finite temperatures—"thermofield dynamics" and the KMS condition and their extension to gauge theories. (84c:81072)
- Petrov, A. D. A vector lattice description of a simple quantum system. I. (Russian summary) (84f:81011a)
- A vector lattice description of a simple quantum system. II. (Russian summary) (84f:81011b)
- (Pluzhnikova, N. I.) See Hutson, V. C. L.; et al., (84m:46001)
- Pym, John S. See Hutson, V. C. L., (84m:46001)
- Reddy, Junuthula Narasimha See Oden, John Tinsley, (84b:73001)
- Ricceri, Biagio Applications de théorèmes de semi-continuité inférieure. (English summary) [Applications of lower semicontinuity theorems] (84c:58017)
- Rotar, V. I. Some remarks on existence and properties of the utility function. (Russian) (84d:90016)
- Schochetman, I. E. Integral operators in the theory of induced Banach representations. II. The bundle approach. (84c:22009)
- Šilhavý, M. On the second law of thermodynamics. I. General framework. (84c:80003a)
- On the second law of thermodynamics. II. Inequalities for cyclic processes. (84c:80003b)
- Simon, Barry See Enss, Volker, (84c:81112)
- Slavov, D. A. See I'in, V. A.; et al., (84c:81060)
- Stochel, J. Individual boundedness condition for positive definite sesquilinear form valued kernels. (84j:47072)
- Tal'dykin, A. T. ★Элементы прикладного функционального анализа. (Russian) [Elements of applied functional analysis] (84c:46004)
- Valent, Tullio Local theorems of existence and uniqueness in finite elastostatics. (84b:73019)
- Volovich, I. V. A-supermanifolds and fibrations. (Russian) (84i:58001)
- Walczak, Stanisław On some properties of cones in normed spaces and their application to investigating extremal problems. I. (Polish summary) (84i:49006a)
- The local extremum principle for problems with constraints upon phase coordinates. (Polish summary) (84i:49006b)
- Wu, Xue Mou Approximation transforming theory. I. (Chinese. English summary) (84j:00002)
- Zagrebnev, V. A. The Bogolyubov-Ruelle theorem: a new proof and generalizations. (Russian. English summary) (84j:82028)
- Zyla, L. V. (with de Figueiredo, Rui J. P.) Nonlinear system identification based on a Fock space framework. (84m:93031)

46P05 Functional analysis over fields other than \mathbb{R} or \mathbb{C} ; non-Archimedean functional analysis [See also 12J25, 32E27.]

- Bayod, José M. (with Martínez Maurica, Javier) A characterization of the spherically complete normed spaces with a distinguished basis. (84c:46103)
- Bhaskaran, R. The structure of ideals in the Banach algebra of Lipschitz functions over valued fields. (84f:46095)
- De Grande-De Kimpe, Nicole Non-Archimedean Fréchet spaces generalizing spaces of analytic functions. (84j:46104)
- The non-Archimedean space $\mathcal{C}^\infty(X)$. (84c:46104)
- Dominguez, Jesus M. Non-Archimedean Gelfand theory. (84d:46113)
- Garg, S. K. See Narang, Tuls Das, (84c:46164)
- Jain, Pawan Kumar (with Kapoor, N. M.) T -bases in non-Archimedean Banach spaces. (84j:46105)
- Kapoor, N. M. See Jain, Pawan Kumar, (84j:46105)
- Khan, Ahmad See Siddiqi, Ataulah; et al., (84c:46091)
- Khan, Mohd. Anis See Siddiqi, Ataulah; et al., (84c:46091)
- Martinez Maurica, Javier A note on the extension of continuous linear forms of non-Archimedean normed spaces. (Spanish) (84g:46106)
- See also Bayod, José M., (84c:46103)
- Mikhailova, L. I. Bounded subsets of non-Archimedean Banach spaces and of their rings of continuous operators. (Russian. English summary) (84d:46114)
- Narang, Tuls Das (with Garg, S. K.) An approximation problem in non-Archimedean quasinnormed spaces. (84c:46164)
- Prolla, João B. ★Topics in functional analysis over valued division rings. (84g:46107)
- On the Stone-Weierstrass theorem for modules over non-Archimedean valued fields. (84c:46078)
- On the spectra of topological algebras of functions over valued fields. (84f:46096)
- Siddiqi, Ataulah (with Khan, Ahmad; Khan, Mohd. Anis) Behaviour of 2-operators on non-Archimedean quasi 2-normed spaces. (84b:46091)
- Srivastava, Jagvind Kumar Space of analytic functions over non-Archimedean fields. (84c:46057)
- Woodcock, C. F. A spectral valuation on the ring of p -adic integers. (84b:46092)

secondary classifications:

- Arizmendi Peimbert, Hugo (with Lara, Miguel; Tomás, Francisco) An abstract notion of compact-open topology. (Spanish) (84m:46054)
- El-Mallah, Mohamed Lamei ★Sur les algèbres normées non-associatives. (French) [Nonassociative normed algebras] (84d:46075)
- Escassut, Alain See Sarmant-Durix, Marie-Claude, (84j:30086)
- Fresnel, Jean (with Matignon, Michel) Produit tensoriel topologique de corps valués. [Topological tensor product of fields with valuation] (84m:12025)
- Fuentes Villalba, Fernanda M. A class of compatible topologies in a commutative field K and its relation with the topology induced by a Krull valuation in K . (Spanish) (84c:12034)
- Govaerts, W. Sequentially continuous linear functionals on spaces of continuous functions. (84c:46051)
- Grincevičius, R. (with Markšaitis, H.) Expansion of characteristic functions of open sets of a p -adic integer ring in certain p -polynomials of a p -adic norm, and a special case of the Weierstrass-Stone theorem. (Russian. English and Lithuanian summaries) (84g:12023)
- Katsaras, A. K. On compact operators between non-Archimedean spaces. (84d:47024)
- Krishnamachari, N. S. Tensor product of Fredholm operators on non-Archimedean Banach spaces. (84j:47014)
- Lara, Miguel See Arizmendi Peimbert, Hugo; et al., (84m:46054)
- Markšaitis, H. See Grincevičius, R., (84g:12023)
- Matignon, Michel See Fresnel, Jean, (84m:12025)
- Rangan, G. On the existence of non-Archimedean valued invariant means. (84d:43003)
- Sarmant-Durix, Marie-Claude (with Escassut, Alain) T -suites idempotentes. (English summary) [Idempotent T -sequences] (84j:30086)
- Tomás, Francisco See Arizmendi Peimbert, Hugo; et al., (84m:46054)

46Q05 Nonstandard functional analysis [See also 03Hxx.]

46R05 Constructive functional analysis [See also 03Fxx.]

47-XX OPERATOR THEORY

47-01 Elementary exposition, textbooks

- Halmos, Paul Richard ★A Hilbert space problem book. (84c:47001)
- Thayer, Francisco Javier ★Théorie spectrale. (French) [Spectral theory] (84c:47001)
- Vidav, Ivan ★Linearni operatorji v Banachovih prostorih. (Slovenian) [Linear operators in Banach spaces] (84c:47001)
- secondary classifications:
- Akilov, G. See Kantorovich, L. V., (84c:46001a) and (84c:46001b)
- Arkhangelskii, A. V. ★Конечномерные векторные пространства. (Russian) [Finite-dimensional vector spaces] (84j:15001)
- (Dombrovskii, M.) See Kolmogorov, A. N.; et al., (84i:46002)
- (Embarek, Djilali) See Kantorovich, L. V.; et al., (84c:46001a); (84c:46001b) and Kirillov, A. A.; et al., (84c:46002)
- Fomin, S. V. See Kolmogorov, A. N., (84i:46002)
- Göpfert, Alfred (with Riedrich, Thomas) ★Funktionalanalysis. (German) [Functional analysis] (84c:46001)
- Gvishiani, A. D. See Kirillov, A. A., (84c:46002)

- Hengartner, Walter (with Lambert, Marcel; Reischer, Corina) ★Introduction à l'analyse fonctionnelle. (French) [Introduction to functional analysis] (84f:46001)
- Kantorovich, L. V. (with Akilov, G.) ★Analyse fonctionnelle. Tome 1. (French) [Functional analysis. Vol. 1] (84c:46001a)
- (with Akilov, G.) ★Analyse fonctionnelle. Tome 2. (French) [Functional analysis. Vol. 2] (84c:46001b)
- Kirilov, A. A. (with Gvishiani, A. D.) ★Théorèmes et problèmes d'analyse fonctionnelle. (French) [Theorems and problems of functional analysis] (84c:46002)
- Kolmogorov, A. N. (with Fomin, S. V.) ★Elementos da teoria das funções e de análise funcional. (Portuguese) [Elements of the theory of functions and functional analysis] (84c:46002)
- Lambert, Marcel See Hengartner, Walter; et al., (84f:46001)
- Limaye, Balmohan Vishnu ★Functional analysis. (84c:46001)
- Pap, Endre ★Funkcionalna analiza. (Serbo-Croatian) [Functional analysis] (84m:46002)
- Prugovečki, Eduard ★Quantum mechanics in Hilbert space. (84c:81005)
- Reischer, Corina See Hengartner, Walter; et al., (84f:46001)
- Riedrich, Thomas See Göpfert, Alfred. (84c:46001)
- Taldykin, A. T. ★Элементы прикладного функционального анализа. (Russian) [Elements of applied functional analysis] (84c:46004)

47-02 Advanced exposition (research surveys, monographs, etc.)

- (Fraguela Collar, Andrés) See Maslov, V. P., 84d:47001
- (Lizorkin, P. I.) See Pietsch, Albrecht, 84c:47002
- Maslov, V. P. ★Métodos operacionales. (Spanish) [Operator methods] 84d:47001
- (Miroshin, N. V.) See Pietsch, Albrecht, 84c:47002
- Pietsch, Albrecht ★Операторные идеалы. (Russian) [Operator ideals] 84c:47002
- (Pogrebnikov, A. K.) See Reed, Michael C.; et al., 84c:47002
- Reed, Michael C. (with Simon, Barry) ★Методы современной математической физики. 4. (Russian) [Methods of modern mathematical physics. Vol. IV] 84c:47002
- Simon, Barry See Reed, Michael C., 84c:47002
- (Sushko, V. N.) See Reed, Michael C.; et al., 84c:47002

secondary classifications:

- Altman, Mieczysław Recent development of the theory of contractors and contractor directions and its applications. (84b:47078)
- Feintuch, Avraham (with Sacks, Richard) ★System theory. (84c:93003)
- Pap, Endre ★Funkcionalna analiza. (Serbo-Croatian) [Functional analysis] (84m:46002)
- Pietsch, Albrecht Approximationszahlen, Eigenwerte und Spuren von Operatoren in Banachräumen. [Approximation numbers, eigenvalues and traces of operators in Banach spaces] (84c:47032)
- Power, S. C. ★Hankel operators on Hilbert space. (84c:47037)
- Sacks, Richard See Feintuch, Avraham, (84c:93003)

47-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Browne, Patrick J. Multiparameter problems: the last decade. (84c:34032)
- Dieudonné, Jean O. Toeplitz's formative years. (84i:01083)
- History of functional analysis. (84i:01070)
- Horváth, Miklós The problem of infinitesimal small quantities in the Leibnizian mathematics. (84b:01021)
- (Toeplitz, Otto) See Dieudonné, Jean, (84i:01083)
- Yosida, Kōsaku 50 years of functional analysis. (Japanese) (84i:01052)
- Anniversary:
Birth of Toeplitz, Otto ★Otto Toeplitz, 1881-1940. (German) (84d:01076)
- Toeplitz, Otto ★Otto Toeplitz, 1881-1940. (German) (84d:01076)

47-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- David, Alexander J. (with Meyer, Gerard G. L.) Unstructured mean iterative processes in reflexive Banach spaces. (84d:65038)
- Meyer, Gerard G. L. See David, Alexander J., (84d:65038)

47-06 Proceedings, conferences, etc.

- (Apostol, Constantin) See Invariant subspaces and other topics, 84c:47001
- (Burry, John H.) See Nonlinear analysis and applications, 84c:47002
- (Douglas, Ronald G.) See Invariant subspaces and other topics, 84c:47001
- (Onusu-Ansah, Twum) See Proceedings: International Symposium in West Africa on Functional Analysis and its Applications, 84d:47002
- (Shtaus, A. V.) See Functional analysis, 84c:47001 and 84c:47002
- (Sine, Robert C.) See Fixed points and nonexpansive mappings, 84m:47001
- (Singh, Sankatha Prasad) See Nonlinear analysis and applications, 84c:47002 and Topological methods in nonlinear functional analysis, 84m:47003
- (Sz. Nagy, Béla) See Invariant subspaces and other topics, 84c:47001
- (Thomeier, S.) See Topological methods in nonlinear functional analysis, 84m:47003
- (Voiculescu, Dan) See Invariant subspaces and other topics, 84c:47001
- (Watson, Bruce B.) See Topological methods in nonlinear functional analysis, 84m:47003
- Cincinnati, Ohio ★Fixed points and nonexpansive mappings. 84m:47001
- Conference:
Nonlinear Analysis and Applications ★Nonlinear analysis and applications. 84c:47002

Conference (continued)

- Operator Theory ★Invariant subspaces and other topics. 84c:47001
- Fixed points and nonexpansive mappings ★Fixed points and nonexpansive mappings. 84m:47001
- Functional analysis ★Функциональный анализ. Вып. 18. (Russian) [Functional analysis. No. 18] 84c:47001
- ★Функциональный анализ. Вып. 19. (Russian) [Functional analysis. No. 19] 84c:47002
- Herculane ★Invariant subspaces and other topics. 84c:47001
- Inequalities of operators and related topics ★Inequalities of operators and related topics. (Japanese) 84m:47002
- Invariant subspaces and other topics ★Invariant subspaces and other topics. 84c:47001
- Kumasi ★Proceedings of the Second International Symposium in West Africa on Functional Analysis and its Applications. 84d:47002
- Meeting:
American Mathematical Society ★Fixed points and nonexpansive mappings. 84m:47001
- ★Topological methods in nonlinear functional analysis. 84m:47003
- Nonlinear analysis and applications ★Nonlinear analysis and applications. 84c:47002
- Operators on Banach spaces ★Operators on Banach spaces. (Japanese) 84j:47001
- Proceedings:
International Symposium in West Africa on Functional Analysis and its Applications ★Proceedings of the Second International Symposium in West Africa on Functional Analysis and its Applications. 84d:47002

Session:

- Fixed point theory and applications ★Topological methods in nonlinear functional analysis. 84m:47003
- Fixed points and nonexpansive mappings ★Fixed points and nonexpansive mappings. 84m:47001

St. John's, Nfld. ★Nonlinear analysis and applications. 84c:47002

Symposium:

- Inequalities of operators and related topics ★Inequalities of operators and related topics. (Japanese) 84m:47002
- Operators on Banach spaces ★Operators on Banach spaces. (Japanese) 84j:47001
- West Africa, Functional Analysis and its Applications ★Proceedings of the Second International Symposium in West Africa on Functional Analysis and its Applications. 84d:47002
- Timişoara ★Invariant subspaces and other topics. 84c:47001
- Topological methods in nonlinear functional analysis ★Topological methods in nonlinear functional analysis. 84m:47003
- Toronto, Ont. ★Topological methods in nonlinear functional analysis. 84m:47003

secondary classifications:

- (Beauzamy, Bernard) See Seminar: Geometry of Banach spaces, (84m:46006)
- (Butković, Davor) See Functional analysis, (84c:46002)
- (Kraljević, Hrvoje) See Functional analysis, (84c:46002)
- (Krivine, Jean-Louis) See Seminar: Geometry of Banach spaces, (84m:46006)
- (Kurepa, Svetozar) See Functional analysis, (84c:46002)
- (Mandrekar, Vidyadhar) See Prediction theory and harmonic analysis, (84f:60004)
- (Masani, Pesi) See Prediction theory and harmonic analysis, (84f:60004)
- (Maurey, Bernard) See Seminar: Geometry of Banach spaces, (84m:46006)
- (Nikol'skii, N. K.) See Investigations on linear operators and function theory, (84a:30004) and Investigations on linear operators and the theory of functions, (84c:30002)
- (Pietsch, Albrecht) See Banach space theory and its applications, (84c:46001)
- (Popa, Nicolae) See Banach space theory and its applications, (84c:46001)
- (Ruess, Wolfgang M.) See Proceedings: Conferences on vector measures and integral representations of operators and on functional analysis/Banach space geometry, (84m:46005)
- (Salehi, Habib) See Prediction theory and harmonic analysis, (84f:60004)
- (Singer, Ivan) See Banach space theory and its applications, (84c:46001)
- Banach space theory and its applications ★Banach space theory and its applications. (84c:46001)
- Bucharest ★Banach space theory and its applications. (84c:46001)

Conference:

- Functional Analysis ★Functional analysis. (84c:46002)
- Functional analysis/Banach space geometry ★Proceedings of the conferences on vector measures and integral representations of operators, and on functional analysis/Banach space geometry. (84m:46005)
- Vector measures and integral representations of operators ★Proceedings of the conferences on vector measures and integral representations of operators, and on functional analysis/Banach space geometry. (84m:46005)
- Dubrovnik ★Functional analysis. (84c:46002)
- Essen ★Proceedings of the conferences on vector measures and integral representations of operators, and on functional analysis/Banach space geometry. (84m:46005)
- Functional analysis ★Functional analysis. (84c:46002)
- Investigations on linear operators and function theory ★Исследования по линейным операторам и теории функций. X. (Russian) [Investigations on linear operators and the theory of functions. X] (84a:30004)
- Investigations on linear operators and the theory of functions ★Исследования по линейным операторам и теории функций. XII. (Russian) [Investigations on linear operators and the theory of functions. XII] (84c:30002)
- Paris ★Séminaire de géométrie des espaces de Banach. (French) [Seminar on the geometry of Banach spaces] (84m:46006)
- Prediction theory and harmonic analysis ★Prediction theory and harmonic analysis. (84f:60004)
- Proceedings:
Conferences on vector measures and integral representations of operators and on functional analysis/Banach space geometry ★Proceedings of the conferences on vector measures and integral representations of operators, and on functional analysis/Banach space geometry. (84m:46005)

Seminar:

Geometry of Banach spaces ★ Séminaire de géométrie des espaces de Banach. (French) [Seminar on the geometry of Banach spaces] (84m:46006)

Romanian-GDR, Banach space theory and its applications ★ Banach space theory and its applications. (84d:46001)

47Axx Single linear operators: general theory

47A05 General (adjoints, conjugates, products, inverses, domains, ranges, etc.)

Aguilella, Joaquín See Burillo López, Pedro J.; et al., 84d:47002

Burillo López, Pedro J. (with Aguilella, Joaquín; Fuster Capilla, Robert) Antisymmetric and finite-rank operators in Hilbert spaces. (Spanish. English summary) 84d:47002

Chapman, G. R. (with Lee, Sung J.) Boundary conditions for linear manifolds. II. Algebraic properties and applications. 84d:47003b

van Daele, A. On pairs of closed operators. 84d:47006

Fujii, Masatoshi (with Nakamoto, Ritsuo) An estimation of the transcendental radius of an operator. 84d:47003a

Fuster Capilla, Robert See Burillo López, Pedro J.; et al., 84d:47002

Izumino, Saichi An estimation of the transcendental radius of an operator. II. 84d:47003b

Kaput, Janusz Note on a paper of T. Leżański concerning: "Almost reciprocal operations" [Studia Math. 58 (1976), no. 2, 149-164; MR 56 #16419]. 84i:47001

Kuang, Jiao Xun The representation and approximation of Drazin inverses of linear operators. (Chinese. English summary) 84d:47001

Kubo, Fumio Conditional expectations and operations derived from network connections. 84d:47004

Lee, Sung J. Boundary conditions for linear manifolds. I. 84d:47003a

Addendum to "Boundary conditions for linear manifolds. I" [J. Math. Anal. Appl. 73 (1980), no. 2, 336-380]. 84m:47004

(with Walters, Terry J.) Boundary conditions for linear manifolds. III.

Infinite-dimensional adjoints via solution spaces. 84d:47003c

(with Nashed, M. Zubair) Least-squares solutions of multivalued linear operator equations in Hilbert spaces. 84d:47002

See also Chapman, G. R., 84d:47003b

(Leżański, Tadeusz) See Kaput, Janusz, 84i:47001

Makai, Endre, Jr. (with Zemánek, Jaroslav) The surjectivity radius, packing numbers and boundedness below of linear operators. 84m:47005

Nakamoto, Ritsuo See Fujii, Masatoshi, 84d:47003a

Nashed, M. Zubair See Lee, Sung J., 84d:47002

Przeworska-Rolewicz, D. Theorems on polynomials in right invertible operators. (German and Russian summaries) 84m:47006

Putnam, David C. On orthogonality of eigenspaces of some operators on Banach spaces. 84d:47004

Sova, Miroslav Interchangeability of unbounded linear operators: general theory of transmutativity. (Czech summary) 84d:47005

Walters, Terry J. See Lee, Sung J., 84d:47003c

Zemánek, Jaroslav Geometric interpretation of the essential minimum modulus. 84d:47002

See also Makai, Endre, Jr., 84m:47005

Zubov, V. M. Generalized inverse for a Fredholm operator. (Russian) 84i:47003

secondary classifications:

Aliev, R. G. On necessary and sufficient conditions for unique solvability of an equation with deviating argument and unbounded operator coefficients in Hilbert space. (Russian) (84d:34083)

Benson, Maurice W. (with Frederickson, Paul O.) Iterative solution of large sparse linear systems arising in certain multidimensional approximation problems. (84b:65029)

Cadzow, James A. Inversion of signal operators. (See 84c:94002)

Campbell, Stephen L. The Drazin inverse of an operator. (84j:47013)

Chang, Rosemary E. The generalized inverse and interpolation theory. (84c:41008)

Dimovski, Ivan Kh. ★ Convolutional calculus. (84d:44001)

Falkner, Neil Closable operators and semigroups. (84d:47049)

Frederickson, Paul O. See Benson, Maurice W., (84b:65029)

Groetsch, C. W. (with Jacobs, B. J.) Iterative methods for generalized inverses based on functional interpolation. (84c:65081)

Grzysiewicz, Ryszard Extreme contractions on real Hilbert spaces. (84d:47056)

Hönig, Chaim Samuel The adjoint equation of a linear Volterra Stieltjes-integral equation with a linear constraint. (84c:45011)

Hudzik, H. (with Musielak, Julian; Urbanski, R.) Linear operators in modular spaces. (84j:46004)

Jacobs, B. J. See Groetsch, C. W., (84c:65081)

Kats, M. P. Continuity of universally measurable linear mappings. (Russian) (84j:46016a)

Correction to: "Continuity of universally measurable linear mappings". (Russian) (84j:46016b)

Kramarz, Luis Inner inverses of Fredholm operators. (84f:47013)

Musielak, Julian See Hudzik, H.; et al., (84j:46004)

Nenciu, G. Existence of the exponentially localised Wannier functions. (84j:81146)

Rodman, Leiba On global geometric properties of subspaces in Hilbert space. (84j:46038)

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Bosch, Carlos (with Hernández-Garcidiego, Carlos; de Oteyza, E.; Pearcy, C. M.)

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Das, Kiran Chandra (with Craven, B. D.) Linearity and weak convergence on the boundary of numerical range. 84m:47010

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Abramov, Yu. Sh. Numerical ranges, zones and spectra of families of selfadjoint operators. (Russian) (84b:47026)

Kaimuma, Daisuke (with Matsumoto, Akemi; Seo, Yûki) Inequalities for spectra of operators. (84a:47011)

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47A15 Invariant subspaces

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Atzmon, Aharon An operator without invariant subspaces on a nuclear Fréchet space. 84b:47003

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Bercovici, H. (with Foias, Ciprian; Langsam, J.; Pearcy, C. M.) (BCP)-operators are reflexive. 84a:47007

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Unitary operators on space II. II. (84j:47065)

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(Ando, Tsuyoshi) See Potapov, V. P., (84a:01061)

Arocena, Rodrigo Noyaux de Toeplitz généralisés et le théorème de Nagy et Foias sur la dilatation des commutants. (English summary) [Generalized Toeplitz kernels and the theorem of Nagy and Foias on the dilation of the commutant] (84j:47039)

- Durszt, E. (with Sz-Nagy, Béla) Remark to a paper: "Models for noncommuting operators" [J. Funct. Anal. 48 (1982), no. 1, 1-11; MR 84h:47010] by A. E. Frazho. (84h:47011)
- Faddeev, M. D. See Pavlov, B. S., (84g:35142)
- Foias, Ciprian See Sz-Nagy, Béla, (84b:47009)
- Frazho, Arthur E. Models for noncommuting operators. (84h:47010)
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- Kovics, István Dilation theory and one-parameter semigroups of contractions. (84h:47043)
- Kuznetsov, A. V. Regular extension of Hermitian operators in a space with indefinite metric. (Russian) (84a:47046)
J-selfadjoint and J-unitary dilations of linear operators. (Russian) (84f:47039)
- Lin, Chia Shiang Projections, symmetries and nilpotent operators on a Hilbert space. (84h:47022)
- Pavlov, B. S. (with Faddeev, M. D.) Scattering on a hollow resonator with a small opening. (Russian. English summary) (84g:35142)
- Potapov, V. P. ★ Collected papers of V. P. Potapov. (84a:01061)
- Rosenblum, Marvin (with Rovnyak, James) An operator-theoretic approach to theorems of the Pick-Nevanlinna and Loewner types. II. (84b:47020)
- Rovnyak, James See Rosenblum, Marvin, (84b:47020)
- Sucia, Ion A functional model for the unitary dilation of a positive definite map. (84c:47015)
- Sz-Nagy, Béla (with Foias, Ciprian) Contractions without cyclic vectors. (84b:47009)
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- Yan, Shao Zong Unitary dilation of an operator. (84b:47044)

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- Đỗ Công Khanh Model operators. II. (Vietnamese. Russian summary) (84h:47037)
- Miklavčič, Milan Eigenvalues of the Orr-Sommerfeld equation in an unbounded domain. (84h:76025)
- 47A30 Norms (inequalities, more than one norm, etc.)
- Dickmeis, Werner (with Nessel, Rolf Joachim) Quantitative Banach-Steinhaus theorems—a survey. (84h:47007)
- Fack, Thierry Sur la notion de valeur caractéristique. [On the notion of characteristic value] (84h:47012)
- Goldberg, Moshe (with Straus, E. G.) Operator norms, multiplicativity factors, and C-numerical radii. (84h:47011)
- Kaimuma, Daisuke (with Matsumoto, Akemi; Seo, Yūki) Inequalities for spectra of operators. (84c:47011)
- Lyons, Russell A lower bound on the Cesàro operator. (84c:47013)
- Matsumoto, Akemi See Kaimuma, Daisuke; et al., (84c:47011)
- Nessel, Rolf Joachim See Dickmeis, Werner, (84h:47007)
- Nieto, Joseph I. Opérateurs à itérés uniformément bornés. [Operators with uniformly bounded iterates] (84c:47006)
- Okikioh, G. O. Weak-norm and L^p estimates for weighted forms of bounded operators mapping between pairs of L^p spaces. (84m:47013)
- Seo, Yūki See Kaimuma, Daisuke; et al., (84c:47011)
- Smith, Roger Rance (with Ward, J. D.) A note on polynomial operator approximation. (84j:47008)
- Straus, E. G. See Goldberg, Moshe, (84h:47011)
- Ward, J. D. See Smith, Roger Rance, (84j:47008)

secondary classifications:

- Ditzian, Zeev Discrete and shift Kolmogorov type inequalities. (84m:47038)
- García-Cuerva, José An extrapolation theorem in the theory of A_p weights. (84c:42028)
- Jóó, István Upper estimates for the eigenfunctions of the Schrödinger operators. (84m:34027a)
- Komornik, V. Lower estimates for the eigenfunctions of the Schrödinger operator. (84m:34027b)
- Mshimba, A. S. A. On the L_p norms of some integral operators. (84d:47065)
- Oberlin, Daniel M. (with Stein, Erwin) Mapping properties of the Radon transform. (84d:44002)
- Plíš, Vlastimil Uniqueness in the first maximum problem. (84g:15029)
- Schröder, Johann ★ Operator inequalities. (84h:65063)
- Stein, Erwin See Oberlin, Daniel M., (84d:44002)

47A35 Ergodic theory [See also 28Dxx.]

- Atalla, Robert E. Local ergodicity of nonpositive contractions on $C(X)$. (84j:47009)
- Atencia, E. (with de la Torre, Alberto) A dominated ergodic estimate for L_p spaces with weights. (84f:47005)
- Baxter, J. R. (with Olsen, James H.) Weighted and subsequential ergodic theorems. (84g:47005)
- Davies, Edward Brian The harmonic functions of mean ergodic Markov semigroups. (84j:47010)
- Émilion, Richard Convergence locale des processus sur-additifs dans L_p . (English summary) [Local convergence of superadditive processes in L_p] (84c:47007)
(with Hachem, Bachar) Un théorème ergodique fortement sur-additif à plusieurs paramètres. (English summary) [A multiparameter strongly superadditive ergodic theorem] (84c:47014)
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Opérateurs à moyennes bornées et théorèmes ergodiques en moyenne. (English summary) [Bounded mean operators and mean ergodic theorems] (84h:47005)

- Feyel, Denis Convergence locale des processus sur-abéliens et sur-additifs. (English summary) [Local convergence of superabelian and superadditive processes] (84g:47006)
- Gologan, Radu-Nicolae An extension of Chacon-Ornstein ergodic theorem. (84m:47014)
- Hachem, Bachar See Émilion, Richard, (84c:47014)
- Hsiao, Sheng Yen Ergodic properties of operator semigroups in general weak topologies. (84c:47008)
- Kutkut, Mahmoud Universal individual ergodic theorem. (Arabic summary) (84g:47007)
- Lin, Michael On local ergodic convergence of semigroups and additive processes. (84h:47012)
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- Nanda, Sudarsan Ergodic theory and almost convergence. (84g:47008)
- Olsen, James H. The individual weighted ergodic theorem for bounded Besicovitch sequences. (84h:47013)
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- Quinn, Joseph Conservative and dissipative parts of non-measure preserving weighted composition operators. (84g:47009)
- Sarymsakov, T. A. Markov operators acting in a matrix space. (Russian) (84h:47006)
- Satō, Ryōtarō On an individual ergodic theorem. (84c:47016)
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- Sine, Robert C. See Lin, Michael, (84m:47015)
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- Voigt, Jürgen Stochastic operators, information, and entropy. (84c:47009)
- Woś, Janusz Random ergodic theorems for sub-Markovian operators. (84j:47011)
- Yoshimoto, Takeshi Inequalities for product operators and vector valued ergodic theorems. (84a:47012)
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- Belley, Jean-Marc Les fonctions additives en analyse harmonique. [Additive functions in harmonic analysis] (84g:43007)
- Bellow, Alexandra Sur la structure des suites "mauvaises universelles" en théorie ergodique. (English summary) [On the structure of "bad universal" sequences in ergodic theory] (84f:28012)
- Blum, J. R. (with Reich, J. I.) Strongly ergodic sequences of integers and the individual ergodic theorem. (84d:28020)
- Chersi, Franco Convergence of averages and invariant measures on noncompact metrizable spaces. (Italian summary) (84c:28025)
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- Feyel, Denis Théorème ergodique ponctuel pour processus sur-abéliens. (English summary) [Point ergodic theorem for superabelian processes] (84h:47046)
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- Kwiatkowski, J. Nonsingular isomorphism and weak isomorphism on the class of dynamical systems with discrete spectra. (84m:28028)
- Lambert, Alan Decompositions of weighted composition isometries. (84m:47042)
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- Parry, William (with Tuncel, Selim) ★ Classification problems in ergodic theory. (84g:28024)
- Reich, J. I. See Blum, J. R., (84d:28020)
- Rhodus, Adolf A characterization of strong ergodicity by means of numerical ranges. (84c:60076)
- Ryvkin, V. B. See Antonevich, A. B., (84j:47049)
- Series, Caroline A problem in ergodic theory. (84k:28015)
- Shurenkov, V. M. ★ Эргодические теоремы и смежные вопросы теории случайных процессов. (Russian) [Ergodic theorems and related questions of the theory of random processes] (84k:60087)
- Tuncel, Selim See Parry, William, (84g:28024)
- Vershik, A. M. A theorem on Markov periodic approximation in ergodic theory. (Russian) (84m:28030)
- Zhdanok, A. I. Iterative processes as Markov chains. (Russian) (84c:60097)

47A40 Scattering theory [See also 34B25, 35P25, 47Dxx.]

- Amrein, W. O. (with Wollenberg, M.) On the Lax-Phillips scattering theory. (84a:47013)
- Baumjartel, Hellmut Stationary completeness criterion for wave operators. (84j:47010)
- Decu, Elena On some examples concerning the wave functor and the scattering theory for discrete time linear and nonlinear systems. (Romanian summary) (84h:47007)
- Grabowski, Marian The asymptotic scattering condition for certain dynamical semigroups. (Russian summary) (84f:47006)
- Kondrat'ev, Yu. G. (with Koshmanenko, V. D.) The scattering problem for operators associated with Dirichlet forms. (Russian) (84c:47018)
- Koshmanenko, V. D. See Kondrat'ev, Yu. G., (84c:47018)
- Kravitsky, Naftali Synthesis of two-dimensional fields of systems with given dispersion law. (84h:47008)
- Livšic, M. S. On scattering and transfer matrices for fields of systems. (84h:47009)
- Najman, Branko Wave operators and similarity for some matrix operators with applications. (Serbo-Croatian summary) (84f:47007)
Scattering theory for matrix operators. I. The factorization extension of matrix operators. (Serbo-Croatian summary) (84c:47019a)

- Scattering theory for matrix operators. II. Scattering theory for the abstract differential equation with a gyroscopic term. (Serbo-Croatian summary) **84c:47019b**
Oberrmann, Peter Adiabatic switching in abstract scattering theory. **84b:47014**
Ramm, Alexander G. Convergence of the T -matrix approach in the potential scattering. **84c:47010**
Rehberg, J. Scattering theory for unitary representations of \mathbb{R}^n over cones. **84c:47008**
Tayoshi, Takao Completeness of wave operators in scattering by bounded obstacles. **84j:47012**
Wollenberg, M. See **Amrein, W. O.**, **84c:47013**
Yavorskii, M. T. Incoming and outgoing subspaces for a canonical differential operator on the semiaxis. (Russian) **84d:47010**

secondary classifications:

- Baumgärtel, Hellmut** (with Rehberg, J.; Wollenberg, M.) The inverse problem of the abstract scattering theory within a relativistic framework. (**84c:81111**)
Carroll, Robert Wayne ★ Transmutation, scattering theory and special functions. (**84b:35114**)
Colgen, Rainer Some applications of trace class—scattering theory. (**84c:35108**)
Combes, J.-M. (with Weder, R.) New criterion for existence and completeness of wave operators and applications to scattering by unbounded obstacles. (**84c:35128**)
Combes, Monique Spectral and scattering theory for a class of strongly oscillating potentials. (**84c:81030**)
Crandall, R. E. (with Litt, B. R.) Reassembly and time advance in reflectionless scattering. (**84m:81155**)
Davies, Edward Brian Nonunitary scattering and capture. II. Quantum dynamical semigroup theory. (**84d:81051**)
 Nonunitary scattering and capture. I. Hilbert space theory. (**84c:81125**)
 Energy dependence of the scattering operator. II. (**84f:81094**)
Davydov, R. N. S -matrix of the Sturm-Liouville equation with slowly decreasing potential. (Russian) (**84g:34033**)
Droz-Vincent, Philippe Wave operators for relativistic two-body systems with central interaction. (**84c:81066**)
Enss, Volker Asymptotic observables on scattering states. (**84j:81110**)
Exner, P. (with Uehla, I.) On the optical approximation in two-channel systems. (**84g:81059**)
Huber, Andreas Spectral properties of the linear multiple scattering operator in L^2 -Banach lattices. (**84b:82071**)
Iagolnitzer, D. Analyticity properties of the S -matrix: historical survey and recent results in S -matrix theory and axiomatic field theory. (**84m:81163**)
 Irreducible kernels and nonperturbative expansions in a theory with pure $m \rightarrow m$ interaction. (**84j:81117**)
Ikebe, Teruo (with Isozaki, Hiroshi) A stationary approach to the existence and completeness of long-range wave operators. (**84f:35113**)
Il'in, E. M. Scattering by noncompact obstacles. (Russian. English summary) (**84m:35094**)
Isozaki, Hiroshi See **Ikebe, Teruo**, (**84f:35113**)
Koshmanenko, V. D. The orthogonal extension method in a scattering problem of quantum field theory. (Russian) (**84c:81079**)
Levine, R. D. See **Pfeifer, Peter**, (**84j:81123**)
Litt, B. R. See **Crandall, R. E.**, (**84m:81155**)
McLean, R. G. D. See **Wan, Kay Kong**, (**84m:81158**)
Mustafaev, B. A. The scattering function of a nonselfadjoint anharmonic operator. (Russian) (**84c:34029**)
Olivier, P. D. On the additive decomposition for polymonic maps. (See **84g:93066f**)
Pavlov, B. S. Conditions for the analyticity of a partial scattering matrix. (Russian) (**84b:35129**)
Perry, Peter A. Propagation of states in dilation analytic potentials and asymptotic completeness. (**84f:81097**)
Petkov, Vesselin Representation of the scattering operator for dissipative hyperbolic systems. (**84c:35229**)
Pfeifer, Peter (with Levine, R. D.) Initial states of maximal entropy in formal scattering theory. (**84j:81123**)
 (Pogrebkov, A. K.) See **Reed, Michael C.**; et al., (**84b:81093**)
Reed, Michael C. (with Simon, Barry) ★ Методы современной математической физики. 3. (Russian) [Methods of modern mathematical physics. Vol. III] (**84b:81093**)
Rehberg, J. See **Baumgärtel, Hellmut**; et al., (**84c:81111**)
Ruijsenaars, S. N. M. On one-dimensional integrable quantum systems with infinitely many degrees of freedom. (**84c:81052**)
Sayapova, M. R. (with Yafaev, D. R.) Scattering theory for potentials of zero radius which are periodic with respect to time. (Russian) (**84f:35114**)
Seipp, H. P. On the S -operator for the external field problem of QED. (**84a:81050**)
Simon, Barry See **Reed, Michael C.**, (**84b:81093**)
 (Sushko, V. N.) See **Reed, Michael C.**; et al., (**84b:81093**)
Tayoshi, Takao Existence of wave operators in scattering by unbounded obstacles. (**84j:35136**)
Tjstheim, Dag On the analysis of a class of multivariate nonstationary stochastic processes. (**84i:60050**)
Uehla, I. See **Exner, P.**, (**84g:81059**)
Vakulenko, A. F. A condition for the absence of a singular continuous spectrum in the Friedrichs model. (Russian) (**84j:81120a**)
 A condition for the absence of a singular continuous spectrum in the Friedrichs model. II. (Russian. English summary) (**84j:81120b**)
Wan, Kay Kong (with McLean, R. G. D.) Asymptotic localization and separation and the scattering of quantum states. (**84m:81158**)
Weder, R. See **Combes, J.-M.**, (**84c:35128**)
Wollenberg, M. See **Baumgärtel, Hellmut**; et al., (**84c:81111**)
Xia, Dao Xing On the Toeplitz operator related to the scattering operator of a semihypnormal operator. (**84m:47031**)

- Yafaev, D. R.** The nonstationary scattering theory for elliptic differential operators. (Russian) (**84c:35066**)
 See also **Sayapova, M. R.**, (**84f:35114**)

47A45 Canonical models for contractions and nonselfadjoint operators

- Agler, Jim** The Arveson extension theorem and coanalytic models. **84g:47011**
Ball, Joseph A. (with Lubin, Arthur) Contractive perturbations of restricted shifts. (See **84g:93005a**)
Bercovici, H. (with Foias, Ciprian; Pearcy, C. M.; Sz-Nagy, Béla) Functional models and extended spectral dominance. **84c:47014**
Clark, Douglas N. (with Siskler, S.) Triangularization of some restricted shifts. (See **84g:93005a**)
Davis, Chandler A factorization of an arbitrary $m \times n$ contractive operator-matrix. **84c:47011**
Dubovoi, V. K. Multiplicities of one-sided shifts contained in a contraction operator. (Russian) **84f:47008**
Durszt, E. (with Sz-Nagy, Béla) Remark to a paper: "Models for noncommuting operators" [J. Funct. Anal. **48** (1982), no. 1, 1–11; MR **84h:47010**] by A. E. Frazho. **84c:47011**
Foias, Ciprian See **Bercovici, H.**; et al., **84c:47014**
Frazho, Arthur E. Infinite-dimensional Jordan models and Smith-McMillan forms. **84c:47014**
 Models for noncommuting operators. **84b:47010**
 See also **Durszt, E.**; et al., **84c:47011**
Gubreev, G. M. (with Kovalenko, A. I.) A new property of the determinant of a perturbation of a weak contraction. (Russian) **84c:47009**
Kovalenko, A. I. See **Gubreev, G. M.**, **84c:47009**
Levan, N. A note on the Nagy-Foias lossy and lossless space. (See **84g:93005a**)
Livic, M. S. Commuting operators and fields of systems, distributed in Euclidean space. **84c:47012**
Lubin, Arthur See **Ball, Joseph A.**, (See **84g:93005a**)
Makarov, N. G. (with Vasyunin, V. I.) A model for noncontractions and stability of the continuous spectrum. **84c:47013**
Pearcy, C. M. See **Bercovici, H.**; et al., **84c:47014**
Straus, L. A. Characteristic function and generalized resolvents of an isometric operator. (Russian) **84m:47016**
Siskler, S. See **Clark, Douglas N.**, (See **84g:93005a**)
Slodkowski, Marek Characteristic functions of doubly commuting contractions. (Russian summary) **84c:47014**
Suciu, Ion Modelling by L^2 -bounded analytic functions. **84c:47015**
 A functional model for the unitary dilation of a positive definite map. **84c:47015**
Sz-Nagy, Béla See **Durszt, E.**, **84c:47011** and **Bercovici, H.**; et al., **84c:47014**
Vasyunin, V. I. See **Makarov, N. G.**, **84c:47013**
Wu, Pei Yuan On the reflexivity of C_0 contractions and weak contractions. **84c:47015**

secondary classifications:

- Baras, John S.** Frequency response methods in multivariable infinite-dimensional linear systems. (See **84g:93005a**)
Đỗ Công Khanh Model operators. I. (Vietnamese. Russian summary) (**84c:47030**)
Foias, Ciprian (with Pearcy, C. M.; Sz-Nagy, Béla) Contractions with spectral radius one and invariant subspaces. (**84g:47002**)
Gauchman, Hillel On nonselfadjoint representations of Lie algebras. (**84m:17006**)
Kaufman, William E. Closed operators and pure contractions in Hilbert space. (**84c:47019**)
Pearcy, C. M. See **Foias, Ciprian**; et al., (**84g:47002**)
Sz-Nagy, Béla See **Foias, Ciprian**; et al., (**84g:47002**)
Zajac, Michal Hyperinvariant subspace lattice of weak contractions. (Russian summary) (**84m:47011**)

47A50 Equations involving linear operators, with vector unknowns

- Aliiev, B.** Finding a generalized conditional normal pseudosolution. (Russian. Tajiki summary) **84m:47017**
Asimova, D. M. (with Stetsenko, V. Ya.) Monotone approximations to the solution of an operator equation. (Russian. Tajiki summary) **84d:47011**
Bakaev, N. Yu. A class of operator equations. (Russian) **84f:47009**
Buraczewski, A. The general theory of determinants in Banach space. (See **84d:47002**)
Campbell, Stephen L. The Drazin inverse of an operator. **84j:47013**
Dzhishkariani, A. V. Approximate solution of equations of the second kind. (Russian) **84c:47012**
Dzhumaev, S. Approximate calculation of a pseudosolution. (Russian. Tajiki summary) **84f:47010**
Engl, Heinz W. Stability of solutions to linear operator equations of the first and second kinds under perturbation of the operator with rank change. **84c:47010**
Fokin, M. V. Normal solvability of a functional equation. (Russian) (See **84m:35003**)
Gadzhiev, G. A. (with Nadirov, A. A.) A two-parameter singular equation. (Russian. English and Azerbaijani summaries) **84m:47018**
Groetsch, C. W. (with King, J. T.) The saturation phenomena for Tikhonov regularization. **84c:47011**
Hahn-Goldberg, Saul A regularity theorem for inverse bounded and accretive operators in abstract Hilbert space. **84f:47011**
Imomnazarov, B. Regularization of dissipative operator equations of the first kind. (Russian) **84d:47012**
King, J. T. See **Groetsch, C. W.**, **84c:47011**
Kislov, N. V. A projection theorem and its application to inhomogeneous boundary value problems. (Russian) **84d:47013**

- Kuleshov, A. A. Linear equations in spaces of Sobolev-Slobodetskii type. I. (Russian) **84m:47019a**
 Linear equations in spaces of Sobolev-Slobodetskii type. II. (Russian) **84m:47019b**
 Linear equations in spaces of Sobolev-Slobodetskii type. III. (Russian) **84m:47019c**
- Lee, Sung J. (with Nashed, M. Zuhair) Gradient method for nondensely defined closed unbounded linear operators. **84c:47016**
- Lomovtsev, F. E. The method of energy inequalities in the study of operator equations. (Russian. English summary) **84c:47012**
- McGhee, D. F. (with Roach, Gary F.) The spectrum of multiparameter problems in Hilbert space. **84c:47017**
- Nadirov, A. A. See Gadzhiev, G. A., **84m:47018**
- Nashed, M. Zuhair See Lee, Sung J., **84c:47016**
- Peters, Wolfgang See Schott, Dieter, **84c:47019**
- Pittellkow, Uwe See Runkel, Hans-J., **84c:47018**
- Przeworska-Rolewicz, D. D -shift and generalized periodic solutions of equations with right invertible operators. (See **84b:90007**)
- Roach, Gary F. See McGhee, D. F., **84c:47017**
- Runkel, Hans-J. (with Pittellkow, Uwe) Matrix functions and two-sided linear operator equations. **84c:47018**
- Saadbaev, A. Operator equations of the first kind with approximate data in Hilbert space. (Russian) **84b:47015**
- Samarin, M. K. Beta-continuity of linear mappings. (Russian) **84m:47020**
- Sarv, L. Two-step α -processes and their application for the solution of ill-posed problems. (Russian. English summary) **84c:47013**
- Schott, Dieter (with Peters, Wolfgang) Über Nullräume, Wertebereiche und Relationen von Operatoren, die bei instationären Iterationsverfahren zur Lösung linearer Gleichungen auftreten. (English and Russian summaries) [Null spaces, ranges and relations of operators which occur in nonstationary iteration methods for the solution of linear equations] **84c:47019**
- Stetsenko, V. Ya. See Asimova, D. M., **84c:47011**
- Ulyanova, E. L. Superlinear convergence of the variable metric method in a Hilbert space. (Russian) **84m:47021**
- Yudovich, V. I. The spectrum of some bordered selfadjoint operators. (Russian) **84c:47014**

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- Abramov, Yu. Sh. Extremal problems generated by operator pencils. (Russian) **84g:49026**
- Aliiev, B. Chebyshev iteration methods for equations of the second kind on a spectrum. (Russian. Tajiki summary) **84c:65054**
- Ames, Karen A. On the comparison of solutions of related properly and improperly posed Cauchy problems for first order operator equations. **84c:34090**
- Asimova, D. M. See Stetsenko, V. Ya., **84c:47011**
- Bakushinskii, A. B. Principle of the residual in the case of a perturbed operator for general regularizing algorithms. (Russian) **84a:65045**
- Chapman, G. R. (with Lee, Sung J.) Boundary conditions for linear manifolds. II. Algebraic properties and applications. **84d:47003b**
- Checkin, A. V. Solution of operator equations by the method of multiparameter regularization. (Russian) **84c:65058**
- Chevreaux, B. Intertwinings and hyperinvariant subspaces. **84c:47007**
- Delfour, M. C. (with Manitius, A.) The structural operator F and its role in the theory of retarded systems. II. **84c:34111**
- Fedorov, A. M. Optimal linear solution of procedures for linear operator equations with random data. (Russian) **84c:65050**
- Galeev, R. Kh. The Cauchy problem for passive systems in Hilbert space. (Russian) **84b:93037**
- Gaponenko, Yu. L. The contracting compactum principle for solving ill-posed problems. (Russian) **84c:65062**
- Greenberg, William (with van der Mee, C. V. M.) Abstract boundary value problems from kinetic theory. **84c:34079**
- Lebedev, V. I. (with Vlasov, Yu. A.) Investigation of the efficiency and stability of three-term iterative methods. (Russian) **84m:65047**
- Lee, Sung J. Boundary conditions for linear manifolds. I. **84d:47003a**
 Addendum to "Boundary conditions for linear manifolds. I." [J. Math. Anal. Appl. 73 (1980), no. 2, 336-380]. **84m:47004**
 (with Walters, Terry J.) Boundary conditions for linear manifolds. III. Infinite-dimensional adjoints via solution spaces. **84d:47003c**
 See also Chapman, G. R., **84d:47003b**
- Liskovets, O. A. Theory and methods of solving ill-posed problems. (Russian) **84c:65072**
- Manitius, A. See Delfour, M. C., **84c:34111**
- van der Mee, C. V. M. See Greenberg, William, **84c:34079**
- Moldabaev, S. M. See Otelbaev, M. O., **84c:93029**
- Otelbaev, M. O. (with Moldabaev, S. M.) Control of a linear operator equation. (Russian) **84c:93029**
- Pettineo, Maria A rapid treatment of boundary value problems for linear partial differential equations. (Italian. English summary) **84g:35043**
- Ramm, Alexander G. Convergence of the T -matrix approach in the potential scattering. **84c:47010**
- Sarv, L. A family of nonlinear iteration methods for the solution of ill-posed problems. (Russian. English and Estonian summaries) **84b:65056**
- Schmidt, Jochen W. Ein Einschliessungsverfahren für Lösungen fehlerbehafteter linearer Gleichungen. (English summary) [An inclusion method for solutions of error-afflicted linear equations] **84c:65034**
- Schott, Dieter Zur Konvergenz von Operatorfolgen im Zusammenhang mit Iterationsverfahren. [On the convergence of operator sequences in connection with iteration methods] **84c:65047**

- Sofonea, Mircea Variational inequalities with blocking property. **84c:49013**
- Stetsenko, V. Ya. (with Asimova, D. M.) The monotonically converging Nekrasov-Seidel method. (Russian. Tajiki summary) **84c:65057**
- Strakhov, V. N. (with Valyashko, G. M.) Adaptive regularization of linear ill-posed problems. (Russian) **84c:65062**
- Tanana, V. P. \star Методы решения операторных уравнений. (Russian) [Methods for solving operator equations] **84c:65054**
- Tarapova, E. I. Integration of the N -wave problem. (Russian) **84c:35105**
- Tikhonov, A. N. Approximate functional equations of the first kind. (Russian) **84g:65073**
- Valyashko, G. M. See Strakhov, V. N., **84c:65062**
- Vlasov, Yu. A. See Lebedev, V. I., **84m:65047**
- Walters, Terry J. See Lee, Sung J., **84d:47003c**
- Wilkinson, J. H. Note on the practical significance of the Drazin inverse. **84c:65071**
- Yamaguchi, Masaru Almost periodic solutions of some wave equations with Dirichlet boundary values. **84m:34067**

47A53 Fredholm operators

- Brodovskii, V. G. Fredholmity of a boundary value problem for a linear functional-differential equation. (Russian. Kazakh summary) **84c:47020**
- Cuellar, Jorge (with Dynin, Alexander; Dynin, Svetlana) Fredholm operator families. I. **84c:47012**
- Dynin, Alexander See Cuellar, Jorge; et al., **84c:47012**
- Dynin, Svetlana See Cuellar, Jorge; et al., **84c:47012**
- Fel'dman, I. A. See Krupnik, N. Ya., **84c:47021**
- Förster, K.-H. (with Liebetrau, E.-O.) Semi-Fredholm operators and sequence conditions. **84c:47015**
- Gordetskii, M. B. Noethericity and reduction of multidimensional discrete convolutions. (Russian) **84g:47012**
- Kramarz, Luis Inner inverses of Fredholm operators. **84c:47013**
- Krishnamachari, N. S. Tensor product of Fredholm operators on non-Archimedean Banach spaces. **84j:47014**
- Krupnik, N. Ya. (with Fel'dman, I. A.) Invertibility of certain Fredholm operators. (Russian) **84c:47021**
- Liebetrau, E.-O. See Förster, K.-H., **84c:47015**
- Mennicken, Reinhard Perturbations of semi-Fredholm operators in locally convex spaces. **84j:47015**
- Müller-Horrig, Volker Zur Theorie der Semi-Fredholm-Operatoren mit stetig projiziertem Kern und Bild. [On the theory of semi-Fredholm operators with continuously projected kernel and image] **84c:47016**
- Pietsch, Albrecht The index-trace formula for Fredholm operators. **84c:47016**
- Putinar, Mihai Algebraic properties of Fredholm systems. **84g:47013**
- Rakočević, Vladimir On one subset of M. Schechter's essential spectrum. **84d:47014**
- Seddighi, Karim Essential spectra of operators in the class $\mathcal{B}_\infty(\Omega)$. **84c:47022**
- Tacon, D. G. Generalized semi-Fredholm transformations. **84d:47015**
- West, T. T. Decomposition of Fredholm operators. (See **84c:54003**)

secondary classifications:

- Ageev, A. L. (with Babanov, Yu. A.; Vasin, V. V.; Ershov, N. V.) Construction of regularizing algorithms for the determination of the structure of amorphous bodies by the method of X-ray spectral structural analysis. (Russian) **84f:65086**
- Azoff, E. (with Clancey, Kevin F.; Gohberg, Israel) Singular points of families of Fredholm integral operators. **84c:47066**
- Babanov, Yu. A. See Ageev, A. L.; et al., **84f:65086**
- Barnes, Bruce A. (with Murphy, G. J.; Smyth, M. R. F.; West, T. T.) \star Riesz and Fredholm theory in Banach algebras. **84a:46108**
- Bosch, Carlos (with Hernández-García, Carlos; de Oteyza, E.; Pearcy, C. M.) Spectral pictures of functions of operators. **84f:47017**
- Clancey, Kevin F. See Azoff, E.; et al., **84c:47066**
- Dancer, E. N. On the use of asymptotics in nonlinear boundary value problems. **84b:34044**
- Ershov, N. V. See Ageev, A. L.; et al., **84f:65086**
- Gohberg, Israel See Azoff, E.; et al., **84c:47066**
- Hernández-García, Carlos See Bosch, Carlos; et al., **84f:47017**
- Kaballo, Winfried On Fredholm operator valued H^p -functions. **84d:47024**
- Kraljević, Hrvoje Rank and index in Banach algebras. **84f:46065**
 (with Suljagić, S.; Veselić, K.) Index in semisimple Banach algebras. (Serbo-Croatian summary) **84c:46048**
- Lay, D. C. (with Thijsse, G. Ph. A.) Decompositions and characterizations of finite-meromorphic operator functions. **84a:47019**
- van der Mee, C. V. M. Transport theory in E_∞ -spaces. **84g:82035**
- Murphy, G. J. See Barnes, Bruce A.; et al., **84a:46108**
- de Oteyza, E. See Bosch, Carlos; et al., **84f:47017**
- Pearcy, C. M. See Bosch, Carlos; et al., **84f:47017**
- Podolak, Esther See Westreich, David, **84b:34010**
- Putinar, Mihai (with Vasilescu, F.-H.) Continuous and analytic invariants for deformations of Fredholm complexes. **84c:58019**
- Smyth, M. R. F. See Barnes, Bruce A.; et al., **84a:46108**
- Thijsse, G. Ph. A. See Lay, D. C., **84a:47019**
- Vasilescu, F.-H. See Putinar, Mihai, **84c:58019**
- Vasin, V. V. See Ageev, A. L.; et al., **84f:65086**
- Veselić, K. See Kraljević, Hrvoje; et al., **84c:46048**
- West, T. T. See Barnes, Bruce A.; et al., **84a:46108**
- Westreich, David (with Podolak, Esther) Systems of Briot-Bouquet equations with analytic solutions. **84b:34010**
- Zemánek, Jaroslav Geometric interpretation of the essential minimum modulus. **84b:47002**

47A55 Perturbation theory

- Coifman, R. R. (with Rochberg, Richard) Projections in weighted spaces, skew projections and inversion of Toeplitz operators. **84j:47014**
- Gohberg, Israel (with Lancaster, Peter; Rodman, Leiba) Perturbations of H -selfadjoint matrices, with applications to differential equations. **84i:47014**
- Gustafson, Karl E. The RKNG (Rellich, Kato, Sz-Nagy, Gustafson) perturbation theorem for linear operators in Hilbert and Banach space. **84h:47017**
- Kitadani, Shin-ichi On majorization of induced operators. **84f:47015**
- Kondrat'ev, Yu. G. Second quantization operators and their perturbations. (Russian) **84i:47020**
- Koshmanenko, V. D. Classification of singular perturbations of selfadjoint operators. (Russian) **84j:47016**
- Kozhukhar, P. A. The spectrum of a perturbed selfadjoint operator. (Russian) **84b:47016**
- Lancaster, Peter See Gohberg, Israel; et al., **84f:47014**
- Lyantse, V. E. (with Storozh, O. G.) Perturbation of a boundary operator. (Ukrainian. Russian summary) **84b:47017**
- Najman, Branko Wave operators in weighted Hilbert spaces and similarity for selfadjoint operators. (Serbo-Croatian summary) **84b:47018**
- Nenciu, G. Removing cut-offs from singular perturbations: an abstract result. **84m:47022**
- Okazawa, Noboru On the perturbation of linear operators in Banach and Hilbert spaces. **84i:47021**
- Rochberg, Richard See Coifman, R. R., **84g:47014**
- Rodman, Leiba See Gohberg, Israel; et al., **84f:47014**
- Senechal, L. J. Chain algebras. **84k:47013**
- Storozh, O. G. See Lyantse, V. E., **84b:47017**
- Weiner, Brian Superoperator perturbation theory for propagators. **84m:47023**
- Yao, Yun Long Some results on unbounded perturbations. (Chinese. English summary) **84k:47014**

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- Anikin, S. A. Asymptotic expansions of products of two currents on the light cone and at small distances. (Russian. English summary) **(84c:81059)**
- Apostol, Constantin On the norm-closure of the similarity orbit of essentially nilpotent operators. **(84d:47020)**
- Berg, I. D. (with Sims, Brailey) Denseness of operators which attain their numerical radius. **(84j:47004)**
- Chernoff, Paul R. See Cirincione, Ross J., **(84b:81023)**
- Cirincione, Ross J. (with Chernoff, Paul R.) Dirac and Klein-Gordon equations: convergence of solutions in the nonrelativistic limit. **(84b:81023)**
- Clancey, Kevin F. (with Putnam, C. R.) Nonnegative perturbations of selfadjoint operators. **(84f:47026)**
- Cuellar, Jorge (with Dynin, Alexander; Dynin, Svetlana) Fredholm operator families. I. **(84k:47012)**
- Datta, D. P. (with Mukherjee, S.) Analyticity of Schrödinger energy levels for confining potentials. **(84b:81024)**
- Davies, Edward Brian The twisting trick for double well Hamiltonians. **(84a:81008)**
- Deif, Assem S. Nondiagonal systems under small perturbations. (German summary) **(84a:15008)**
- Dynin, Alexander See Cuellar, Jorge; et al., **(84k:47012)**
- Dynin, Svetlana See Cuellar, Jorge; et al., **(84k:47012)**
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- Friedlander, Leonid Sur le spectre de la perturbation faible d'un opérateur auto-adjoint. (English summary) [On the spectrum of a weak perturbation of a selfadjoint operator] **(84f:58110)**
- Hunziker, W. See Vock, E., **(84b:81022)**
- Jonas, P. Compact perturbations of definitizable operators. II. **(84d:47046)**
- Li, Bing Ren The perturbation theory for linear operators of discrete type. **(84d:47039)**
- Makarov, N. G. (with Vasyunin, V. I.) A model for noncontractions and stability of the continuous spectrum. **(84c:47013)**
- Stability of the essential spectrum of operators that are close to unitary operators. (Russian) **(84j:47002)**
- Mukherjee, S. See Datta, D. P., **(84b:81024)**
- Pindor, M. (with Turchetti, G.) Padé approximants and variational methods for operator series. (Italian and Russian summaries) **(84b:81021)**
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- Rafel, G. G. Application of a combined Galerkin-averaging method. **(84m:73051)**
- Ramm, Alexander G. Eigenfunction expansions for some nonselfadjoint operators and the transport equation. **(84j:47032)**
- Sims, Brailey See Berg, I. D., **(84j:47004)**
- Sin'ko, G. I. On the spectral theory of a finite-dimensional perturbation of the differentiation operator. (Russian) **(84j:47084)**
- Smith, Roger Rance (with Ward, J. D.) A note on polynomial operator approximation. **(84j:47008)**
- Sohr, Hermann Eine Verallgemeinerung mehrerer Störungskriterien verschiedenen Typs im Hilbertraum. [A generalization of several perturbation criteria of different type in Hilbert space] **(84k:47031)**
- Taratunin, V. V. The structure of the essential spectrum of evolution operators of nonstationary neutron transport. (Russian) **(84m:82128)**
- Travis, Curtis C. (with Webb, G. F.) Perturbation of strongly continuous cosine family generators. **(84f:47045)**
- Turchetti, G. See Pindor, M., **(84b:81021)**
- Vasyunin, V. I. See Makarov, N. G., **(84c:47013)**
- Vock, E. (with Hunziker, W.) Stability of Schrödinger eigenvalue problems. **(84b:81022)**
- Ward, J. D. See Smith, Roger Rance, **(84j:47008)**
- Webb, G. F. See Travis, Curtis C., **(84f:47045)**
- Wendt, W. D. See Frank, Leonid S., **(84b:47030)**

47A56 Functions whose values are linear operators (operator and matrix pencils, etc.)

- Anderson, William N., Jr. (with Trapp, George E.) Analytic operator functions and electrical networks. **84c:47022**
- Atzmon, Aharon Operators with resolvent of bounded characteristic. **84j:47017**
- Balinskii, A. I. (with Zayachkovskii, V. S.) Criteria for factorization of operator pencils in a Banach space. (Russian) **84j:47018**
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- Gevorkyan, L. Z. A functional model of a certain family of nonselfadjoint operators. (Russian. English and Armenian summaries) **84c:47023**
- Godich, V. I. Bisymmetric matrix colligations. (Russian) **84b:47018**
- Gomilko, A. M. An upper bound for the number of eigenvalues of an operator pencil depending on a parameter. (Russian. English and Azerbaijani summaries) **84j:47019**
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- Kaballo, Winfried On Fredholm operator valued H^p -functions. **84b:47024**
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- Miloslavskii, A. I. Spectral properties of a class of quadratic operator pencils. (Russian) **84c:47023**
- Mirzoev, S. S. Multiple completeness of root vectors of polynomial operator pencils corresponding to boundary value problems on the half-axis. (Russian) **84j:47020**
- Nursultanov, E. D. Factorization of higher-order pencils. (Russian) **84c:47024**
- Orazov, M. B. A class of rational pencils of M. V. Keldysh's type, arising in problems of hydromechanics. (Russian) (See **84m:35003**)
- Rodman, Leiba See Kaashoek, M. A.; et al., **84c:47017**
- Takahashi, Katsutoshi On relative primeness of operator polynomials. **84f:47016**
- Trapp, George E. See Anderson, William N., Jr., **84c:47022**
- Vlasov, V. V. Minimality of derivative chains. (Russian) **84j:47021**
- Wu, Jing Bo Quasipositive definite operator functions and quasicompletely monotonic operator functions. (Chinese. English summary) **84j:47022**
- Yakubov, S. Ya. Quadratic operator pencils. (Russian) **84d:47015**
- Zaidman, Samuel Almost-periodicity for operator-valued functions. (French summary) **84g:47015**
- Zayachkovskii, V. S. See Balinskii, A. I., **84j:47018**

secondary classifications:

- Ball, Joseph A. See Helton, J. William, **(84b:93018)**
- Denman, E. D. (with Leyva-Ramos, J.; Jeon, G. J.) The algebraic theory of latent projectors in lambda matrices. **(84c:15005)**
- Gauchman, Hillel Connection colligations on Hilbert bundles. **(84i:58011)**
- Ginzburg, Yu. P. (with Talyush, N. A.) Polynomial pencils of analytic matrix functions and families of contracting extensions of isometric operators. (Russian) **(84d:47009)**
- Gohberg, Israel (with Lancaster, Peter; Rodman, Leiba) ★ Matrix polynomials. **(84c:15012)**
- (with Kaashoek, M. A.; van Schagen, F.) Rational matrix and operator functions with prescribed singularities. **(84f:15037)**
- Guyker, James Commuting hyponormal operators. **(84c:47028)**
- Helton, J. William (with Ball, Joseph A.) The cascade decompositions of a given system vs. the linear fractional decompositions of its transfer function. **(84b:93018)**
- Jeon, G. J. See Denman, E. D.; et al., **(84c:15005)**
- Kaashoek, M. A. See Gohberg, Israel; et al., **(84f:15037)**
- König, Hermann A trace theorem and a linearization method for operator polynomials. **(84c:47021)**
- Kublanovskaya, V. N. A certain approach to the solution of spectral problems for pencils of matrices. (Russian) **(84d:15012)**
- Lancaster, Peter See Gohberg, Israel; et al., **(84c:15012)**
- Leyva-Ramos, J. See Denman, E. D.; et al., **(84c:15005)**
- Livšic, M. S. Cayley-Hamilton theorem, vector bundles and divisors of commuting operators. **(84j:47005)**
- Pankov, A. A. See Zayachkovskii, V. S., **(84j:47026)**
- Rodman, Leiba See Gohberg, Israel; et al., **(84c:15012)**
- Sălăgean, Grigore Ștefan Admissible functions method for operator functions. **(84c:30076)**
- van Schagen, F. See Gohberg, Israel; et al., **(84f:15037)**
- Talyush, N. A. See Ginzburg, Yu. P., **(84d:47009)**
- Tidjane Diallo, A. Une notion de convexité pour les fonctions opératoires. [A concept of convexity for operator-valued functions] **(84m:26012)**
- Zayachkovskii, V. S. (with Pankov, A. A.) Stability of factorizations of polynomial operator pencils. (Russian) **(84j:47026)**

47A60 Functional calculus

- Ando, Tsuyoshi Fixed points of certain maps on positive semidefinite operators. **84g:47016**
- Bosch, Carlos (with Hernández-Garcíadiego, Carlos; de Oteyza, E.; Pearcy, C. M.) Spectral pictures of functions of operators. **84f:47017**
- Constantinescu, Tiberiu (with Gheondea, Aurelian) Algebraic aspects of the functional calculus for meromorphic functions. **84d:47016**
- Fan, Ky Iteration of analytic functions of operators. II. **84c:47018**
- Gheondea, Aurelian See Constantinescu, Tiberiu, **84d:47016**
- Hernández-Garcíadiego, Carlos See Bosch, Carlos; et al., **84f:47017**
- Hwang, Jun Shung On the operator ranges of analytic functions. **84g:47017**
- Kaashoek, M. A. (with van der Mee, C. V. M.; Rodman, Leiba) Spectral analysis of analytic operator functions with compact spectrum. (See **84g:93005d**)
- Ma, Ji Pu Analytic operator rings and analytic J -selfadjoint operator rings. (Chinese. English summary) **84m:47024**
- Mączyński, Maciej A Banach space reformulation of the spectral theorem. **84c:47025**

- van der Mee, C. V. M. See Kaashoek, M. A.; et al., (See 84g:93005d)
 de Oteyza, E. See Bosch, Carlos; et al., 84f:47017
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 Pustylnik, E. I. Functions of a positive operator. (Russian) 84b:47019
 Rodman, Leiba Equivalence of linear operator polynomials. (See 84g:93005c)
 See also Kaashoek, M. A.; et al., (See 84g:93005d)
 Rosenblum, Marvin (with Rovnyak, James) An operator-theoretic approach to theorems of the Pick-Nevanlinna and Loewner types. II. 84b:47020
 Rovnyak, James See Rosenblum, Marvin, 84b:47020

secondary classifications:

- Ando, Tsuyoshi On the arithmetic-geometric-harmonic-mean inequalities for positive definite matrices. (84j:15016)
 Atanacković, T. M. (with Djukić, Dj. S.) An extremum variational principle for a class of boundary value problems. (84g:49039)
 Derzhavets, B. A. Functional calculus of operators $\partial/\partial z$, in Banach spaces of entire functions of exponential type of several variables. (Russian) (84m:47037)
 Djukić, Dj. S. See Atanacković, T. M., (84g:49039)
 Kaashoek, M. A. (with van der Mee, C. V. M.; Rodman, Leiba) Analytic operator functions with compact spectrum. II. Spectral pairs and factorization. (84c:47017)
 Li, Shao Kuan Functional model of semihyponormal operators. (Chinese. English summary) (84f:47029)
 Marshall, Erich A spectral mapping theorem for local multipliers. (84j:47056)
 van der Mee, C. V. M. See Kaashoek, M. A.; et al., (84c:47017)
 Rodman, Leiba See Kaashoek, M. A.; et al., (84c:47017)
 Rothblum, Uriel G. Resolvent expansions of matrices and applications. (84d:15024)
 Solomyak, B. M. The existence of invariant subspaces for operators with nonsymmetric growth of the resolvent. (Russian. English summary) (84d:47006)

47A62 Equations involving linear operators, with operator unknowns

- Chan, Bada Perturbations of shifts. 84b:47016
 Duggal, B. P. (with Khalagaj, J. M.) Operator equations $AB + BA^* = A^*B + BA = I$. 84d:47017
 Fialkow, Lawrence A. A note on the range of the operator $X \rightarrow AX - XB$. 84b:47021
 Khalagaj, J. M. See Duggal, B. P., 84d:47017
 Khasbardar, Sunanda K. (with Thakare, Nimbakrishna K.) Operator equations and isometries. 84d:47018
 Slavova, S. K. One-sided invertibility of a class of linear transformers. (Russian. English summary) 84d:47019
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- Adams, Gregory T. A nonlinear characterization of stable invariant subspaces. (84i:47006)
 Carroll, Robert Wayne ★ Transmutation, scattering theory and special functions. (84b:35114)

47A65 Structure theory

- Apostol, Constantin (with Martin, M.) A C^* -algebra approach to the Cowen-Douglas theory. 84j:47023
 Frunză, Stefan On the spectral semidistance and quasinilpotent equivalence for systems of operators. 84j:47024
 Halmos, Paul Richard BDF or the infinite principal axis theorem. 84i:47025
 Kaufman, William E. Closed operators and pure contractions in Hilbert space. 84c:47019
 Lin, Chia Shiang Projections, symmetries and nilpotent operators on a Hilbert space. 84b:47022
 Makarov, N. G. The unitary point spectrum of almost unitary operators. (Russian. English summary) 84m:47025
 Martin, M. See Apostol, Constantin, 84j:47023
 Mel'nicenko, G. A. The structure of some operators from a nest algebra. (Russian. English and Lithuanian summaries) 84f:47018
 Teodorescu, Radu Some properties of C_* operators. (Romanian. French summary) 84j:47025

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- Bosch, Carlos (with Hernández-Garcíadiego, Carlos; de Oteyza, E.; Pearcy, C. M.) Spectral pictures of functions of operators. (84f:47017)
 de Branges, Louis The Carathéodory-Fejér extension theorem. (84a:47008)
 Chunaeva, M. S. See Vernik, A. N., (84f:47040)
 Dincă, George (with Mateescu, Daniel) On the structure of linear and K -positive definite operators. (84c:47028)
 Durszt, E. On contractive p -dilations. (84i:47012)
 Gevorkyan, L. Z. A functional model of a certain family of nonselfadjoint operators. (Russian. English and Armenian summaries) (84i:47023)
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 Jans, Jan Commuting subnormal operators quasisimilar to multiplication by coordinate functions on odd spheres. (84g:47025)
 Klambauer, G. The Stieltjes moment problem. (84d:44009)
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 Thompson, Robert C. (with Kuo, Chi-Chin Tung) Doubly stochastic, unitary, unimodular, and complex orthogonal power embeddings. (84c:15031)
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- Bosch, Carlos (with Hernández-Garcíadiego, Carlos; de Oteyza, E.; Pearcy, C. M.) Spectral pictures of functions of operators. (84f:47017)
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47A67 Representation theory

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- Kalyuzhnyi, A. A. An integral representation of exponentially convex functions. (Russian) (84d:46069)
 Litvinov, G. L. (with Lomonosov, V. I.) Corrections: "Density theorems in locally convex spaces and their applications" [Trudy Sem. Vektor. Tenzor. Anal. No. 20 (1981), 210-227; MR 83i:47009]. (Russian) (84f:47001)
 Lomonosov, V. I. See Litvinov, G. L., (84f:47001)
 Raşa, Ion Fonctionnelles P_* -exactes et fonctionnelles P_* -simples. [P_* -exact and P_* -simple functionals] (84d:41039)
 Tymowski, Sławomir On the analogue of the formula $\cos t = \frac{1}{2}e^{it} + \frac{1}{2}e^{-it}$ for operator cosine functions. (84i:47060)

47A68 Factorization theory

- Arov, D. Z. (with Krein, M. G.) The problem of finding the minimum of entropy in indeterminate problems of continuation. (Russian) 84m:47027
 Clancey, Kevin F. (with Gohberg, Israel) ★ Factorization of matrix functions and singular integral operators. 84a:47016
 Dym, Harry Applications of factorization theory to the inverse spectral problem. (See 84g:93005c)
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- Davis, Chandler A factorization of an arbitrary $m \times n$ contractive operator-matrix. (84c:47011)
 De Santis, Romano M. (with Porter, William A.) Operator factorization on partially ordered Hilbert resolution spaces. (84g:93027)
 Dym, Harry (with Jacob, Andrei) Applications of factorization and Toeplitz operators to inverse problems. (84j:47043)
 Gohberg, Israel (with Kaashoek, M. A.; van Schagen, F.) Similarity of operator blocks and canonical forms. II. Infinite-dimensional case and Wiener-Hopf factorization. (84a:47032)
 (with Kaashoek, M. A.; Lerer, L.; Rodman, Leiba) Common multiples and common divisors of matrix polynomials. II. Vandermonde and resultant matrices. (84c:15024)
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 Korotkov, V. B. Regular and compact factorization of integral operators in L_p . (Russian) (84f:47059)
 Lancaster, Peter A review of some recent results concerning factorization of matrix and operator valued functions. (84c:15015)
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- van Schagen, F. See Gohberg, Israel; et al., (84a:47032)
 Schumitzky, Alan State feedback control for general linear systems. (See 84g:93005c)
 Tung, L. (with Saks, Richard) Wiener-Hopf techniques in resolution space. (See 84g:93005b)

47A70 Eigenfunction expansions, rigged Hilbert spaces; eigenvalue problems in general [See also 49Gxx.]

- Algazin, S. D. Localization of eigenvalues of closed linear operators. (Russian) 84c:47020
 Barnsley, M. F. (with Raddatz, W.) Estimates and bounds for the doubly perturbed eigenvalue problem. (See 84j:41003)
 Binding, Paul (with Källström, A.; Sleeman, B. D.) An abstract multiparameter spectral theory. 84i:47026
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 Geronimo, Jeffrey S. An upper bound on the number of eigenvalues of an infinite-dimensional Jacobi matrix. 84i:47027
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 Knight, B. W. See Sirovich, Lawrence, 84d:47022
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 Richter, Peter H. W. Zerlegung positiv definiter Kerne und Entwicklung nach gemeinsamen verallgemeinerten Eigenfunktionen für Familien streng kommutierender symmetrischer Operatoren. [Decomposition of positively definite kernels and development based on common generalized eigenfunctions for families of strictly commuting symmetric operators] 84d:47021
 Roach, Gary F. Symmetry groups and multiparameter eigenvalue problems. (Russian and Polish summaries) 84i:47029
 Saryer, M. A. (with Gadzhiev, G. A.) An aspect of multiparameter spectral theory. I. (Russian) 84i:47030a
 (with Gadzhiev, G. A.) An aspect of multiparameter spectral theory. II. Questions of the completeness of eigenvectors and the compactness of a set of eigenvalues. (Russian) 84i:47030b
 Shkalikov, A. A. Estimates for meromorphic functions and summation of series over eigenvectors vectors of nonselfadjoint operators. (Russian) 84c:47019
 Sirovich, Lawrence (with Knight, B. W.) On the eigentheory of operators which exhibit a slow variation. 84d:47022
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secondary classifications:

- Albrecht, Julius See Goerisch, Friedrich, (See 84i:00016)
 Binding, Paul Multiparameter definiteness conditions. II. (84i:47055)
 Bozhinov, Nikolai S. A convolutional approach to the multiplier problem connected with generalized eigenvector expansions of an unbounded operator. (84i:44016)
 Browne, Patrick J. (with Sleeman, B. D.) Nonlinear multiparameter eigenvalue problems. (84c:58018)
 (with Sleeman, B. D.) A numerical technique for multiparameter eigenvalue problems. (84c:65035)
 Ditkin, V. V. An iterative method of solution of an eigenvalue problem. (Russian) (84h:65059)
 Geymonat, Giuseppe (with Grisvard, Pierre) Diagonalisation d'opérateurs non autoadjoints et séparation des variables. (English summary) [Diagonalization of nonselfadjoint operators and separation of variables] (84f:35107)
 Goerisch, Friedrich (with Albrecht, Julius) Untere Schranken für die Eigenwerte Stekloffscher Eigenwertaufgaben. [Lower bounds for the eigenvalues of Steklov eigenvalue problems] (See 84i:00016)
 Gomilko, A. M. On the spectrum adjoining the real axis in a problem of elasticity theory. (Russian) (84m:35090)
 An upper bound for the number of eigenvalues of an operator pencil depending on a parameter. (Russian. English and Azerbaijani summaries) (84j:47019)
 Greenlee, W. M. A convergent variational method of eigenvalue approximation. (84d:49047)
 Grisvard, Pierre See Geymonat, Giuseppe, (84f:35107)

- Horwitz, L. P. (with Katznelson, E.) A partial inner product space of analytic functions for resonances. (84c:81023)
 Katznelson, E. See Horwitz, L. P., (84c:81023)
 Martynuk, A. E. Application of a combined method of successive approximations to a linear equation with a completely continuous operator. (Russian) (84m:65072)
 McGhee, D. F. Multiparameter problems and joint spectra. (84m:47008)
 Meyer, Magdalene Die Berechnung von Eigenwerten und Eigenvektoren linearer und beschränkter Operatoren im Hilbertraum mittels Pseudostöriteration. (The computation of eigenvalues and eigenvectors of linear and bounded operators in Hilbert space via pseudoperturbative iteration) (84c:65060)
 Sleeman, B. D. See Browne, Patrick J., (84c:58018) and (84c:65035)
 Yakubov, S. Ya. Quadratic operator pencils. (Russian) (84c:47015)
 Yudovich, V. I. The spectrum of some bordered selfadjoint operators. (Russian) (84c:47014)

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- Behrends, Ehrhard Operators which respect norm intervals. 84d:47023
 Bouldin, Richard Compact approximants. 84c:47031
 Grabner, Sandy Automatic discontinuity of intertwining operators. 84c:47020
 Lay, D. C. (with Thijsse, G. Ph. A.) Decompositions and characterizations of finite-meromorphic operator functions. 84c:47019
 Musielak, Julian On filtered families of operators in two-modular spaces. 84c:47021
 Panetitz, Stephen M. Unitarization of symplectics and stability for causal differential equations in Hilbert space. 84c:47021
 Radziwiłł, G. V. The problem of completeness of root vectors in the spectral theory of operator-valued functions. (Russian) 84c:47023
 Rassias, John Michael On approximation of approximately linear mappings by linear mappings. 84c:47027
 Rowley, B. Spectral triples and Fourier coefficients of the inverse of an operator polynomial. (See 84g:93005c)
 Thijsse, G. Ph. A. See Lay, D. C., 84c:47019

secondary classifications:

- Arocena, Rodrigo On the parametrization of Adamjan, Arov and Krein. (84c:47025)
 De Santis, Romano M. Stochastic optimal control and a separation theorem in Hilbert resolution space. (See 84g:93005c)
 Dickmeis, Werner (with Nessel, Rolf Joachim) Condensation principles with rates. (84c:41041)
 Eckstein, Gheorghe Exact controllability and spectrum assignment. (84a:93012)
 Edmunds, David E. See Teixeira, M. F., (84c:46084)
 El-Hallab, Khalifa Une généralisation du théorème de Banach-Steinhaus. (Spanish summary) [A generalization of the Banach-Steinhaus theorem] (84c:46045)
 Feintuch, Avraham Realization theory for symmetric systems. (84j:93027)
 Discrete-time feedback systems: an operator theoretic approach. (84g:93053)
 Fleming, Gordon N. A limit on the variation of bounded positive operators. (84d:81011)
 Khan, Ahmad See Siddiqi, Ataulah; et al., (84b:46091)
 Khan, Mohd. Anis See Siddiqi, Ataulah; et al., (84b:46091)
 Khrushchëv, S. V. (with Nikol'skii, N. K.; Pavlov, B. S.) Unconditional bases of exponentials and of reproducing kernels. (84c:46019)
 Korobeinik, Yu. F. On a class of linear operators. (Russian) (84d:46077)
 Kovalishina, I. V. (with Potapov, V. P.) Radii of the Weyl circle in the matrix Nevanlinna-Pick problem. (Russian) (84j:30050)
 Martinez Maurica, Javier A note on the extension of continuous linear forms of non-Archimedean normed spaces. (Spanish) (84g:46106)
 Nessel, Rolf Joachim See Dickmeis, Werner, (84c:41041)
 Nikol'skii, N. K. See Khrushchëv, S. V.; et al., (84c:46019)
 de las Oblas-L. y Nasarre, M. Carmen Preservation of convergences by projection on the limit space. (Spanish. English summary) (84c:46018)
 Pallaschke, Diethard Functional analysis and control theory. (84c:49020)
 Pavlov, B. S. See Khrushchëv, S. V.; et al., (84c:46019)
 Potapov, V. P. See Kovalishina, I. V., (84j:30050)
 Pour-El, Marian Boykan (with Richards, Ian) Noncomputability in analysis and physics: a complete determination of the class of noncomputable linear operators. (84j:03114)
 (with Richards, Ian) Computability and noncomputability in classical analysis. (84c:03056)
 Prigorskii, V. A. Quasissimilarity of chains of projectors. (Russian) (84b:47048)
 Ran, A. C. M. Minimal factorization of selfadjoint rational matrix functions. (84c:15013)
 Richards, Ian See Pour-El, Marian Boykan, (84c:03056) and (84j:03114)
 Siddiqi, Ataulah (with Khan, Ahmad; Khan, Mohd. Anis) Behaviour of 2-operators on non-Archimedean quasi 2-normed spaces. (84b:46091)
 Teixeira, M. F. (with Edmunds, David E.) Interpolation theory and measures of noncompactness. (84c:46084)
 Zagrebnov, V. A. The Bogolyubov-Ruelle theorem: a new proof and generalizations. (Russian. English summary) (84j:82028)

47Bxx Single linear operators: special classes of operators

47B05 Compact operators, Riesz operators

- Aiena, Pietro Relative regularity and Riesz operators. 84a:47020
 Crombez, G. (with Govaerts, W.) Multipliers from $L_1(G)$ into $L_\infty(G)$ which are not almost weakly compact. 84g:47018
 Fleischer, Wilhelm Charakterisierung einer Klasse linearer Operatoren. [Characterization of a class of linear operators] 84c:47022
 Fourie, Jan (with Swart, Johan) Operators factoring compactly through a normal BK-space with AK. 84c:47022
 Govaerts, W. See Crombez, G., 84g:47018

- Karapetyants, N. K. Complete continuity of some classes of operators of convolution type with homogeneous kernels. (Russian) **84c:47021**
- Katsaras, A. K. On compact operators between non-Archimedean spaces. **84d:47024**
- Koros, Demetrios Superdiagonal forms for completely continuous linear operators. **84c:47022**
- Kress, Rainer On the Fredholm alternative. **84f:47021**
- Pietsch, Albrecht Approximationszahlen, Eigenwerte und Spuren von Operatoren in Banachräumen. [Approximation numbers, eigenvalues and traces of operators in Banach spaces] **84d:47032**
- Ramus, Alexander G. Spectral properties of some nonselfadjoint operators and some applications. **84g:47019**
- Variational principles for eigenvalues of compact nonselfadjoint operators. II. **84f:47022**
- Rosentrater, C. Ray Compact operators and derivations induced by weighted shifts. **84c:47029**
- Shurygin, V. A. Construction of eigenvectors of completely continuous selfadjoint linear operators in constructive analysis for an eigenvalue of given multiplicity. (Russian) **84j:47033**
- Swart, Johan See Fourie, Jan, **84c:47022**
- Vietsch, W. K. Compact operators. **84j:47034**

secondary classifications:

- Bennndorf, Andreas A result on equicontinuous sets of operators on nuclear Fréchet spaces related to the bounded approximation property. **(84b:46007)**
- Boudin, Richard Compact approximants. **(84i:47031)**
- Chaudhary, Muhammad Nasir Compactness of positive maps majorized by compact maps. **(84j:47075)**
- Collins, Heron S. (with Ruess, Wolfgang M.) Duals of spaces of compact operators. **(84i:47062)**
- Deshpande, M. V. (with Padhye, S. M.) A note on semigroups of selfadjoint compact operators. **(84b:47049)**
- (with Padhye, S. M.) Collectively compact sets of operators and almost periodic functions. **(84b:47056)**
- Dodds, Peter G. (with Schep, Anton R.) Compact integral operators on Banach function spaces. **(84d:47039)**
- Gong, Wei Bang Scalar-type operators that are commutators of compact operators. **(84m:47045)**
- Kopilevich, Yu. I. See Silbergleit, A. S., **(84c:47003)**
- Maizenberg, I. G. (with Tarnopol'skaya, S. A.; Shapiro, M. V.) Integral operators with a weak singularity in Hölder spaces with weight. (Russian) **(84g:45006)**
- Padhye, S. M. See Deshpande, M. V., **(84b:47049)** and **(84b:47056)**
- Rodes-Usan, Alvaro A. W -norm summability on rearrangements of a given basis. (Spanish. English summary) **(84b:46032)**
- Ruess, Wolfgang M. See Collins, Heron S., **(84i:47062)**
- Schep, Anton R. See Dodds, Peter G., **(84d:47039)**
- Shapiro, M. V. See Maizenberg, I. G.; et al., **(84g:45006)**
- Silbergleit, A. S. (with Kopilevich, Yu. I.) The spectrum of a polynomial operator pencil. (Russian. English and Armenian summaries) **(84c:47003)**
- Sourour, Ahmed Ramzi Isometries of norm ideals of compact operators. **(84e:47061)**
- Tarnopol'skaya, S. A. See Maizenberg, I. G.; et al., **(84g:45006)**
- Vofberg, A. L. Two remarks concerning the theorem of S. Axler, S.-Y. A. Chang and D. Sarason. **(84h:47038a)**

47B10 Hilbert-Schmidt operators, trace class operators, nuclear operators, p -summing operators, etc.

- Carl, Bernd Inequalities between geometric quantities of operators in Banach spaces. **84c:47022**
- On a characterization of operators from l_p into a Banach space of type p with some applications to eigenvalue problems. **84i:47033**
- Cobos, F. See Villamarin, Manuel-Antonio Fugarcas, **84h:47023**
- Edmunds, David E. Entropy numbers, s -numbers and eigenvalues. **84c:47023**
- van Eldik, P. See Grobler, J. J.; et al., **84g:47020a**
- Engelbrecht, J. C. (with Grobler, J. J.) Fredholm theory for operators in an operator ideal with a trace. II. **84g:47020b**
- Gorbachuk, M. L. (with Kutovoi, V. A.) Resolvent comparability of some boundary value problems. (Russian) **84b:47024**
- Grobler, J. J. (with Raubenheimer, H.; van Eldik, P.) Fredholm theory for operators in an operator ideal with a trace. I. **84g:47020a**
- See also Engelbrecht, J. C., **84g:47020b**
- Jarchow, Hans (with Ott, Rudolf) On trace ideals. **84f:47023**
- Kato, Mikio On the limit orders of operator ideals. **84d:47025**
- Khalil, Rosbdi Multipliers of Schatten classes. **84d:47034**
- Kühn, Thomas An operator ideal in connection with Gaussian measures and applications to nuclearity of integral operators. **84i:47035**
- γ -Radonifying operators and entropy ideals. **84d:47026**
- On the r -nuclearity of Gaussian covariances and the composition of nuclear operators. **84c:47024**
- Kutovoi, V. A. See Gorbachuk, M. L., **84b:47024**
- Leitner, Hartmut (with Pietsch, Albrecht) An elementary proof of Lidskij's trace formula. (German and Russian summaries) **84b:47025**
- Linde, Werner (with Mandrekar, Vidyadhar; Weron, Aleksander) Radonifying operators related to p -stable measures on Banach spaces. **84h:47024**
- Lubitz, Claus \star Weylzahlen von Diagonaloperatoren und Sobolev-Einbettungen. (German) [Weyl numbers of diagonal operators and Sobolev imbeddings] **84d:47028**
- Mandrekar, Vidyadhar See Linde, Werner; et al., **84h:47024**
- Martin Peinador, Elena The weak summability domination of a sequence S of the Hilbert space in relation with the set of linear bounded operators. **84f:47024**
- Mukherjee, R. N. On some trace class integral operators with sum kernels. **84g:47021**

- O'Brien, D. M. A simple test for nuclearity of integral operators on $L_2(\mathbb{R}^n)$. **84d:47027**
- Ott, Rudolf See Jarchow, Hans, **84f:47023**
- Pietsch, Albrecht Eigenvalues of integral operators. II. **84h:47025**
- See also Leiterer, Hartmut, **84b:47025**
- Raubenheimer, H. See Grobler, J. J.; et al., **84g:47020a**
- Redheffer, Raymond M. (with Volkmann, Peter) Bilinear Funktionen mit Hilbertraum-Operatoren als Veränderlichen. [Bilinear functions with Hilbert space operators as variables] **84i:47036**
- Reinov, O. I. Approximation properties of order p and the existence of non- p -nuclear operators with p -nuclear second adjoints. **84f:47025**
- Szulga, Jerzy On lattice summing operators. **84c:47025**
- Thomas, Erik G. F. The trace formula. **84m:47030**
- Tij, Nicolae On a class of $l_{p,p}$ operators. **84h:47026**
- Villamarin, Manuel-Antonio Fugarcas (with Cobos, F.) On Schauder bases in the Lorentz operator ideal. **84h:47023**
- Volkmann, Peter See Redheffer, Raymond M., **84i:47036**
- Weron, Aleksander See Linde, Werner; et al., **84h:47024**

secondary classifications:

- Arazy, Jonathan Certain Schur-Hadamard multipliers in the spaces C_r . **(84i:47061)**
- Chatterji, S. D. Orthogonally scattered dilation of Hilbert space valued set functions. **(84b:46099)**
- Courbage, M. Mathematical problems of irreversible statistical mechanics for quantum systems. I. Analytic continuation of the collision and destruction operators by spectral deformation method. **(84j:82031a)**
- Mathematical problems of irreversible statistical mechanics for quantum systems. II. On the singularities of $(\Psi(z) - z)^{-1}$ and the pseudo-Markovian equation. Application to Lee model. **(84j:82031b)**
- Đặng Hùng Thắng See Nguyễn Duy Tiên, **(84b:60006)**
- Fack, Thierry Sur la notion de valeur caractéristique. [On the notion of characteristic value] **(84m:47012)**
- Gordon, Y. (with Reisner, S.) Some geometrical properties of Banach spaces of polynomials. **(84d:46035)**
- Jarchow, Hans On Hilbert-Schmidt spaces. **(84d:46017)**
- Kamthan, P. K. (with Sofi, M. A.) Operators of type S_p and the associated nuclearity. **(84c:46009)**
- Kittaneh, Fuad On generalized Fuglede-Putnam theorems of Hilbert-Schmidt type. **(84h:47028)**
- Linde, Rainer Symmetric extensions of Schatten-classes. (German and Russian summaries) **(84c:47058)**
- (Lizorkin, P. I.) See Pietsch, Albrecht, **(84c:47002)**
- Makarov, N. G. (with Vasyunin, V. I.) A model for noncontractions and stability of the continuous spectrum. **(84c:47013)**
- The unitary point spectrum of almost unitary operators. (Russian. English summary) **(84m:47025)**
- Mekler, A. A. The averaging operator with respect to a countable partition on a minimal symmetric invariant ideal of the space $L^1(0, 1)$. (Russian. English summary) **(84c:46027)**
- (Miroshin, N. V.) See Pietsch, Albrecht, **(84c:47002)**
- Nguyễn Duy Tiên (with Đặng Hùng Thắng) Mappings of stable cylindrical measures in Banach space. (Russian summary) **(84b:60006)**
- Nielsen, N. J. The ideal property of tensor products of Banach lattices with applications to the local structure of spaces of absolutely summing operators. **(84b:46023)**
- Pap, Endre Sequential theory of linear continuous operators. **(84g:46059)**
- Pedrocchi, V. G. (with Tamura, Taro) Hermitian and non-Hermitian boson expansions based on the commutator method. **(84d:81019)**
- Pelletier, Joan Wick Tensor norms and operators in the category of Banach spaces. **(84c:46156)**
- Pietsch, Albrecht \star Операторные идеалы. (Russian) [Operator ideals] **(84c:47002)**
- Tensor products of sequences, functions, and operators. **(84c:46075)**
- Approximationszahlen, Eigenwerte und Spuren von Operatoren in Banachräumen. [Approximation numbers, eigenvalues and traces of operators in Banach spaces] **(84i:47032)**
- The index-trace formula for Fredholm operators. **(84c:47016)**
- Reisner, S. See Gordon, Y., **(84f:46035)**
- Sofi, M. A. See Kamthan, P. K., **(84c:46009)**
- Takahashi, Yasuji Bochner's theorem and partially admissible shifts of measures on L^p -spaces. **(84f:60007)**
- Tamura, Taro See Pedrocchi, V. G., **(84d:81019)**
- Temam, Roger On the continuity of the trace of vector functions with bounded deformation. **(84d:46042)**
- Triebel, Hans Mapping properties of abstract integral operators. Applications. **(84c:47065)**
- Vasyunin, V. I. See Makarov, N. G., **(84c:47013)**
- Weiss, Gary An extension of the Fuglede-Putnam theorem modulo the Hilbert-Schmidt class to operators of the form $\sum M_n X_n$, I, II. **(84j:47036)**
- An extension of the Fuglede commutativity theorem modulo the Hilbert-Schmidt class to operators of the form $\sum M_n X_n$. **(84e:47026)**
- Widom, Harold A trace formula for Wiener-Hopf operators. **(84c:47038)**

47B15 Hermitian and normal operators (spectral measures, functional calculus, etc.)

- Abramov, Yu. Sh. Numerical ranges, zones and spectra of families of selfadjoint operators. (Russian) **84b:47026**
- Ando, Tsuyoshi See Kubo, Fumio, **84d:47028**
- Clancey, Kevin F. (with Putnam, C. R.) Nonnegative perturbations of selfadjoint operators. **84f:47026**
- Fan, Ky Normalizable operators. **84i:47037**

- Friedland, Shmuel A characterization of normal operators. **84i:47038**
- Karakhanyan, M. I. An asymptotic variant of the Fuglede-Putnam theorem on commutators of linear bounded operators in strong and weak operator topologies. (Russian. Armenian summary) **84a:47023**
- Kubo, Fumio (with Ando, Tsuyoshi) Means of positive linear operators. **84d:47028**
- Masani, Pesi An outline of the spectral theory of propagators. **84i:47027**
- Moszyński, Krzysztof On approximation of the spectral density function of a selfadjoint operator. **84g:47022**
- Approximation spectrale d'un opérateur borné et normal à l'aide de ses fonctions de la densité spectrale. (English summary) [Spectral approximation of a bounded normal operator by means of its spectral density functions] **84e:47029**
- Owusu-Ansah, Twum Hermitian operators, symmetric operators and the spectral theorem on certain Banach spaces. (See **84d:47002**)
- Partington, J. R. The resolvent of a Hermitian operator on a Banach space. **84d:47029**
- Patel, A. B. A joint spectral theorem for unbounded normal operators. **84i:47039**
- Putnam, C. R. Normal operators and strong limit approximations. **84g:47023**
- See also Clancey, Kevin F., **84i:47026**
- Rehder, Wulf On the adjoints of normal operators. **84c:47026**
- On the product of selfadjoint operators. **84i:47040**
- Sen, Dilip Kumar On operators on Hilbert spaces over H^* -algebras. **84j:47035**
- Sheplev, A. V. Dissipative bi-extensions of closed Hermitian operators. (Russian) **84e:47030**
- Weiss, Gary An extension of the Fuglede-Putnam theorem modulo the Hilbert-Schmidt class to operators of the form $\sum M_i X N_i$, I, II. **84j:47036**
- Yan, Shao Zong On polar product operator $A^* \cdot A$. (Chinese. English summary) **84c:47027**

secondary classifications:

- Berezans'kii, Yu. M. (with Kondrat'ev, Yu. G.; Samoilenko, Yu. S.) Generalized functions of an infinite number of variables and their application in spectral theory. (Russian) **(84d:46059)**
- Capri, Osvaldo Nicolás (with González Domínguez, Alberto) Exponential representations of operator-valued impedance functions. **(84a:94026)**
- Cercignani, Carlo (with Protopopescu, V.) The spectral decomposition for a class of linear transport operators. **(84c:82032)**
- Cho, S. J. (with Kaftal, V.) A generalization of the Weyl-von Neumann theorem to semifinite von Neumann algebras. **(84a:46129)**
- Davidson, Kenneth R. Lifting commuting pairs of C^* algebras. **(84b:46078)**
- González Domínguez, Alberto See Capri, Osvaldo Nicolás, **(84a:94026)**
- Guo, Duo Zao Graphically reductive operators. (Chinese. English summary) **(84h:47008)**
- Kaftal, V. See Cho, S. J., **(84a:46129)**
- Kondrat'ev, Yu. G. See Berezans'kii, Yu. M.; et al., **(84d:46059)**
- Lubin, Arthur A note on single input controllability for normal systems. **(84c:93011)**
- Mączyński, Maciej A Banach space reformulation of the spectral theorem. **(84e:47025)**
- van der Mee, C. V. M. ★Semigroup and factorization methods in transport theory. **(84m:82122)**
- Mel'nikchenko, G. A. The structure of some operators from a nest algebra. (Russian. English and Lithuanian summaries) **(84f:47018)**
- Nikol'skii, N. K. See Vasyunin, V. I., **(84c:93016)**
- Popescu, Nicolae N. Exponential dichotomies and Hermitian operators in Banach spaces. **(84b:34088)**
- Protopopescu, V. See Cercignani, Carlo, **(84c:82032)**
- Putnam, C. R. Absolute values of hyponormal operators with asymmetric spectra. **(84c:47034)**
- Samoilenko, Yu. S. See Berezans'kii, Yu. M.; et al., **(84d:46059)**
- Smith, William V. Spectral measures. I. General theory in a topological vector space. **(84d:46063)**
- Valette, Alain Extensions of C^* -algebras: a survey of the Brown-Douglas-Fillmore theory. **(84h:46096)**
- Vasyunin, V. I. (with Nikol'skii, N. K.) Control subspaces of minimal dimension. Elementary introduction. Discothea. (Russian. English summary) **(84c:93016)**

47B20 Subnormal operators, hyponormal operators, etc.

- Arora, S. C. (with Kumar, Ramesh) M -paranormal operators. **84g:47024**
- Clancey, Kevin F. (with Conway, John B.; Raphael, Marc) On a conjecture of Carey and Pincus. **84c:47031**
- Conway, John B. The dual of a subnormal operator. **84j:47037**
- (with Hadwin, Donald W.) Strong limits of normal operators. **84e:47032**
- See also Clancey, Kevin F.; et al., **84c:47031**
- Fan, Peng (with Stampfli, Joseph) On the density of hyponormal operators. **84j:47038**
- Furuta, Takayuki A Hilbert-Schmidt norm inequality associated with the Fuglede-Putnam theorem. **84c:47023**
- Guyker, James Commuting hyponormal operators. **84c:47028**
- Hadwin, Donald W. See Conway, John B., **84e:47032**
- Hartman, Jim A hyponormal weighted shift whose spectrum is not a spectral set. **84a:47024**
- Janas, Jan Commuting subnormal operators quasisimilar to multiplication by coordinate functions on odd spheres. **84g:47025**
- Kittaneh, Fuad On generalized Fuglede-Putnam theorems of Hilbert-Schmidt type. **84h:47028**
- Kobayashi, Akihiro (with Okayasu, Takateru) A remark on a theorem of Goya and Saitō. **84c:47029**
- Kumar, Ramesh See Arora, S. C., **84g:47024**
- Li, Shao Kuan Some results about semihyponormal operators. (Chinese. English summary) **84f:47027**
- A subclass of the hyponormal operators—the complete hyponormal operators. (Chinese) **84f:47028**
- On an inequality of semihyponormal operator spectrum. **84a:47025**

On some properties of the spectrum of semihyponormal operators. (Chinese. English summary) **84c:47026**

Functional model of semihyponormal operators. (Chinese. English summary) **84f:47029**

- Lubin, Arthur Spectral inclusion and c.n.e. **84c:47033**
- Murphy, G. J. Self-dual subnormal operators. **84b:47027**
- Okayasu, Takateru See Kobayashi, Akihiro, **84c:47029**
- Pincus, Joel D. (with Xia, Dao Xing) Mosaic and principal function of hyponormal and semihyponormal operators. **84d:47030**
- Prasanna, Shanti On topological properties of operators. **84c:47027**
- Putnam, C. R. Absolute values of completely hyponormal operators. **84b:47028**
- Absolute values of hyponormal operators with asymmetric spectra. **84c:47034**
- Rai, S. N. Relation between numerical range and polar decomposition of an operator. **84i:47041**
- Raphael, Marc See Clancey, Kevin F.; et al., **84c:47031**
- Stampfli, Joseph See Fan, Peng, **84j:47038**
- Voiculescu, Dan Remarks on Hilbert-Schmidt perturbations of almost-normal operators. **84f:47030**
- Xia, Dao Xing On the Toeplitz operator related to the scattering operator of a semihyponormal operator. **84m:47031**
- Spectral analysis of hyponormal operators and semihyponormal operators. (Chinese) **84h:47029**
- See also Pincus, Joel D., **84d:47030**

secondary classifications:

- Campbell, Stephen L. Linear operators for which T^*T and TT^* commute. III. **(84a:47044)**
- Clancey, Kevin F. (with Putnam, C. R.) Nonnegative perturbations of selfadjoint operators. **(84f:47026)**
- Embry-Wardrop, Mary The positive factor of a subnormal semigroup. **(84b:47033)**
- Hayashi, Kiyotsaka On Toeplitz operators and spectral properties. **(84b:47031)**
- Kaufman, William E. Closed operators and pure contractions in Hilbert space. **(84c:47019)**
- Lange, Ridgley Essentially subnormal operators and K -spectral sets. **(84c:47008)**
- Li, Shao Kuan The method of approximate eigenvectors and its applications. (Chinese) **(84b:47018)**
- Lubin, Arthur On pure subnormal semigroups. **(84i:47035)**
- Nakamura, Yoshihiro Principal functions and invariant subspaces of hyponormal operators. **(84i:47009)**
- Olin, Robert F. (with Thomson, James E.) Algebras generated by a subnormal operator. **(84i:47063)**
- Putnam, C. R. See Clancey, Kevin F., **(84f:47026)**
- Sebestyén, Zoltán Moment theorems for operators of Hilbert space. **(84f:47064)**
- Thomson, James E. See Olin, Robert F., **(84i:47063)**
- Tong, Yu Sun Tensor product spaces with indefinite inner products and linear operators on these spaces. (Chinese. English summary) **(84c:47051)**

47B25 Symmetric and selfadjoint operators (unbounded)

- Borell, Christer Positivity improving operators and hypercontractivity. **84b:47029**
- Dincă, George (with Mateescu, Daniel) On the structure of linear and K -positive definite operators. **84c:47028**
- Farforovskaya, Yu. B. On the difference $f(B) - f(A)$ for unbounded selfadjoint operators in perturbation theory. (Russian. English summary) **84c:47029**
- Heiss, W. D. Padé approximants for the solvent of selfadjoint operators. **84m:47032**
- Jørgensen, Palle E. T. Spectral theory of finite volume domains in \mathbb{R}^n . **84b:47024**
- Khrushchëv, S. V. Uniqueness theorems and essentially selfadjoint operators. (Russian. English summary) **84c:47030**
- Larson, David R. Annihilators of operator algebras. **84d:47031**
- Mateescu, Daniel See Dincă, George, **84c:47028**
- Vasilescu, F.-H. Anticommuting selfadjoint operators. **84d:47032**

secondary classifications:

- Aguilella, Joaquín See Burillo López, Pedro J.; et al., **(84c:47002)**
- Burillo López, Pedro J. (with Aguilella, Joaquín; Fuster Capilla, Robert) Antisymmetric and finite-rank operators in Hilbert spaces. (Spanish. English summary) **(84b:47002)**
- Cowling, Michael G. Harmonic analysis on semigroups. **(84h:43004)**
- van Daele, A. On pairs of closed operators. **(84d:47006)**
- Feller, M. N. Infinite-dimensional selfadjoint Laplace-Lévy differential operators. (Russian) **(84m:35115)**
- Fuglede, Bent Conditions for two selfadjoint operators to commute or to satisfy the Weyl relation. **(84c:81013)**
- Fuster Capilla, Robert See Burillo López, Pedro J.; et al., **(84c:47002)**
- Ghirardi, Gian Carlo (with Rimini, A.; Weber, Tullio) Quantum evolution in the presence of additive conservation laws and the quantum theory of measurement. **(84a:81004)**
- Kolomý, Josef On determination of eigenvalues and eigenvectors of selfadjoint operators. **(84c:47018)**
- Moszyński, Krzysztof Spectral approximation of a selfadjoint operator by the method of moments. (Italian) **(84j:47031)**
- Mourre, Eric Algebraic approach to some propagation properties of the Schrödinger equation. (See **84j:81006**)
- Rimini, A. See Ghirardi, Gian Carlo; et al., **(84c:81004)**
- Shtraus, L. A. Characteristic function and generalized resolvents of an isometric operator. (Russian) **(84m:47016)**
- Titchenko, S. V. Spectral representation of countably parametric semigroups. (Russian) **(84h:47044)**
- Weber, Tullio See Ghirardi, Gian Carlo; et al., **(84c:81004)**

- 47B35 Toeplitz operators, Wiener-Hopf operators [See also 45P05, 47G05 for other integral operators.]

- Ali, Fatima. See Khalil, Roshdi, 84f:47031
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Unbounded strongly decomposable operators. (Chinese. English summary) (84g:47029)

Jibril, Adnan A. S. On well-bounded operators of class Γ . (84g:47030)

Li, Bing Ren The perturbation theory for linear operators of discrete type. (84a:47039)

Marschall, Erich A spectral mapping theorem for local multipliers. (84j:47056)

Nagy, B. Semigroups of operators and decomposability. (84c:47033)

A spectral residuum for each closed operator. (84a:47040)

On Boolean algebras of projections and prespectral operators. (84f:47038)

Panchapagesan, T. V. A note on spectral and prespectral operators. (84a:47041)

Ricker, W. Extended spectral operators. (84i:47049)

On Boolean algebras of projections and scalar-type spectral operators. (84b:47040)

Smith, William V. Spectral measures. II. Characterization of scalar operators. (84g:47031)

Sun, Shan Li Unbounded decomposable operators. (Chinese. English summary) (84c:47034)

(with Xu, Feng) Functional calculus for unbounded decomposable operators. (Chinese. English summary) (84c:47046)

See also Wang, Sheng Wang; et al., (84g:47033)

Tanahashi, Kōtarō A characterization of decomposable operators. (84a:47042)

Reductive weak decomposable operators are spectral. (84d:47043)

Wang, Sheng Wang Operators of the $\mathfrak{D}_{(M)}$ type and their resolvents. (Chinese. English summary) (84b:47041)

(with Zou, Cheng Zu; Sun, Shan Li) Some properties of decomposable operators. (Chinese. English summary) (84g:47033)

Local resolvents and operators decomposable with respect to the identity.

(Chinese) (84j:47057)

(with Erdélyi, I.) Analytically invariant spectral resolvents. (84c:47029)

Xu, Feng A note on spectral decompositions of unbounded operators. (Chinese. English summary) (84c:47035)

(with Zou, Cheng Zu) On the Boolean algebra of projection operators. (Chinese. English summary) (84g:47032)

See also Sun, Shan Li, (84e:47046)

Yu, Da Hai The perturbation and spectrum distribution of a discrete spectral operator. (Chinese. English summary) (84i:47050)

Zou, Cheng Zu On Erdélyi's strong spectral capacities. (Chinese. English summary) (84c:47036)

The spectral capacity of a decomposable operator. (Chinese) (84i:47051)

See also Xu, Feng, (84g:47032) and Wang, Sheng Wang; et al., (84g:47033)

secondary classifications:

Achermanns, S. T. M. (with Gerards, A. M. H.) Spectral localization in Banach algebras. (84c:46050a)

On the local spectrum at the identity of a Banach algebra. (84c:46050b)

Epifanio, G. (with Trapani, C.) Some spectral properties in algebras of unbounded operators. (84b:47054)

Gerards, A. M. H. See Achermanns, S. T. M., (84c:46050a)

Gohberg, Israel (with Kaashoek, M. A.; van Schagen, F.) Similarity of operator blocks and canonical forms. II. Infinite-dimensional case and Wiener-Hopf factorization. (84a:47032)

Gong, Wei Bang Scalar-type operators that are commutators of compact operators. (84m:47045)

Kaashoek, M. A. See Gohberg, Israel; et al., (84a:47032)

Nikol'skii, N. K. (with Vasyunin, V. I.) Control subspaces of minimal dimension, and spectral multiplicities. (See 84a:47001)

Reidel, Norbert Spektraltheorie in geordneten Vektorräumen. [Spectral theory in ordered vector spaces] (84d:46012)

van Schagen, F. See Gohberg, Israel; et al., (84a:47032)

Smith, William V. Spectral measures. I. General theory in a topological vector space. (84d:46063)

Song, Guo Zhu See Wang, Sheng Wang; et al., (84j:46070)

Trapani, C. See Epifanio, G., (84b:47054)

Vasyunin, V. I. See Nikol'skii, N. K., (See 84a:47001)

Wang, Qiao Ling See Wang, Sheng Wang; et al., (84j:46070)

Wang, Sheng Wang (with Song, Guo Zhu; Wang, Qiao Ling) M -topology and some properties of $\mathfrak{D}_{(M)}$ operators. (Chinese. English summary) (84j:46070)

47B44 Accretive operators, dissipative operators, etc.

Arendt, Wolfgang (with Chernoff, Paul R.; Kato, Tosio) A generalization of dissipativity and positive semigroups. (84e:47047)

Boydziev, Khristo N. Unbounded dissipative operators on Jordan-Banach algebras and B^* algebras. (84c:47037)

Chernoff, Paul R. See Arendt, Wolfgang; et al., (84e:47047)

Kato, Tosio (with Satake, Ichirō) An algebraic theory of Landau-Kolmogorov inequalities. (84i:47052)

See also Arendt, Wolfgang; et al., (84e:47047)

de Laubenfels, Ralph J. Extensions of d/dx that generate uniformly bounded semigroups. (84i:47053)

Lewis, Roger T. Applications of a comparison theorem for quasi-accretive operators in a Hilbert space. (See 84b:34002)

McIntosh, Alan G. R. On representing closed accretive sesquilinear forms as $(A^{1/2}u, A^{1/2}v)$. (84c:47030)

Satake, Ichirō See Kato, Tosio, (84i:47052)

Shepelev, A. V. On generalized dissipative extensions. (Russian) (84a:47043)

Sohr, Hermann Eine Verallgemeinerung mehrerer Störungskriterien verschiedenen Typs im Hilbertraum. [A generalization of several perturbation criteria of different type in Hilbert space] (84k:47031)

secondary classifications:

Dubois, R.-M. Complexifications d'espaces de Banach réels et dissipativité.

[Complexifications of real Banach spaces and dissipativity] (84c:46008)

Fan, Ky Normalizable operators. (84b:47037)

Gubreev, G. M. (with Kovalenko, A. I.) A new property of the determinant of a perturbation of a weak contraction. (Russian) (84c:47009)

Hahn-Goldberg, Saul A regularity theorem for inverse bounded and accretive operators in abstract Hilbert space. (84f:47011)

Kovalenko, A. I. See Gubreev, G. M., (84c:47009)

Pustylnik, E. I. Functions of a positive operator. (Russian) (84b:47019)

47B47 Commutators, derivations

Campbell, Stephen L. Linear operators for which T^*T and TT^* commute. III. (84a:47044)

Carey, Richard W. (with Pincus, Joel D.) Principal functions, index theory, geometric measure theory and function algebras. (84c:47048)

Corbett, J. V. The commutation relation $[Y, Z] = 2Y$ and the absolutely continuous spectrum of Y . (84b:47042)

Gong, Wei Bang Scalar-type operators that are commutators of compact operators. (84d:47045)

Lu, Shi Jie On the derivations with norm closed range in Banach spaces. (84i:47054)

Moeller, James W. A double commutant theorem for conjugate selfadjoint operators. (84d:47044)

Pincus, Joel D. See Carey, Richard W., (84c:47048)

Raichinov, I. On the question of minimally commuting elements of algebras of linear operators acting in spaces of analytic functions. I. (Bulgarian. English and Russian summaries) **84b:47055**

Raichinov, R. I. See **Stoilov, Peio**, **84j:47058**

Stoilov, Peio (with **Raichinov, R. I.**) Explicit representation of the commutant of a first-order Euler differential operator in a linear polynomial operator algebra. (Bulgarian. English and Russian summaries) **84j:47058**

Tong, Yu Sun The double commutants and generalized spectral decompositions for selfadjoint operators in Π_2 spaces. (Chinese. English summary) **84c:47038**

Torgašev, Aleksandar Commutators on Wachs spaces. **84d:47045**

secondary classifications:

Bourdaud, Gérard Une extension du théorème des commutateurs de Calderón. (English summary) [A generalization of the commutator theorem of Calderón] (**84b:47061**)

Une extension du théorème des commutateurs de Calderón. [An extension of Calderón's commutator theorem] (**84m:42024**)

Chaves, M. The eigenvalues of the exponential function of the product of two operators that commute with their commutator. (Spanish) (**84c:47017**)

Gallatin, G. M. A useful formula for evaluating commutators. (**84c:81052**)

Hainzl, J. On commuting linear partial differential operators. (**84a:35052**)

Karakhanyan, M. I. An asymptotic variant of the Fuglede-Putnam theorem on commutators of linear bounded operators in strong and weak operator topologies. (Russian. Armenian summary) (**84a:47023**)

Karasev, P. P. See **Karasev, V. P.**; et al., (**84c:81084**)

Karasev, V. P. (with **Karasev, P. P.**; **San'ko, V. A.**; **Shelepin, L. A.**) A covariant formulation of the method of second quantization and some of its applications. (Russian) (**84c:81084**)

Livšic, M. S. Commuting operators and fields of systems, distributed in Euclidean space. (**84c:47012**)

Nasr, A. H. Observables measured simultaneously with the potential. (**84b:81047**)

Popa, Sorin On commutators in properly infinite W^* -algebras. (**84c:46063**)

Raichinov, I. Some commuting properties of algebras of linear operators acting in spaces of analytic functions. II. (Bulgarian. English and Russian summaries) (**84j:30092**)

Rosenstrater, C. Ray Compact operators and derivations induced by weighted shifts. (**84m:47029**)

San'ko, V. A. See **Karasev, V. P.**; et al., (**84c:81084**)

Shelepin, L. A. See **Karasev, V. P.**; et al., (**84c:81084**)

47B50 Operators on a space with an indefinite metric

Ball, Joseph A. (with **Helton, J. William**) Factorization results related to shifts in an indefinite metric. **84m:47047**

(with **Helton, J. William**) A Beurling-Lax theorem for the Lie group $U(m, n)$ which contains most classical interpolation theory. **84m:47046**

Bayasgalan, Ts. Existence of a positive square root of an operator, which is positive with respect to an indefinite metric. (Russian) **84c:47049**

Chunayeva, M. S. The characteristic function of a symmetric relation in a Pontryagin space. (Russian) **84j:47059**

See also **Vernik, A. N.**, **84f:47040**

Derkach, V. A. (with **Tsekanovskii, È. R.**) Classes of Krein-Langer functions and characteristic operator-functions of accretive operators in the Pontryagin space Π_2 . (Russian) **84j:47060**

Glukhov, V. P. (with **Ilyazova, D. Z.**) Nonexpanding extensions of nonexpanding relations in a Hilbert space with G -metric. (Russian) **84j:47061**

Helton, J. William See **Ball, Joseph A.**, **84m:47046** and **84m:47047**

Ilyazova, D. Z. See **Glukhov, V. P.**, **84j:47061**

Iokhvidov, E. I. Criteria for closedness and boundedness of linear operators of some classes. (Russian) **84c:47045**

Ivanchenko, T. S. The Nevanlinna-Pick problem in the case of an indefinite metric. (Russian. English summary) **84c:47056**

Jonas, P. Compact perturbations of definitizable operators. II. **84d:47046**

Kaashoek, M. A. Symmetrisable operators and minimal factorization. **84c:47050**

Kalinina, T. B. Extensions of an operator in a Hilbert space with an anti-unitary transformation. (Russian) **84c:47032**

Katsnel'son, V. È. Logarithmic subharmonicity of the J -form of the analytic J -expanding matrix-function. (Russian. English summary) **84d:47047**

Kuzhel', A. V. Regular extension of Hermitian operators in a space with indefinite metric. (Russian) **84a:47046**

J -selfadjoint and J -unitary dilations of linear operators. (Russian) **84f:47039**

Langer, Heinz Spectral functions of definitizable operators in Krein spaces. **84c:47034**

McEnnis, Brian W. Fundamental reducibility of selfadjoint operators on Krein space. **84d:47047**

Shifts on indefinite inner product spaces. II. **84b:47043**

Tong, Yu Sun Dissipative operators in spaces with an indefinite metric. (Chinese) **84j:47062**

Tensor product spaces with indefinite inner products and linear operators on these spaces. (Chinese. English summary) **84c:47051**

Tsekanovskii, È. R. See **Derkach, V. A.**, **84j:47060**

Vernik, A. N. (with **Chunayeva, M. S.**) Characteristic function of a linear relation in a space with an indefinite metric. (Russian) **84f:47040**

Two examples in the theory of characteristic functions of operators in a Krein space. (Russian) **84j:47063**

Wu, Jing Bo On the J -normal extensions of operators. (Chinese. English summary) **84c:47052**

Yan, Shao Zong Unitary dilation of an operator. **84b:47044**

Unitary operators on space II. I. (Chinese. English summary) **84j:47064**

Unitary operators on space II. II. **84j:47065**

Unitary operators on space II. III. (Chinese) **84j:47066**

secondary classifications:

Araki, Huzihiro On a pathology in indefinite metric inner product space. (**84f:81046**)

Broadbridge, P. (with **Hurst, C. A.**) Canonical forms for quadratic Hamiltonians. (**84c:81027**)

Dyakarev, Yu. M. Multiplicative and additive Stieltjes classes of analytic matrix-valued functions and interpolation problems connected with them. II. (Russian) (**84c:30042**)

Hurst, C. A. See **Broadbridge, P.**, (**84c:81027**)

Krall, Allan M. See **Mingarelli, Angelo B.**, (**84c:34039**) and (**84c:33016**)

Ma, Ji Pu Analytic operator rings and analytic J -selfadjoint operator rings. (Chinese. English summary) (**84m:47024**)

Mingarelli, Angelo B. (with **Krall, Allan M.**) Jacobi-type polynomials under an indefinite inner product. (**84c:34039**)

(with **Krall, Allan M.**) Laguerre type polynomials under an indefinite inner product. (**84c:33016**)

Potapov, V. P. A theorem on the modulus. I. Fundamental concepts. The modulus. (Russian) (**84d:15026**)

Tong, Yu Sun The double commutants and generalized spectral decompositions for selfadjoint operators in Π_2 spaces. (Chinese. English summary) (**84c:47038**)

Wu, Jing Bo Realizations of weighting patterns in Hilbert spaces. (**84c:93023**)

47B55 Operators on ordered spaces

Aliprantis, C. D. (with **Burkinshaw, O.**) Dunford-Pettis operators on Banach lattices. **84b:47045**

(with **Burkinshaw, O.**) On positive order continuous operators. **84c:47053**

Bakhtin, V. I. Solution of two problems of functional analysis in semiordered spaces. (Russian) **84j:47067**

Burkinshaw, O. See **Aliprantis, C. D.**, **84b:47045** and **84c:47053**

Cristescu, Romulus Relations d'ordre dans les espaces d'opérateurs. [Order relations in operator spaces] **84a:47048**

Godefroy, Gilles Sur les opérateurs compacts réguliers. [Regular compact operators] **84c:47057**

Hong, Chuan Li See **Zhang, Shi Sheng**, **84b:47040**

Kato, Tosio Superconvexity of the spectral radius, and convexity of the spectral bound and the type. **84c:47049**

Lipecki, Z. (with **Plachky, Detlef**) On monogenic operators and measures. **84c:47039**

Extensions of positive operators and extreme points. III. **84b:47046a**

(with **Thomsen, Wolfgang**) Extensions of positive operators and extreme points.

IV. **84b:47046b**

Marek, Ivo (with **Žitný, Karel**) Two-sided spectral bounds of two irreducible linear maps. **84c:47058**

Miyajima, Shinzo A characterization and the structure of operators with Maharam property. **84c:47040**

Papageorgiou, Nikolaos S. Nonsmooth analysis on partially ordered vector spaces. I. Convex case. **84h:47039**

Plachky, Detlef See **Lipecki, Z.**, **84c:47039**

Takeo, Fumiko On the spectrum of positive operators in simplex spaces. **84m:47048**

Thomsen, Wolfgang See **Lipecki, Z.**, **84b:47046b**

Vraciu, George Sur une représentation intégrale des opérateurs $(n-o)$ -bornés. [On an integral representation of $(n-o)$ -bounded operators] **84c:47054**

Zhang, Shi Sheng (with **Hong, Chuan Li**) On the positive solutions and spectral theory for a class of convex operators. (Chinese. English summary) **84b:47040**

Žitný, Karel See **Marek, Ivo**, **84c:47058**

secondary classifications:

Abramovich, Yu. A. (with **Geller, V. A.**) On a question of Fremlin concerning order bounded and regular operators. (**84b:46008**)

Arendt, Wolfgang (with **Chernoff, Paul R.**; **Kato, Tosio**) A generalization of dissipativity and positive semigroups. (**84c:47047**)

(with **Sourour, Ahmed Ramzi**) Ideals of regular operators on l^2 . (**84c:47048**)

Atalla, Robert E. Local ergodicity of nonpositive contractions on $C(X)$. (**84j:47009**)

Azaria, N. (with **Wright, J. D.** Maitland) Positive operators on operator algebras. (Italian summary) (**84c:46061**)

Chaudhary, Muhammad Nasir Compactness of positive maps majorized by compact maps. (**84j:47075**)

Chernoff, Paul R. See **Arendt, Wolfgang**; et al., (**84c:47047**)

Chyng Suan Dyk Kha Behavior of positive eigenvectors of a concave, not completely continuous operator near the boundary of the positive spectrum. (Russian) (**84b:47020**)

Geller, V. A. See **Abramovich, Yu. A.**, (**84b:46008**)

Heinrich, Stefan (with **Nielsen, N. J.**; **Olsen, G. H.**) Order bounded operators and tensor products of Banach lattices. (**84a:46154**)

Kato, Tosio See **Arendt, Wolfgang**; et al., (**84c:47047**)

Kitover, A. K. Spectral properties of homomorphisms with weight in algebras of continuous functions and their applications. (Russian. English summary) (**84c:47045**)

Krasnosel'skii, M. A. (with **Sobolev, A. V.**) Spectral gap of a focusing operator. (Russian) (**84c:47003**)

Kurtakov, K. Sh. Some properties of quasi-indecomposable weakly quasiconcave operators. (Russian. Tajiki summary) (**84f:47063**)

Nielsen, N. J. See **Heinrich, Stefan**; et al., (**84a:46154**)

Olsen, G. H. See **Heinrich, Stefan**; et al., (**84a:46154**)

Potocký, Rastislav On a property of Riesz spaces. (Russian summary) (**84a:46014**)

Reidel, Norbert Spektraltheorie in geordneten Vektorräumen. [Spectral theory in ordered vector spaces] (**84c:46012**)

Schaefer, Helmut H. Some recent results on positive groups and semigroups. (**84j:47071**)

Schmitt, Lothar M. (with **Wittstock, Gerd**) Kernel representation of completely positive Hilbert-Schmidt operators on standard forms. (**84a:46132**)

Sobolev, A. V. See **Krasnosel'skii, M. A.**, (**84c:47003**)

- Sourour, Ahmed Ramzi. See Arendt, Wolfgang. (84c:47048)
 Szulga, Jerzy. On lattice summing operators. (84c:47025)
 Wittstock, Gerd. See Schmitt, Lothar M., (84a:46132)
 Wright, J. D. Maitland. See Azarnia, N., (84i:46061)
 Yamamoto, Sadaaki. On linear operators on ordered Banach spaces. (84b:46011)

47B99 None of the above, but in this section

- Antoine, Jean-Pierre. (with Mathot, F.) Regular operators on partial inner product spaces. (French summary) 84m:47049
 Dym, Harry. (with Gohberg, Israel) Extension of matrix valued functions and block matrices. 84g:47035
 Gohberg, Israel. See Dym, Harry, 84g:47035
 Guale, Edda. On the equivalence of classes of operators of $\mathcal{H}^{\infty}(\Omega)$ into itself with the matrix of derivations. (Italian. English summary) 84m:47050
 Itoh, Shigeru. Algebraic models for positive operator valued measures. 84a:47050
 Kurbatov, V. G. A generalization of an operator of inner superposition. (Russian) 84b:47047
 Mathot, F. See Antoine, Jean-Pierre, 84m:47049
 Mikhailova, I. V. (with Potapov, V. P.) On a criterion of Hermitian positivity. (Russian) 84a:47051
 Nasr, A. H. The commutant of a multiplication operator. 84a:47052
 Potapov, V. P. See Mikhailova, I. V., 84a:47051
 Prigorskii, V. A. Quasimilarity of chains of projectors. (Russian) 84b:47048
 Sen, Dilip Kumar. Generalized p -selfadjoint operators on Banach spaces. 84j:47068

secondary classifications:

- Bakry, Dominique. (with Meyer, P.-A.) Sur les inégalités de Sobolev logarithmiques. I, II. [On logarithmic Sobolev inequalities. I, II] (84j:60083)
 Ball, Joseph A. (with Helton, J. William) Lie groups over the field of rational functions, signed spectral factorization, signed interpolation, and amplifier design. (84j:94033)
 Beaumamy, Bernard. Sous-espaces invariants pour les contractions de classe C_1 et vecteurs cycliques dans $C_0(Z)$. [Invariant subspaces for contractions of class C_1 and cyclic vectors in $C_0(Z)$] (84a:47006)
 Feintuch, Avraham. The causal invertibility problem. (See 84g:93005c)
 Gali, I. M. (with Okb El-Bab, A. S.) Integral representation of exponentially convex functions of infinite number of variables. (Arabic summary) (84j:47029)
 Helton, J. William. See Ball, Joseph A., (84j:94033)
 Khasbardar, Sunanda K. (with Thakare, Nimbakrishna K.) Operator equations and isometries. (84d:47018)
 Kondrat'ev, Yu. G. Second quantization operators and their perturbations. (Russian) (84i:47020)
 Perturbation of operators of second quantization. (Russian) (84d:58081)
 Krée, Paul. Anticommutative integration and Fermi fields. (84j:81052)
 Meyer, P.-A. See Bakry, Dominique, (84j:60083)
 Mynbaev, K. T. (with Otelbaev, M. O.) Upper bounds of approximation numbers of the imbedding operator of a class of weight spaces. I. (Russian. Kazakh summary) (84i:46077a)
 (with Otelbaev, M. O.) Bounds of approximation numbers of the imbedding operator of a class of weight spaces. II. (Russian. Kazakh summary) (84a:46077b)
 Okb El-Bab, A. S. See Gali, I. M., (84j:47029)
 Otelbaev, M. O. See Mynbaev, K. T., (84a:46077a) and (84a:46077b)
 Samoilenko, V. G. The spectrum of a differential operator with an infinite number of variables. (Russian) (84g:47043)
 Saworotnow, Parfeny P. Generalized positive definite functions and stationary processes. (84j:60045)
 Schuchermayer, Walter. Norm attaining operators on some classical Banach spaces. (84g:46031)
 Shtraus, L. A. Extensions of an isometric operator that depend on a complex parameter. (Russian) (84a:47010)
 Smirnov, S. N. On the asymptotic behavior of Feller chains. (Russian) (84c:60095)
 Thakare, Nimbakrishna K. See Khasbardar, Sunanda K., (84d:47018)
 Voigt, Jürgen. Stochastic operators, information, and entropy. (84c:47009)

47Cxx Single linear operators as elements of algebraic systems

47C05 Operators in algebras

secondary classifications:

- Davidson, Kenneth R. Essentially spectral operators. (84i:47048)
 Dym, Harry. (with Gohberg, Israel) Extension of matrix valued functions and block matrices. (84g:47035)
 Fe'dman, I. A. See Krupnik, N. Ya., (84c:47021)
 Gohberg, Israel. See Dym, Harry, (84g:47035)
 Krupnik, N. Ya. (with Fe'dman, I. A.) Invertibility of certain Fredholm operators. (Russian) (84c:47021)
 Moeller, James W. A double commutant theorem for conjugate selfadjoint operators. (84d:47044)

47C10 Operators in *-algebras

secondary classifications:

- Khalil, Roshdi. On some Banach space sequences. (84a:46046)

47C15 Operators in C^* - or von Neumann algebras

secondary classifications:

- Ayupov, Sh. A. On the construction of Jordan algebras of selfadjoint operators. (Russian) (84b:46071)
 Chien, Mao Ting. Homogeneity of singly generated C^* -algebras. (84c:46044)
 Kamei, Eizaburo. Majorization in finite factors. (84j:46086)
 Majewski, Adam. (with Robinson, Derek W.) Strictly positive and strongly positive semigroups. (84c:47042)
 Paulsen, Vern I. Preservation of essential matrix ranges by compact perturbations. (84g:46084)
 Popa, Sorin. On commutators in properly infinite W^* -algebras. (84c:46063)
 Robinson, Derek W. See Majewski, Adam, (84c:47042)
 Wu, Liang Sen. Tensor products of preclosed operators on C^* -algebras. (84m:46071)

47C99 None of the above, but in this section

47Dxx Algebraic systems of linear operators [See also 46Lxx.]

47D05 Semigroups of operators (For nonlinear operators, see 47H20; see also 20M20.)

- Abdelaziz, Nazar Hussein. Commutativity and the generation of n -parameter semigroups of bounded linear operators. 84g:47036
 On the product of class A -semigroups of linear operators. 84d:47048
 Babescu, Gh. Spectral theorems for functions whose values are cosine and sine operators. (Russian) 84m:47051
 Boyadzhiev, Khristo N. Unbounded generators of positive semigroups on B^* algebras. 84i:47059
 Cloranescu, Ioana. On quasianalytic vectors for some classes of operators. 84f:47041
 Deshpande, M. V. (with Padhye, S. M.) A note on semigroups of selfadjoint compact operators. 84b:47049
 Embry-Wardrop, Mary. The positive factor of a subnormal semigroup. 84c:47033
 Emch, Gerard G. (with Varilly, Joseph C.) Some remarks on dilating semigroups of completely positive mappings. 84c:47034
 Falkner, Neil. Closable operators and semigroups. 84d:47049
 Giga, Yoshikazu. The Stokes operator in L spaces. 84f:47042
 Görlich, E. (with Pontzen, D.) An approximation theorem for semigroups of growth order α and an extension of the Trotter-Lie formula. 84d:47050
 Greiner, Günther. Spektrum und Asymptotik stark stetiger Halbgruppen positiver Operatoren. [Spectrum and asymptotics of strongly continuous semigroups of positive operators] 84j:47069
 Groh, Ulrich. (with Neubrander, Frank) Stabilität starkstetiger, positiver Operatorhalbgruppen auf C^* -Algebren. [Stability of strongly continuous, positive operator semigroups on C^* -algebras] 84b:47041
 Guinand, P. S. On quasinilpotent semigroups of operators. 84b:47042
 Herbst, Ira W. The spectrum of Hilbert space semigroups. 84m:47052
 Hooton, James G. Dirichlet semigroups on bounded domains. 84a:47053
 Ishii, Susumu. Linear evolution equations $du/dt + A(t)u = 0$: a case where $A(t)$ is strongly uniform-measurable. 84j:47070
 Jørgensen, Palle E. T. Compact symmetry groups and generators for sub-Markovian semigroups. 84c:47055
 Kovács, István. Dilation theory and one-parameter semigroups of contractions. 84b:47043
 Kurepa, Svetozar. Semigroups and cosine functions. 84f:47043
 Levan, N. On s (strong)-stability of Hilbert space contraction semigroups. (See 84g:93005c)
 Lubin, Arthur. On pure subnormal semigroups. 84c:47035
 Lutz, Dieter. On bounded time-dependent perturbations of operator cosine functions. 84d:47041
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- Gillespie, T. A. See Benzinger, Harold; et al. (84h:47038)
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- Hönig, Chaim Samuel Équations intégrales généralisées et applications. [Generalized integral equations and applications] (84m:45039)
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- Khavinak, I. Operator valued measures and perturbations of semigroups. (84j:28019)
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- Leake, R. J. (with Swaminathan, B.) Discrete-time system operators on resolution sets of sequences. (See 84g:93005b)
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- Paquet, Luc Problèmes mixtes pour le système de Maxwell. (English summary) [Mixed problems for the Maxwell system] (84c:58075)
- Pfeifer, Dietmar On a general probabilistic representation formula for semigroups of operators. (84d:60043)
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- Song, Jian (with Yu, Jing Yuan; Wang, Yan Zu; Hu, Shun Ju; Zhao, Zhong Xin; Liu, Jia Quan; Feng, De Xing; Zhu, Guang Tian) Spectral properties of population operator and asymptotic behaviour of population semigroup. (84m:92032)
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- Alagia, Humberto R. Cartan subalgebras of Banach-Lie algebras of operators. (84a:17010)
 Ayupov, Sh. A. Extension of traces and type criteria for Jordan algebras of selfadjoint operators. (84a:46125)
 Christensen, Erik Derivations and their relation to perturbations of operator algebras. (84b:46080)
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 Gauchman, Hillel On nonselfadjoint representations of Lie algebras. (84m:17006)
 Kadison, Richard V. Diagonalizing matrices over operator algebras. (84i:46080)

- Korotkov, V. B. On Halmos-Sunder problems concerning integral operators in L_2 . (Russian) (84i:47068)
- Limaye, Balmohan Vishnu (with Namboodiri, M. N. N.) Approximation by positive functionals. (84e:46059)
- Meľnichenko, G. A. The structure of some operators from a nest algebra. (Russian. English and Lithuanian summaries) (84i:47018)
- Namboodiri, M. N. N. See Limaye, Balmohan Vishnu, (84e:46059)
- Papaloucas, L. C. Uncertainty relations and semigroups in B -algebras. (84m:81036)
- Pimsner, M. (with Popa, Sorin; Voiculescu, Dan) Remarks on ideals of the Calkin-algebra for certain singular extensions. (84i:46073)
- Popa, Sorin See Pimsner, M.; et al., (84i:46073)
- Redheffer, Raymond M. (with Volkmann, Peter) Bilineare Funktionen mit Hilbertraum-Operatoren als Veränderlichen. [Bilinear functions with Hilbert space operators as variables] (84i:47036)
- Villamarín, Manuel-Antonio Fugarolas (with Cobos, F.) On Schauder bases in the Lorentz operator ideal. (84i:47023)
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- Arendt, Wolfgang (with Sourour, Ahmed Ramzi) Ideals of regular operators on l^2 . (84c:47048)
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- Chaudhry, Muhammad Nasir Compactness of positive maps majorized by compact maps. (84j:47075)
- Diaz, Maximiliano See Canavati, José A., (84c:47057)
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- Junek, Heinz Linear operators in (F) -spaces. (84j:47076)
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- Carl, Bernd Inequalities between geometric quantities of operators in Banach spaces. (84c:47022)
- Clancey, Kevin F. Exact sequences of algebras generated by singular integral operators. (84c:47063)
- De Grande-De Kimpe, Nicole Operators factoring through a generalized sequence space; applications. (84b:46011)
- van Eldik, P. See Grobler, J. J.; et al., (84g:47020a)
- Engelbrecht, J. C. (with Grobler, J. J.) Fredholm theory for operators in an operator ideal with a trace. II. (84g:47020b)
- Franco, L. (with Piñero, C.) The injective hull of an operator ideal on locally convex spaces. (84i:47049)
- Grobler, J. J. (with Raubenheimer, H.; van Eldik, P.) Fredholm theory for operators in an operator ideal with a trace. I. (84g:47020a)
- See also Engelbrecht, J. C., (84g:47020b)
- Helm, P. R. Generators and relations for certain linear groups over rings of linear operators. (84b:16011)
- Jarchow, Hans (with Ott, Rudolf) On trace ideals. (84f:47023)
- Kato, Mikio On the limit orders of operator ideals. (84d:47025)
- Kühn, Thomas An operator ideal in connection with Gaussian measures and applications to nuclearity of integral operators. (84i:47035)
- γ -Radonifying operators and entropy ideals. (84d:47026)
- On the n -nuclearity of Gaussian covariances and the composition of nuclear operators. (84c:47024)
- Leitner, Hartmut (with Pietsch, Albrecht) An elementary proof of Lidskij's trace formula. (German and Russian summaries) (84b:47025)
- (Lizorkin, P. L.) See Pietsch, Albrecht, (84c:47002)
- Lubitz, Claus \star Weylzahlen von Diagonaloperatoren und Sobolev-Einbettungen. (German) [Weyl numbers of diagonal operators and Sobolev imbeddings] (84c:47028)
- Mekler, A. A. The averaging operator with respect to a countable partition on a minimal symmetric invariant ideal of the space $L^1(0, 1)$. (Russian. English summary) (84c:46027)
- (Miroshin, N. V.) See Pietsch, Albrecht, (84c:47002)
- Ott, Rudolf See Jarchow, Hans, (84f:47023)
- Pelletier, Joan Wick Tensor norms and operators in the category of Banach spaces. (84c:46156)
- Pietsch, Albrecht \star Операторные идеалы. (Russian) [Operator ideals] (84c:47002)
- Approximationszahlen, Eigenwerte und Spuren von Operatoren in Banachräumen. [Approximation numbers, eigenvalues and traces of operators in Banach spaces] (84i:47032)
- See also Leitner, Hartmut, (84b:47025)
- Piñero, C. See Franco, L., (84f:47049)
- Raubenheimer, H. See Grobler, J. J.; et al., (84g:47020a)
- Ricker, W. On Boolean algebras of projections and scalar-type spectral operators. (84b:47040)
- Ruckle, William H. Absolutely divergent series and Banach operator ideals. (84j:46025)
- Schütt, Carsten On the volume of unit balls in Banach spaces. (84c:46040)
- Thomas, Marc P. Closed ideals of $l^p(\omega_\kappa)$ when $\{\omega_\kappa\}$ is star-shaped. (84d:46078)

- Tijš, Nicolae On a class of l_{∞} operators. (84b:47026)
- Wood, Bertram One-sided ideals in Banach algebras. (84c:46049)

47D35 Dual spaces of operator algebras and topological groups

secondary classifications:

- Araki, Huzihiro (with Jurzak, Jean-Paul) On a certain class of \ast -algebras of unbounded operators. (84g:47041)
- Jurzak, Jean-Paul See Araki, Huzihiro, (84g:47041)
- Kürsten, Klaus-Detlef Ein Gegenbeispiel zum Reflexivitätsproblem für gemeinsame Definitionsbereiche von Operatoralgebren im separablen Hilbert-Raum. [A counterexample to the reflexivity problem for common domains of definition of operator algebras in separable Hilbert space] (84b:47055)
- 47D40 Algebras of unbounded operators
- Araki, Huzihiro (with Jurzak, Jean-Paul) On a certain class of \ast -algebras of unbounded operators. (84g:47041)
- Epifanio, G. (with Trapani, C.) Some spectral properties in algebras of unbounded operators. (84b:47054)
- Junek, Heinz (with Müller, Jürgen) Topologische Ideale unbeschränkter Operatoren im Hilbertraum. (English and Russian summaries) [Topological ideals of unbounded operators in Hilbert space] (84j:47077)
- Jurzak, Jean-Paul Unbounded operator algebras and DF-spaces. (84j:47078)
- See also Araki, Huzihiro, (84g:47041)
- Kürsten, Klaus-Detlef Ein Gegenbeispiel zum Reflexivitätsproblem für gemeinsame Definitionsbereiche von Operatoralgebren im separablen Hilbert-Raum. [A counterexample to the reflexivity problem for common domains of definition of operator algebras in separable Hilbert space] (84b:47055)
- Müller, Jürgen See Junek, Heinz, (84j:47077)
- Powers, Robert T. Algebras of unbounded operators. (84a:47059)
- Schmüdgen, Konrad On the Heisenberg commutation relation. I. (84j:47079)
- Schröder, Manfred (with Timmermann, Werner) Einige einfache Eigenschaften von Automorphismen in Algebren unbeschränkter Operatoren. [Some simple properties of automorphisms in algebras of unbounded operators] (84d:47061)
- Timmermann, Werner See Schröder, Manfred, (84d:47061)
- Trapani, C. See Epifanio, G., (84b:47054)

secondary classifications:

- Antoine, Jean-Pierre (with Mathot, F.) Regular operators on partial inner product spaces. (French summary) (84c:47049)
- Hofmann, Gerald Ein hinreichendes Kriterium für die Normalität von Kegeln in Tensoralgebren und einige Anwendungen. [A sufficient criterion for the normality of cones in tensor algebras and some applications] (84c:46119)
- Kunze, Wolfgang Halbordnung und Topologie in GC^\ast -Algebren. [Partial order and topology in GC^\ast -algebras] (84d:46089)
- Mathot, F. See Antoine, Jean-Pierre, (84m:47049)

47D45 Applications to physics

secondary classifications:

- Ball, Joseph A. (with Helton, J. William) Subinvariants for analytic mappings on matrix balls. (84d:32035)
- Carey, A. L. (with O'Brien, D. M.) Absence of vacuum polarisation in Fock space. (84c:81049)
- Helton, J. William See Ball, Joseph A., (84d:32035)
- Herbut, F. (with Ivanović, I. D.) The principle of strictly increasing mixing character in incompatible general measurement. (84b:81011)
- Hofmann, Gerald Topologien auf der Algebra der Testfunktionen der Quantenfeldtheorie. [Topologies on the algebra of test functions of quantum field theory] (84c:81019)
- Ivanović, I. D. See Herbut, F., (84b:81011)
- Matveichuk, M. S. A description of finite measures in semifinite algebras. (Russian) (84b:46088)
- O'Brien, D. M. See Carey, A. L., (84c:81049)

47D99 None of the above, but in this section

- Binding, Paul Multiparameter definiteness conditions. II. (84f:47055)
- Bridges, Douglas S. A constructive look at positive linear functionals on $\mathcal{C}(H)$. (84f:47056)
- Bulteel, A. Inequalities in Hilbert modules of operator valued functions, a tool for least squares ARMA filtering. (See 84g:93005d)
- Deshpande, M. V. (with Padhye, S. M.) Collectively compact sets of operators and almost periodic functions. (84b:47056)
- Lutz, Dieter An approximation theorem for cosine operator functions. (84c:47060)
- Padhye, S. M. See Deshpande, M. V., (84b:47056)
- secondary classifications:
- Eschmeier, Jörg Equivalence of decomposability and 2-decomposability for several commuting operators. (84d:47042)
- Feyel, Denis Sur les extensions cylindriques de noyaux. [On cylindrical extensions of kernels] (84b:31006)
- Mikhaleva, L. I. Bounded subsets of non-Archimedean Banach spaces and of their rings of continuous operators. (Russian. English summary) (84d:46114)
- Solel, Baruch On derivations of certain algebras related to irreducible triangular algebras. (84c:46152)

47E05 Ordinary differential operators [See also 34B25, 58Fxx.]

- Apyshv, O. D. The spectrum of a polar differential operator. (Russian) **84c:47049**
- Barkovskii, Yu. S. Hypo-oscillation and hyperoscillation differential operators. (Russian) **84c:47050**
- Brown, Richard C. (with Tvrdý, Milan) Generalized boundary value problems with abstract side conditions and their adjoints. II. **84f:47057**
- Dmitrushchenkov, V. A. Spectral differential operators with periodic coefficients. (Russian) **84c:47057**
- Gorbachuk, M. L. (with Levchuk, V. V.) Selfadjoint extensions with an absolutely continuous spectrum of a minimal operator generated by a first-order operator-differential expression. (Russian. English summary) **84d:47062**
- Granata, Antonio On factorizations of selfadjoint ordinary differential operators. **84c:47061**
- Gubreev, G. M. (with Kovalenko, A. I.) Criteria for the completeness of root subspaces of a differentiation operator with abstract boundary conditions. (Russian) **84g:47042**
- I'in, V. A. (with Tikhomirov, V. V.) The basis property of Riesz means of spectral decompositions corresponding to an n th-order ordinary nonselfadjoint differential operator. (Russian) **84d:47050**
- Izanko, Yu. Ya. The Fredholm property of differential operators in a space of bounded functions. (Russian) **84j:47080**
- Joó, István A sharp estimate for the difference of partial sums of a trigonometric Fourier series and of expansions in eigen- and associated functions of nonselfadjoint differential operators of Schrödinger type for an absolutely continuous function in the one-dimensional case. (Russian) **84d:47065**
- (with Nersesyan, A. B.) The rate of equiconvergence of spectral expansions of some functional-differential operators in certain classes of functions of bounded variation. (Russian) **84m:47059**
- Kasymov, E. A. Sufficient conditions for essential selfadjointness of a higher-order operator. (Russian) **84c:47051**
- Khachatryan, I. G. Investigation of the point spectrum of an ordinary singular differential operator. (Russian. Armenian summary) **84j:47081**
- Komornik, V. The asymptotic behaviour of the eigenfunctions of higher order of a linear differential operator. **84j:47082**
- Kovalenko, A. I. See Gubreev, G. M., **84g:47042**
- Levchuk, V. V. See Gorbachuk, M. L., **84d:47062**
- Levin, A. Yu. Factorization and nonlowering of oscillations at the boundary. (Russian) (See **84i:00016**)
- McBride, Adam C. Index laws for some ordinary differential operators. (See **84b:34002**)
- Fractional powers of a class of ordinary differential operators. **84b:47058**
- Mikhailits, V. A. Spectra of operators and boundary value problems. (Russian) **84j:47083**
- Minkin, A. M. Equiconvergence theorem for expansion by a spectral function of a symmetric differential operator and into a Fourier integral. (Russian) **84a:47062**
- Nersesyan, A. B. See Joó, István, **84m:47059**
- Okikiolu, G. O. Expansions of Taylor series type for linear differential operators. **84c:47051**
- Orudzhev, G. D. Selfadjoint boundary value problems for operator-differential equations. (Russian. English and Azerbaijani summaries) **84c:47052**
- Paris, R. B. See Wood, A. D., (See **84b:34002**)
- Sin'ko, G. I. On the spectral theory of a finite-dimensional perturbation of the differentiation operator. (Russian) **84j:47084**
- Sobolevskii, E. P. Estimation of the commutator $A(\lambda - B)^{-1} - (\lambda - B)^{-1}A$. (Russian) **84m:47060**
- Storozh, O. G. Conditions for the selfadjointness of some differential-boundary operators. (Russian) **84b:47059**
- Tikhomirov, V. V. See I'in, V. A., **84b:47050**
- Tvrdý, Milan See Brown, Richard C., **84f:47057**
- Vagabov, A. I. Multiple completeness of eigen- and associated functions for ordinary differential pencils with irregular boundary conditions. (Russian. English summary) **84m:47061**
- Wood, A. D. (with Paris, R. B.) On some conjectures on the deficiency index for symmetric differential operators. (See **84b:34002**)
- Wray, S. D. On a second-order differential expression and its Dirichlet integral. (See **84b:34002**)
- secondary classifications:
- Abudov, A. A. The Green function of a higher-order operator-differential equation with boundary conditions. (Russian. English and Azerbaijani summaries) **84c:34062**
- Alimov, Sh. A. (with Joó, István) Equiconvergence theorem with exact order. **84d:34017**
- Atkinson, F. V. (with Evans, William D.) On the exponential behaviour of eigenfunctions and the essential spectrum of differential operators. **84a:34027**
- Avron, Joseph E. (with Simon, Barry) Almost periodic Schrödinger operators. I. Limit periodic potentials. **84i:34023**
- Benzinger, Harold (with Berkson, Earl; Gillespie, T. A.) Spectral families of projections, semigroups, and differential operators. **84b:47038**
- Berkson, Earl See Benzinger, Harold; et al., **84b:47038**
- Borell, Christer Positivity improving operators and hypercontractivity. **84b:47029**
- Brown, Richard C. (with Tvrdý, Milan; Vejvoda, Otto) Duality theory for linear n th order integro-differential operators with definition domain in L^2_ω determined by interface side conditions. **84a:45008**
- Das, P. C. (with Prasad, Uma Shanker) Adjoints and selfadjointness for a differential operator with a varying structure. **84c:34022**
- Dikhamindzhiya, G. V. Essential selfadjointness of an operator of Dirac type. (Russian. English and Georgian summaries) **84c:34034**
- Dzhurashyan, M. M. The property of being a basis for biorthogonal systems that are generated by boundary value problems for fractional-order differential operators. (Russian) **84a:42020**
- Erbe, Lynn H. (with Lee, Sung J.) Operator part of infinite system of differential equations. **84d:34062**
- Evans, William D. See Atkinson, F. V., **84a:34027**
- Everitt, W. N. On certain regular ordinary differential expressions and related differential operators. **84c:34033**
- (with Wray, S. D.) A singular spectral identity and inequality involving the Dirichlet integral of an ordinary differential expression. **84g:34034**
- Ezeilo, James Okoye Chukuka Periodic solutions of certain sixth order differential equations. **84b:34049**
- Fulton, C. T. Asymptotics of the m -coefficient for eigenvalue problems with eigenparameter in the boundary conditions. **84c:34034**
- Gasymov, M. G. On the spectrum of a nonselfadjoint operator. (Russian) **84c:34031**
- Gillespie, T. A. See Benzinger, Harold; et al., **84b:47038**
- Gorbachuk, V. I. (with Ribak, M. O.) Boundary value problems for the operator Sturm-Liouville equation with a spectral parameter in the equation and in the boundary condition. (Russian) **84b:34047**
- Grünbaum, F. Alberto Differential operators commuting with convolution integral operators. **84b:45023**
- Guseinov, I. M. Spectral analysis of a class of systems of first-order differential equations. (Russian. English and Azerbaijani summaries) **84g:34037**
- Heinz, Erhard ★ Über das absolut stetige Spektrum singulärer Differentialgleichungssysteme. (German) [On the absolutely continuous spectrum of systems of singular differential equations] **84m:34025**
- Herron, Isom H. A completeness theorem for the linear stability problem of nearly parallel flows. **84g:34038**
- Ivanov, B. A. Spectral properties of positive operator-valued functions. (Russian) **84g:34028**
- Joó, István See Alimov, Sh. A., **84d:34017**
- Kauffman, Robert M. Nonnormalizable eigenfunction expansions for ordinary differential operators. (See **84b:34002**)
- Khachatryan, I. G. Some inverse problems for higher-order differential operators on the semiaxis. (Russian) **84m:34028**
- Khasanov, A. B. Inverse problem of scattering theory for the Zakharov-Shabat operator. (Russian) **84c:34035**
- Kha Zai Bang (with Korobeinik, Yu. F.) The applicability of composite differential operators to some classes of exponential functions. (Russian) **84d:30065**
- Klaus, Martin On $-d^2/dx^2 + V$ where V has infinitely many "bumps". (French summary) **84m:34029**
- Knowles, Ian (with Race, David) On the correctness of boundary conditions for certain linear differential operators. **84f:34027**
- Korobeinik, Yu. F. See Kha Zai Bang, **84d:30065**
- Kozhukhar', P. A. The spectrum of a perturbed selfadjoint operator. (Russian) **84b:47016**
- de Laubenfels, Ralph J. Extensions of d/dx that generate uniformly bounded semigroups. **84b:47053**
- Lazetic, Nebojsa Convergence of expansions in eigen- and associated functions of a nonselfadjoint operator of Sturm-Liouville type with discontinuous coefficients. (Russian) **84m:34031**
- Convergence of spectral expansions corresponding to a nonnegative selfadjoint extension of the Sturm-Liouville operator for functions from the class H^s_μ . (Russian) **84c:34034**
- Lee, Sung J. Index and nonhomogeneous conditions for linear manifolds. **84e:58002**
- See also Erbe, Lynn H., **84d:34062**
- Levchuk, V. V. Smooth maximally dissipative boundary value problems for a parabolic equation in a Hilbert space. (Russian) **84c:34064**
- Lewis, Roger T. Applications of a comparison theorem for quasi-accretive operators in a Hilbert space. (See **84b:34002**)
- Lifshits, A. E. Spectral properties of degenerate systems of ordinary differential equations on a finite interval. (Russian) **84f:34034**
- McLaughlin, Joyce R. Higher order inverse eigenvalue problems. **84g:34042**
- Miyatake, Sadao Constructions of eigenfunctions for the Sturm-Liouville operator by comparison method. **84g:34043**
- Moikeichev, V. S. In the perturbation of a boundary value problem by terms with deviating argument the spectrum can vanish. (Russian) **84f:34038**
- Moses, Harry E. (with Prosser, Reese T.) The Gel'fand-Levitan equation on a finite interval. **84c:34035**
- Mynbaev, K. T. (with Otelbaev, M. O.) Upper bounds of approximation numbers of the imbedding operator of a class of weight spaces. I. (Russian. Kazakh summary) **84a:46077a**
- (with Otelbaev, M. O.) Bounds of approximation numbers of the imbedding operator of a class of weight spaces. II. (Russian. Kazakh summary) **84a:46077b**
- Nachovich, Mauro A remark on differential equations with polynomial coefficients. (Italian summary) **84c:34010**
- O'Brien, D. M. A trace formula for Schrödinger operators with step potentials. **84c:34035**
- Okikiolu, G. O. Semigroups of operators generated by linear differential operators—representations of linear multiplicative and differential operators. **84g:47037**
- Representations of linear differential operators with domains comprising measurable functions. **84m:47053a**
- Semigroups of operators whose generators are defined in terms of differential and multiplier operators. **84m:47053b**
- Otelbaev, M. O. On asymptotic formulas for eigenvalues of the Sturm-Liouville operator. (Russian) **84m:34033**
- See also Mynbaev, K. T., **84a:46077a** and **84a:46077b**
- Ouyang, Liang On the limit circle criterion of second-order differential operators. (Chinese) **84b:34041**
- Prasad, Uma Shanker See Das, P. C., **84c:34022**
- Prosser, Reese T. See Moses, Harry E., **84c:34035**
- Race, David See Knowles, Ian, **84f:34027**
- Radzievskii, G. V. The problem of completeness of root vectors in the spectral theory of operator-valued functions. (Russian) **84b:47023**

- Raichinov, R. I. See Stoilov, Peio, (84j:47058)
- Ribak, M. O. See Gorbachuk, V. I., (84h:34047)
- Roach, Gary F. ★ Green's functions. (84h:34001)
- Shaldanbaev, A. Sh. Trace formulas for periodic and antiperiodic Sturm-Liouville problems. (Russian. English summary) (84h:34038)
- Shkalikov, A. A. Basis property of eigenfunctions of ordinary differential operators with integral boundary conditions. (Russian. English summary) (84g:34044)
- Simon, Barry See Avron, Joseph E., (84i:34023)
- Slyusarchuk, V. E. The invertibility of almost periodic c -continuous functional operators. (Russian) (84h:34091)
- Smith, William V. Differential operators in Banach spaces with densely defined spectral measures. (84d:34019)
- de Snoo, Hendrik S. V. Pointwise convergence of eigenfunction expansions associated with ordinary differential operators. (84g:34045)
- Stoilov, Peio (with Raichinov, R. I.) Explicit representation of the commutant of a first-order Euler differential operator in a linear polynomial operator algebra. (Bulgarian. English and Russian summaries) (84j:47058)
- Sultanaev, Ya. T. Asymptotic behavior of the spectrum of ordinary differential operators in the degenerate case. (Russian) (84m:34034)
- Suturin, M. G. On an inverse scattering problem with nonlocal complex-valued potential. (Russian) (84h:34040)
- Szymkat, Maciej The form of the n th iteration of the operator $q = fd/dx$. (84i:05022)
- Tiwari, S. On eigenvector expansions associated with a matrix differential operator. (84m:34035)
- Tvrdý, Milan See Brown, Richard C.; et al., (84a:45008)
- Vagabov, A. I. On the incompleteness of a system of eigenelements of differential operators in a space of vector functions. (Russian) (84j:34021)
- Vejvoda, Otto See Brown, Richard C.; et al., (84a:45008)
- Velier, O. A. The spectrum and spectral singularities of differential operators with periodic complex-valued coefficients. (Russian) (84h:34040)
- Veling, E. J. M. Optimal lower bounds for the spectrum of a second order linear differential equation with a p -integrable coefficient. (84h:34050)
- Weber, Albin On the asymptotic distribution of eigenvalues of the Sturm-Liouville operator. (84g:34046)
- Wray, S. D. See Everitt, W. N., (84g:34034)

47F05 Partial differential operators [See also 35Pxx, 58Gxx.]

- Berezans'kii, Yu. M. (with Samoilenko, V. G.) Selfadjointness of differential operators with a finite and infinite number of variables, and evolution equations. (Russian) 84m:47062
- de Bivar-Weinholtz, António Formule de la demi-somme pour des opérateurs du type Schrödinger avec potentiel singulier complexe. (English summary) [A formula for the half sum of Schrödinger-type operators with complex singular potential] 84b:47060
- Kantor, S. A. Splitting of strongly elliptic operators. (Russian) 84h:47053
- Muthuramalingam, P. L. Kato bound for spherically symmetric potentials with respect to square roots of the Laplacian. 84c:47052
- Orochko, Yu. B. On the theory of selfadjoint operators that are generated by second-order strongly singular expressions in divergence form. (Russian) 84j:47085
- Samoilenko, V. G. The spectrum of a differential operator with an infinite number of variables. (Russian) 84g:47043
- See also Berezans'kii, Yu. M., 84m:47062
- Samoilenko, Yu. S. (with Us, G. F.) Differential operators with constant coefficients in spaces of functions of a countable number of variables. (Russian) 84h:47054
- Sarko, E. M. On the analyticity of an almost-periodic function with a bounded Bloch spectrum. (Russian) 84h:47055
- Shevchenko, V. I. On the coincidence of the minimal and the maximal operator for differential expressions with a singularity in the leading coefficients. (Russian) 84m:47063
- Us, G. F. See Samoilenko, Yu. S., 84h:47054

secondary classifications:

- Arutyunyan, T. N. The spectrum of a class of differential operators. (Russian. English and Armenian summaries) (84e:35116)
- Babich, V. M. (with Ulin, V. V.) Complex ray solutions and eigenfunctions that are concentrated in the neighborhood of a closed geodesic. (Russian. English summary) (84a:35225)
- Bastis, A. I. Divergence of spectral expansions of functions from L^2_μ . (Russian) (84b:35098)
- Bazarbekov, A. B. Smooth extensions of the Laplace operator in a domain with corner points. (Russian) (84j:35128)
- Ben-Artzi, Matania A limiting absorption principle for Schrödinger operators with spherically symmetric exploding potentials. (84d:35037)
- Berthier, Anne-Marie ★ Spectral theory and wave operators for the Schrödinger equation. (84e:35108)
- On the point spectrum of Schrödinger operators. (84i:35106)
- de Bivar-Weinholtz, António Sur l'opérateur de Schrödinger avec potentiel singulier magnétique, dans un ouvert arbitraire de \mathbb{R}^N . (English summary) [On the Schrödinger operator with a singular magnetic potential, in an arbitrary open subset of \mathbb{R}^N] (84a:35214)
- Bogatov, M. I. Positive definite operators generated by elliptic-quasielliptic equations. (Russian) (84m:35037)
- Campanato, Sergio Generation of analytic semigroups by elliptic operators of second order in Hölder spaces. (84j:35063)
- Chueshev, I. D. On the existence of domains of definition of the Schrödinger operator with a highly singular potential of paired interactions. (Russian) (84c:35079)
- Coifman, R. R. (with Deng, D. G.; Meyer, Yves) Domaine de la racine carrée de certains opérateurs différentiels accréités. (English summary) [Domain of the square root of certain accretive differential operators] (84h:35040)

- Coz, Marcel A Marchenko equation for complex interactions with a regular analytic continuation. (84d:35121)
- Davies, Edward Brian Some norm bounds and quadratic form inequalities for Schrödinger operators. (84e:35123b)
- Demichele, Cataldo (with Matteo, Alba) The index of second-order elliptic operators with singular coefficients in unbounded domains. (Italian. English summary) (84i:35036)
- Deng, D. G. See Coifman, R. R.; et al., (84h:35040)
- Dmitrushchenkov, V. A. The spectrum of the Schrödinger operator with periodic potential in a two-dimensional strip. (Russian) (84h:35097)
- Donig, J. The domain dependence of dominant Fredholm eigenvalues for the Helmholtz operator. (84i:35044)
- Eastham, Michael S. P. (with Kalf, Hubert) ★ Schrödinger-type operators with continuous spectra. (84i:35107)
- Elfinger, H. J. Lower-bound estimates on the coupling constant of certain nonlinear Schrödinger equations by L^p -inequalities. (84e:81012)
- Egorov, Yu. V. (with Kondrat'ev, V. A.) Estimate of the first eigenvalue of a selfadjoint elliptic operator. (Russian. English summary) (84i:35110)
- Fabes, Eugene B. (with Jerison, David S.; Kenig, Carlos E.) The Wiener test for degenerate elliptic equations. (French summary) (84g:35067)
- Froese, Richard (with Herbst, Ira W.; Hoffmann-Ostenhof, Maria; Hoffmann-Ostenhof, Thomas) L^2 -exponential lower bounds to solutions of the Schrödinger equation. (84c:35034)
- Frolov, N. N. Fundamental solutions of infinite-dimensional differential equations with constant coefficients. (Russian) (84d:35142)
- On a homeomorphism of Hilbert spaces that is realized by a differential operator. (Russian) (84a:46072)
- Garadzhev, A. On the spectral theory for problems on normal oscillations of an ideal fluid in rotating elastic vessels. (Russian) (84a:35257)
- Gauchman, Hillel Operator colligations on differentiable manifolds. (84e:58017)
- Gimadilamov, M. G. Criterion of discreteness of the spectrum of a hypoelliptic operator. (Russian) (84h:35120)
- Grubb, Gerd Spectral asymptotics for the "soft" selfadjoint extension of a symmetric elliptic differential operator. (84h:35107)
- Gutkin, Eugene Integrable systems with delta-potential. (84a:58005)
- Hainzl, J. On commuting linear partial differential operators. (84a:35052)
- Herbst, Ira W. See Froese, Richard; et al., (84c:35034)
- Hoegh-Krohn, Raphael (with Holden, Helge; Martinelli, Fabio) The spectrum of defect periodic point interactions. (84j:81145)
- Hoffmann-Ostenhof, Maria See Froese, Richard; et al., (84c:35034)
- Hoffmann-Ostenhof, Thomas See Froese, Richard; et al., (84c:35034)
- Holden, Helge See Hoegh-Krohn, Raphael; et al., (84j:81145)
- Hughes, Rhonda J. Singular perturbations in the interaction representation. II. (84e:35122)
- Ifin, E. M. Scattering characteristics of a problem of diffraction by a wedge and by a screen. (Russian. English summary) (84h:35101)
- Iwatsuka, Akira The essential spectrum of two-dimensional Schrödinger operators with perturbed constant magnetic fields. (84h:35103)
- Jerison, David S. See Fabes, Eugene B.; et al., (84g:35067)
- Kalf, Hubert See Eastham, Michael S. P., (84i:35107)
- Kasparov, G. G. Index of invariant elliptic operators, K -theory and representations of Lie groups. (Russian) (84g:58100)
- Kato, Tosio Holomorphic families of Dirac operators. (84h:35114)
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- Baoendi, M. S. (with Goulaouic, C.) Sharp estimates for analytic pseudodifferential operators and application to Cauchy problems. (84g:35173)
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Webb, J. R. L. Approximation solvability of nonlinear equations. **(84c:47077)**

Yurges, V. V. Some geometric characteristics of Banach spaces and accretive operators. (Russian) **(84j:46028)**

47H07 Monotone and positive operators on ordered Banach spaces or other ordered topological vector spaces

Gupta, Chaitan P. Leray-Schauder type continuation theorems for some nonlinear equations in Banach spaces. **84b:47057**

Kurtakov, K. Sh. Some properties of quasi-indecomposable weakly quasiconcave operators. (Russian. Tajiki summary) **84f:47063**

Kusraev, A. G. (with Kutateladze, S. S.) Analysis of subdifferentials by means of Boolean valued models. (Russian) **84c:47068**

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Kuzhen'kin, S. N. Monotone sublinear projectors in K -spaces. (Russian) **84b:47064**

Tokareva, T. V. A class of nonlinear equations with concave operators depending on a parameter. (Russian) **84j:47090**

secondary classifications:

Hirsch, Morris W. Differential equations and convergence almost everywhere in strongly monotone semiflows. **(84b:34095)**

Lakshmikantham, V. (with Leela, S.) Existence and monotone method for periodic solutions of first-order differential equations. **(84c:34059)**

Leela, S. See Lakshmikantham, V., **(84c:34059)**

Riddell, R. C. Equivalence of nonlinear complementarity problems and least element problems in Banach lattices. **(84c:90082)**

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Emmanuele, Giovanni A note on some weakly continuous mappings in Banach spaces. **84c:47054**

Convergence of the Mann-Ishikawa iterative process for nonexpansive mappings. **84d:47070a**

A remark on my paper: "Convergence of the Mann-Ishikawa iterative process for nonexpansive mappings". **84d:47070b**

Goebel, Kazimierz (with Reich, Simeon) Iterating holomorphic self-mappings of the Hilbert ball. **84b:47065**

Guay, Merle D. (with Singh, Kanahya L.; Whitfield, J. H. M.) Fixed point theorems for nonexpansive mappings in convex metric spaces. **84b:47066**

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Lami Dozo, Enrique Quasinormality of cones in Hilbert spaces. **84c:47043**

Massatt, Paul A fixed point theorem for α -condensing maps on a sphere. **84g:47048**

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Miyazaki, Kenichi (with Kawatani, Takeo; Miyaura, Suga) Some remarks on the Mann iterative process for nonexpansive mappings. **84m:47070a**

(with Kawatani, Takeo; Miyaura, Suga) Corrections to: "Some remarks on the Mann iterative process for nonexpansive mappings" [Bull. Kyushu Inst. Tech. Math. Natur. Sci. No. 29 (1982), 17-25]. **84m:47070b**

Potapov, A. S. (with Sadovskii, B. N.) On a fixed-point theorem for condensing operators. (Russian) **84m:47071**

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Singh, Kanahya L. (with Whitfield, J. H. M.) Sequence of iterates for nonexpansive type mappings in Banach spaces. **84b:47068**

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Whitfield, J. H. M. See Guay, Merle D.; et al., **84b:47066** and Singh, Kanahya L., **84b:47068**

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Anderson, Melissa S. See Kirk, W. A., **(84b:47064)**

Borwein, Jonathan M. (with Sims, Brailey) Nonexpansive mappings on Banach lattices. **(84f:46009)**

Dancer, E. N. On the indices of fixed points of mappings in cones and applications. **(84d:58020)**

van Dulst, D. (with Sims, Brailey) Fixed points of nonexpansive mappings and Chebyshev centers in Banach spaces with norms of type (KK). **(84d:46027)**

Fitzpatrick, P. M. (with Petryshyn, W. V.) On connected components of solutions of nonlinear eigenvalue problems. **(84d:47086)**

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Rhoades, B. E. Some fixed point theorems for generalized nonexpansive mappings. (See **84c:47002**)

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- Singh, Kanahya L. See Naimpally, S. A.; et al., **84b:47073** and **84j:47094**
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- Zhang, Shi Sheng Recent development of the theory of fixed points. I. (Chinese) **84d:47071**
- Carmichael, N. (with Pritchard, A. J.; Quinn, M. D.) Control and state-estimate of nonlinear systems. **84d:93028**
- Chen, Shao Zhong (with Liu, Dao Su) An example which has no fixed point. **84d:60098**
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- van Duist, D. Some geometric properties related to normal structure. **84i:46026**
- Du'o'ng Trong Nhân Some metrical fixed point theorems. **84d:54071**
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- Karohl, Bernhard Remark on a fixed point theorem for expanding maps. **84m:54045**
- Keller, Klaus (with Schneider, Albert) Ein funktionalanalytischer Beweis des Satzes von Cauchy-Kowalewski. (English summary) [A functional-analytic proof of the Cauchy-Kowalewski theorem] **84i:35010**
- Khan, Mohd. Saeed Remarks on some fixed point theorems. **84d:54076**
- Kirk, W. A. Locally nonexpansive mappings in Banach spaces. **84g:47047**
- Kuhn, Gabriella Generalized nonexpansive mappings: approximation of fixed points. (Italian summary) **84a:47069**
- Lami Dozo, Enrique Quasnormality of cones in Hilbert spaces. **84d:47043**
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- Massabo, Ivar (with Vignoli, Alfonso) Irreducible continua of solutions for Birkhoff-Kellogg type equations. **84b:58028**
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- Mukherjee, R. N. On some fixed point theorems on Hausdorff metric and Banach spaces. **84d:54077**
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- Qin, Cheng Lin See Chen, Wen Yuan, **84c:47074**
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- Ray, William O. (with Sine, Robert C.) Nonexpansive mappings with precompact orbits. **84b:47058**
(with Williamson, T. E.) Fixed points and the geometry of nonexpansive mappings in Banach spaces. **84a:47070**
- Reich, Simeon See Plant, Andrew T., **84c:47073**
- Sadovskii, B. N. See Potapov, A. S., **84m:47071**
- Schneider, Albert See Keller, Klaus, **84i:35010**
- Sharma, P. L. (with Yuel, A. K.) Fixed point theorems under asymptotic regularity at a point. II. **84f:54065**
- Shmyrva, V. I. Construction of algorithms for finding fixed points of piecewise-constant monotone mappings in \mathbb{R}^n . (Russian) **84b:65059**
- Sine, Robert C. See Ray, William O., **84b:47058**
- Singh, Kanahya L. See Guay, Merle D.; et al., **84b:47066**
- Sullivan, Francis E. Ordering and completeness of metric spaces. **84d:54079**
- Turincic, Mihai A class of operator equations on ordered metric spaces. **84d:54080**
- Vignoli, Alfonso See Massabo, Ivar, **84b:58028**
- Whitfield, J. H. M. See Guay, Merle D.; et al., **84b:47066**

secondary classifications:

- Achari, J. On a pair of random generalized nonlinear contractions. **84i:60083**
- Ben-El-Mechaiekh, Hichem (with Deguire, Paul; Granas, Andrzej) Une alternative non linéaire en analyse convexe et applications. (English summary) [A nonlinear alternative in convex analysis and some consequences] **84f:52008**
- Blažek, J. Some remarks on the duality mapping. (Russian and Polish summaries) **84i:46025**
- Boccardo, Lucio (with Donati, Flavio) Existence and stability results for solutions of some strongly nonlinear constrained problems. **84a:49008**
- Browder, Felix E. Fixed point theory and nonlinear problems. **84b:58027**

- Williams, B. B. See Gillespie, A. A., (84c:54073)
 Williamson, T. E. See Ray, William O., (84c:47070)
 Yadav, B. S. Schauder's fixed point theorem and the invariant subspace problem. (84c:47011)
 Yuel, A. K. See Sharma, P. L., (84f:54065)
 Zhang, Gong Qing Free boundary problems and the set-valued mappings. (84h:35172)
 Zhang, Shi Sheng (with Chen, Shao Zhong) Random fixed-point theorems in probabilistic analysis and their applications to random approximation theory. (Chinese. English summary) (84k:60085)
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- Ding, Hong Ming Notes on the nonlinear eigenvalue problem. (Chinese. English summary) 84d:47083
 Klimov, V. S. Eigenvectors of nonlinear potential operators. (Russian) 84b:47077
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secondary classifications:

- Browne, Patrick J. (with Sleeman, B. D.) Nonlinear multiparameter eigenvalue problems. (84c:58018)
 Edelson, Allan L. (with Pera, Maria Patrizia) A note on nonlinear problems depending on infinite-dimensional parameters. (84c:47069)
 Kubrusly, R. S. On variational nonlinear eigenvalue inequalities. (Portuguese summary) (84c:49014)
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- Agase, S. B. See Krishna, S. V., (84j:34070) and (84j:34071)
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 Bakhtin, V. I. Theorems on the existence of fixed points for monotone operators. (Russian) (84j:47092)
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 Benci, Vieri (with Fortunato, Donato) The dual method in critical point theory. Multiplicity results for indefinite functionals. (Italian summary) (84g:58025)
 Bertsch, M. Asymptotic behavior of solutions of a nonlinear diffusion equation. (84d:35018)

- Capozzi, A. (with Salvatore, A.) Periodic solutions for nonlinear problems with strong resonance at infinity. (84j:34034)
- Castro, Alfonso See Bates, Peter W., (84b:47080)
- Catté, Francine See Barthélemy, Louise, (84j:49010)
- Cesari, Lamberto (with Kannan, Rangachary) Solutions of nonlinear hyperbolic equations at resonance. (84c:35176)
- Chossat, P. Interactions entre bifurcation par brisure partielle de symétrie sphérique. [Interactions in bifurcation by partial break of spherical symmetry] (84d:58019)
- Chudnovsky, D. V. (with Chudnovsky, Gregory V.; Neveu, André) Classical and quantum operator nonlinear Schrödinger equation. I. (84c:35130)
- Chudnovsky, Gregory V. See Chudnovsky, D. V.; et al., (84c:35130)
- Conti, Giuseppe (with Iannacci, Rita) Nonzero solutions of nonlinear systems of differential equations via fixed point theorems for multivalued maps. (84j:34068)
- Coron, Jean-Michel Formules de Trotter pour une équation d'évolution quasilineaire du premier ordre. [Trotter formulas for a first-order quasilinear evolution equation] (84c:35059)
- Descoux, Jean (with Rappaz, Jacques) Approximation of solution branches of nonlinear equations. (French summary) (84c:58020)
- Diaconu, Adrian Sur quelques méthodes itératives combinées. [On some combined iterative methods] (84c:65079)
- Engler, Hans Invariant sets for functional-differential equations in Banach spaces and applications. (84c:34064)
- Erğashbaev, T. Equations with a nonlinear operator that is invariant with respect to a group. (Russian. Tajiki summary) (84c:58195)
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- de Figueiredo, Djairo Guedes Positive solutions of semilinear elliptic problems. (84c:35067)
- Fortunato, Donato See Benci, Vieri, (84g:58025)
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- Gaponenko, Yu. L. Accuracy of solutions of nonlinear ill-posed problems. (Russian) (84c:65083)
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- Huילgol, R. R. A multiparameter bifurcation theorem. (84b:58028)
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- Ize, Jorge Introduction to bifurcation theory. (84f:58029)
- Kannan, Rangachary (with Lakshmikantham, V.) Existence of periodic solutions of semilinear parabolic equations and the method of upper and lower solutions. (84c:35014)
- See also Cesari, Lamberto, (84a:35176)
- Karakostas, George Causal operators and topological dynamics. (84b:45025a)
- Kavian, Otared See Gallouët, Thierry, (84f:35054)
- Kesavan, S. Existence of solutions by the Galerkin method for a class of nonlinear problems. (84j:35071)
- Knightly, George H. (with Sather, D.) Stable subcritical solutions for a class of variational problems. (84c:58021)
- Krishna, S. V. (with Agase, S. B.) On weak solutions of abstract Cauchy problem in nonreflexive Banach spaces. (84j:34070)
- (with Agase, S. B.) Nonlinear evolution equations in locally convex spaces. (84j:34071)
- Kuttler, Kenneth L., Jr. A degenerate nonlinear Cauchy problem. (84f:34090)
- Lakshmikantham, V. (with Leela, S.; Vatsala, A. S.) Method of quasi-upper and lower solutions in abstract cones. (84c:34072)
- See also Kannan, Rangachary, (84c:35014)
- Lapin, A. V. Approximation of nonlinear stationary variational inequalities. (Russian) (84d:65083)
- Leela, S. See Lakshmikantham, V.; et al., (84a:34072)
- Le Van Hot Generic differentiability of mappings and convex functions in Banach and locally convex spaces. (84b:58015)
- Liskovets, O. A. Consistent discretization in variational methods for solving ill-posed extremal problems. (Russian) (84c:65052)
- Solution of equations of the first kind with monotone operator under nonmonotone perturbations. (Russian. English summary) (84d:47067)
- Loginov, B. N. Stability of solutions of the problem of bifurcation points. (Russian) (84g:58032)
- Lomp, Marika See Vaarmann, O., (84c:65075)
- Maksimov, V. P. Some nonlinear boundary value problems. (Russian) (84g:34029)
- Malec, Miloslav Nonlinear Volterra-type equation in Banach space. (Russian summary) (84i:45013)
- Matkowski, Janusz Functional equations and Nemytskii operators. (84i:45008)
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- Pankov, A. A. Solutions bounded and almost periodic with respect to time of a class of nonlinear evolution equations. (Russian) (84i:34081)
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- Pavel, N. H. Differential equations on closed subsets of a Banach space and applications. (84c:34073)
- Petryshyn, W. V. (with Yu, Zhi Shou) Periodic solutions of nonlinear second-order differential equations which are not solvable for the highest derivative. (84c:34060)
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- Smiley, Michael W. An existence theorem for abstract nonlinear hyperbolic boundary value problems at resonance. (84b:35109)
- Existence theorems for nonlinear hyperbolic boundary value problems at resonance. (84b:35089)
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- Vaarmann, O. (with Lomp, Marika) Extension of the domain of convergence of methods with approximation of a pseudoinverse operator. (Russian. English and Estonian summaries) (84c:65075)
- Valent, Tullio Local theorems of existence and uniqueness in finite elastostatics. (84b:73019)
- Vanderbauwhede, André Hopf bifurcation for abstract nonlinear equations. (84b:58035)
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- Ward, James R., Jr. Existence for a class of semilinear problems at resonance. (84j:35072)
- Ypma, T. J. Following paths through turning points. (84c:65051)
- Yu, Zhi Shou See Petryshyn, W. V., (84c:34060); (84c:34061); (84c:34062) and (84g:34030)

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- Bakushinskii, A. B. An asymptotic relation for the iteratively regularized Newton-Kantorovich method. (Russian) 84b:47070
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- Bulgakov, A. I. (with Lyapin, L. N.) Connectedness of sets of solutions of functional inclusions. (Russian) (84b:39010)
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- Alicki, R. (with Messer, Joachim) Nonlinear quantum dynamical semigroups for many-body open systems. (84c:82033)
- Brillard, A. Sur l'interpolation des opérateurs maximaux monotones. (English summary) [On the interpolation of maximal monotone operators] (84c:46159)
- Cortazar, Carmen The application of dissipative operators to nonlinear diffusion equations. (84c:35060)
- Downing, David J. (with Ray, William O.) Uniformly Lipschitzian semigroups in Hilbert space. (84c:47066)
- Grimmer, Ronald (with Zeman, Marvin) Nonlinear Volterra integro-differential equations in a Banach space. (84c:45012)
- Ilyashenko, Yu. S. The dimension of attractors of k -contracting systems in an infinite-dimensional space. (Russian. English summary) (84m:58080)
- Iwamiya, Toshiyuki (with Oharu, S.; Takahashi, Tadayasu) On the semigroup approach to some nonlinear dispersive equations. (84d:35083)
- Khazan, M. I. Nonlinear evolution equations with a small parameter. (Russian) (84b:34096)
- Lions, Pierre-Louis (with Nisio, Makiko) A uniqueness result for the semigroup associated with the Hamilton-Jacobi-Bellman operator. (84b:49032)
- Lu, Xi Guan The semigroup approach to the boundary value problem for quasilinear equations of first order. (Chinese. English summary) (84c:35024)
- Messer, Joachim See Alicki, R., (84c:82033)
- Nisio, Makiko See Lions, Pierre-Louis, (84b:49032)
- Oharu, S. See Iwamiya, Toshiyuki; et al., (84d:35083)
- Pavel, N. H. Addendum: "Nonlinear evolution equations governed by f -quasidissipative operators" [Nonlinear Anal. 5 (1981), no. 5, 449-468; MR 82i:34073]. (84g:34110)
- Pimbley, George H. On a nonlinear semigroup theory for systems. (84c:34068)
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- Rodé, Gerd Differentiability of a convex semigroup on \mathbb{R}^n . (84c:90104)
- Ruppert, Wolfgang On structural methods and results in the theory of compact semitopological semigroups. (84m:22004)
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- Webb, G. F. The semigroup associated with nonlinear age dependent population dynamics. (84g:92038)
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- 47H99 None of the above, but in this section
- Appel, Yu. (with Zabrejko, P. P.) Sharp upper bounds for a superposition operator. (Russian. English summary) 84j:47105
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- Constant and variable drop theorems on metrizable locally convex spaces. 84c:47050
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- Zabrejko, P. P. See Appel, Yu., 84j:47105 and Appell, Jürgen, 84m:47088
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- Castaing, Charles Solutions continues à droite d'un problème d'évolution dans $\mathcal{C}(X)$ et dans les espaces hilbertiens. [Right-continuous solutions of an evolution problem in $\mathcal{C}(X)$ and in Hilbert spaces] (84j:34067)
- Chen, C. F. (with Yates, R. E.) Continued fraction describing functions for bilinear and multiplicative nonlinear systems. (See 84g:93005b)
- Cocu, Marius A quasivariational inequality occurring in friction problems. (84c:49009)
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- Đỗ Hồng Tàn A note on probabilistic measures of noncompactness. (84b:54028)
- Dubinsky, Ed Nonlinear analysis in different kinds of Fréchet spaces. (84f:58015)
- Duong Minh Duc Analytic contractive vector fields in Fréchet spaces. (84m:58020)
- Horiuchi, Kazuo A mathematical theory of system fluctuations. (84c:93078)
- Janson, Svante On the interpolation of sublinear operators. (84d:46112)
- Khan, Ahmad Lipschitz 2-operators. (84g:46035)
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- Micheletti, Anna Maria About differentiable mappings with singularities between Banach spaces. (Italian summary) (84b:58018)
- Nistor, I. Theorems on existence and uniqueness of solution to boundary value problems of place and microrotation for Cosserat bodies. (84g:73009)
- Rassias, John Michael On approximation of approximately linear mappings by linear mappings. (84c:47027)
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- Ribarić, M. Application of general systems methodology to the study of implicit functions and the stability of functional analytic properties of operators. (84c:58024)
- Sattinger, D. H. Bifurcation and symmetry breaking in applied mathematics. (Chinese) (84d:58021)
- Toland, John F. A Leray-Schauder degree calculation leading to nonstandard global bifurcation results. (84i:58031)

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- (Adimurthi, M.) See Glowinski, Roland, 84b:49002
 Ahmed, Nasir Uddin (with Teo, K. L.) ★Optimal control of distributed parameter systems. 84b:49001
 Alekseev, V. M. (with Tikhomirov, V. M.; Fomin, S. V.) ★Comande optimale. (French) 84m:49001
 Cooper, Leon Classical optimization. (See 84b:90005)
 Elster, Karl-Heinz (with Göpfert, Alfred) Über einige Entwicklungstrends in der Mathematischen Optimierung. [On some trends of development in mathematical optimization] (See 84a:00012)
 Faldin, N. V. See Ivanov, Viktor Aleksandrovich, 84b:49003
 Fomin, S. V. See Alekseev, V. M.; et al., 84m:49001
 Foulds, L. R. ★Optimization techniques. 84i:49001
 Glowinski, Roland ★Lectures on numerical methods for nonlinear variational problems. 84b:49002
 Göpfert, Alfred See Elster, Karl-Heinz, (See 84a:00012)
 Hrusa, William J. See Troutman, John L., 84f:49001
 Ivanov, Viktor Aleksandrovich (with Faldin, N. V.) ★Теория оптимальных систем автоматического управления. (Russian) [Theory of optimal automatic control systems] 84b:49003
 Klötzler, Rolf Dualität in der Steuerungstheorie. [Duality in control theory] 84a:49001
 Kósá, András (with Szegedi, Ferenc) ★Teoría de control óptimo. (Spanish) [Optimal control theory] 84g:49001
 Leitmann, George ★The calculus of variations and optimal control. 84m:49002
 Lions, Jacques-Louis ★Some methods in the mathematical analysis of systems and their control. 84m:49003
 Macki, Jack W. (with Strauss, Aaron) ★Introduction to optimal control theory. 84d:49001
 Sethi, Suresh P. (with Thompson, Gerald L.) ★Optimal control theory. 84g:49002 (Sosinski, A. B.) See Alekseev, V. M.; et al., 84m:49001
 Strauss, Aaron See Macki, Jack W., 84d:49001
 Szegedi, Ferenc See Kósá, András, 84g:49001
 Teo, K. L. See Ahmed, Nasir Uddin, 84b:49001
 Thompson, Gerald L. See Sethi, Suresh P., 84g:49002
 Tikhomirov, V. M. See Alekseev, V. M.; et al., 84m:49001
 Troutman, John L. ★Variational calculus with elementary convexity. 84f:49001 (Vijayasundaram, M. G.) See Glowinski, Roland, 84b:49002

secondary classifications:

- Carmichael, David G. ★Structural modelling and optimization. (84c:93001)
 Ciarlet, Philippe G. ★Introduction à l'analyse numérique matricielle et à l'optimisation. (French) [Introduction to matrix numerical analysis and optimization] (84c:65002a) (with Thomas, Jean-Marie) ★Exercices d'analyse numérique matricielle et d'optimisation. (French) [Exercises in matrix numerical analysis and optimization] (84c:65002b)
 Goryashko, A. P. See Yudin, D. B.; et al., (84b:93002)
 Kamien, Morton I. (with Schwartz, Nancy L.) ★Dynamic optimization. (84b:90012)
 Moiseev, N. N. ★Математические задачи системного анализа. (Russian) [Mathematical problems of systems analysis] (84c:93002)
 Nemirovskii, A. S. See Yudin, D. B.; et al., (84b:93002)
 Ragsdell, K. M. See Reklaitis, G. V.; et al., (84i:93004)
 Ravindran, A. See Reklaitis, G. V.; et al., (84i:93004)
 Reklaitis, G. V. (with Ravindran, A.; Ragsdell, K. M.) ★Engineering optimization. (84i:93004)
 Schwartz, Nancy L. See Kamien, Morton I., (84b:90012)
 Thomas, Jean-Marie See Ciarlet, Philippe G., (84c:65002b)
 Yudin, D. B. (with Goryashko, A. P.; Nemirovskii, A. S.) ★Математические методы оптимизации устройств и алгоритмов АСУ. (Russian) [Mathematical methods of optimization of automatic control devices and algorithms] (84b:93002)

49-02 Advanced exposition (research surveys, monographs, etc.)

- Aubin, Jean-Pierre (with Nepomiaschty, Pierre; Charles, Anne-Marie) ★Méthodes explicites de l'optimisation. (French) [Explicit optimization methods] 84c:49001
 Belova, Z. I. See Dem'yanov, V. F.; et al., 84b:49001
 Charles, Anne-Marie See Aubin, Jean-Pierre; et al., 84c:49001
 Chennouf, F. L. Optimal control of mechanical systems [ibid., pp. 115-128; MR 81c:49001]. (See 84b:00032)
 Chobanov, Georgi Iv. See Miranda, Mario, 84m:49005
 Contensou, P. See Marchal, C., 84f:49003
 Daugavet, V. A. See Dem'yanov, V. F.; et al., 84b:49001
 Dem'yanov, V. F. (with Vasil'ev, L. V.) ★Нелифференцируемая оптимизация. (Russian) [Nondifferentiable optimization] 84d:49002 (with Rubinov, A. M.; Pecherskaya, N. A.; Daugavet, V. A.; Malozemov, V. N.; Palyaeva, V. N.; Nikulina, V. N.; Shablinskaya, I. R.; Sivtsova, V. K.; Vinogradova, T. K.; Belova, Z. I.; Timoshina, I. R.; Myshkov, S. K.; Karelin, V. V.; Voiton, E. F.) ★Негладкие задачи теории оптимизации и управления. (Russian) [Nonsmooth problems of the theory of optimization and control] 84b:49001

- Fortin, Michel (with Glowinski, Roland) ★Méthodes de lagrangien augmenté. (French) [Augmented Lagrangian methods] 84c:49002
 Giazinta, Mariano On differentiability of the extremals of variational integrals. 84b:49002
 Glowinski, Roland See Fortin, Michel, 84c:49002
 Karelin, V. V. See Dem'yanov, V. F.; et al., 84b:49001
 Leipholz, H. H. E. On direct methods in the calculus of variations. 84b:49002
 Liskovets, O. A. ★Вариационные методы решения неустойчивых задач. (Russian) [Variational methods for solving unstable problems] 84m:49004
 Malozemov, V. N. See Dem'yanov, V. F.; et al., 84b:49001
 Marchal, C. (with Contensou, P.) Singularities in optimization of deterministic dynamic systems. 84f:49003
 Miranda, Mario Recent progress in the calculus of variations. (Bulgarian) 84m:49005
 Myshkov, S. K. See Dem'yanov, V. F.; et al., 84b:49001
 Nečas, Jindřich On the solution of the 19th Hilbert's problem. (See 84a:00012)
 Nepomiaschty, Pierre See Aubin, Jean-Pierre; et al., 84c:49001
 Nikulina, V. N. See Dem'yanov, V. F.; et al., 84b:49001
 Palyaeva, V. N. See Dem'yanov, V. F.; et al., 84b:49001
 Pecherskaya, N. A. See Dem'yanov, V. F.; et al., 84b:49001
 Pshenichnyi, B. N. ★Необходимые условия экстремума. (Russian) [Necessary conditions for an extremum] 84c:49003
 Roxin, Emilio O. (with Stern, Lynell E.) Some recent developments in the infinite time optimal control problem. (See 84c:00009)
 Rubinov, A. M. See Dem'yanov, V. F.; et al., 84b:49001
 Shablinskaya, I. R. See Dem'yanov, V. F.; et al., 84b:49001
 Sivtsova, V. K. See Dem'yanov, V. F.; et al., 84b:49001
 Stern, Lynell E. See Roxin, Emilio O., (See 84c:00009)
 Timoshina, I. R. See Dem'yanov, V. F.; et al., 84b:49001
 Tsyplun, Ya. Z. Optimality in problems and methods of modern control theory. (Russian) 84c:49004
 Vasil'ev, L. V. See Dem'yanov, V. F., 84d:49002
 Vesely, Jiří Some aspects of modern potential theory. (See 84a:00012)
 Vinogradova, T. K. See Dem'yanov, V. F.; et al., 84b:49001
 Voiton, E. F. See Dem'yanov, V. F.; et al., 84b:49001

secondary classifications:

- Bank, B. (with Guddat, J.; Klatte, D.; Kummer, Bernd; Tammer, Klaus) ★Nonlinear parametric optimization. (84i:90147)
 Bensoussan, Alain ★Stochastic control by functional analysis methods. (84k:93059)
 Bertsekas, Dimitri P. ★Constrained optimization and Lagrange multiplier methods. (84c:90068)
 Boltyanskii, V. G. See Pontryagin, L. S.; et al., (84i:93008)
 Dubovitskii, A. Ya. (with Milyutin, A. A.) Theory of the principle of the maximum. (Russian) (84g:90038)
 Evtushenko, Yu. G. ★Методы решения экстремальных задач и их применение в системах оптимизации. (Russian) [Methods for solving extremal problems and their application in systems of optimization] (84c:49039)
 Gamkrelidze, R. V. See Pontryagin, L. S.; et al., (84i:93008)
 Geering, Hans P. Survey of optimal control theory for problems with constrained state variables: geometric approach. (84j:93003)
 Guddat, J. See Bank, B.; et al., (84i:90147)
 Klatte, D. See Bank, B.; et al., (84i:90147)
 Kummer, Bernd See Bank, B.; et al., (84i:90147)
 Milyutin, A. A. See Dubovitskii, A. Ya., (84g:90038)
 Mishchenko, E. F. See Pontryagin, L. S.; et al., (84i:93008)
 Oden, John Tinsley (with Reddy, Junuthula Narasimha) ★Variational methods in theoretical mechanics. (84b:73001)
 Petukhov, L. V. See Troitskii, V. A., (84d:73055)
 Pontryagin, L. S. (with Boltyanskii, V. G.; Gamkrelidze, R. V.; Mishchenko, E. F.) ★Математическая теория оптимальных процессов. (Russian) [The mathematical theory of optimal processes] (84i:93008)
 Reddy, Junuthula Narasimha See Oden, John Tinsley, (84b:73001)
 Rumyantsev, V. V. Certain variational principles of mechanics [ibid. pp. 74-90; MR 81d:49030]. (See 84b:00032)
 Tammer, Klaus See Bank, B.; et al., (84i:90147)
 Troitskii, V. A. (with Petukhov, L. V.) ★Оптимизация формы упругих тел. (Russian) [Optimization of the form of elastic bodies] (84d:73055)
 Whittle, Peter ★Optimization over time. Vol. I. (84f:90002)

49-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Demidov, S. S. On the history of the theory of first-order partial differential equations. C. G. J. Jacobi's "first method". (Russian) (84i:01059)
 Dorofeeva, A. V. The calculus of variations in the last third of the 19th century. (Russian. English summary) (84j:01044)

49-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Legras, Jean ★Algorithmes et programmes d'optimisation non linéaire avec contraintes. (French) [Algorithms and nonlinear optimization programs with constraints] (84m:65010)

49-06 Proceedings, conferences, etc.

- (Ceconi, Jaurès P.) See *Mathematical theories of optimization*, 84g:49003
- (Fiacco, Anthony V.) See *Semi-infinite programming and applications*, 84f:49004
- (Gorenflo, Rudolf) See *Applied nonlinear functional analysis*, 84c:49002
- (Hoffmann, Karl Heinz) See *Applied nonlinear functional analysis*, 84c:49002
- (Kortanek, Kenneth O.) See *Semi-infinite programming and applications*, 84f:49004
- (Lommatzsch, Klaus) See *Proceedings: Conference on mathematical optimization*, 84i:49002
- (Zolezzi, Tullio) See *Mathematical theories of optimization*, 84g:49003
- Applied nonlinear functional analysis** ★ *Applied nonlinear functional analysis*. 84c:49002
- Austin, Tex. ★ *Semi-infinite programming and applications*. 84f:49004
- Berlin ★ *Proceedings der 13. Jahrestagung "Mathematische Optimierung"*. (German) [Proceedings of the 13th Annual Conference on Mathematical Optimization] 84i:49002
- ★ *Applied nonlinear functional analysis*. 84c:49002
- Conference:**
- Mathematical optimization** ★ *Proceedings der 13. Jahrestagung "Mathematische Optimierung"*. (German) [Proceedings of the 13th Annual Conference on Mathematical Optimization] 84i:49002
- Mathematical Theories of Optimization** ★ *Mathematical theories of optimization*. 84g:49003
- Genova ★ *Mathematical theories of optimization*. 84g:49003
- Mathematical theories of optimization** ★ *Mathematical theories of optimization*. 84g:49003
- Proceedings:**
- Conference on mathematical optimization** ★ *Proceedings der 13. Jahrestagung "Mathematische Optimierung"*. (German) [Proceedings of the 13th Annual Conference on Mathematical Optimization] 84i:49002
- Semi-infinite programming and applications** ★ *Semi-infinite programming and applications*. 84f:49004
- Symposium:**
- Semi-Infinite Programming and Applications** ★ *Semi-infinite programming and applications*. 84f:49004
- Workshop:**
- Applied Nonlinear Functional Analysis** ★ *Applied nonlinear functional analysis*. 84c:49002
- secondary classifications:
- (Aubin, Jean-Pierre) See *Advances in Hamiltonian systems*, (84j:58001)
- (Bensoussan, Alain) See *Advances in Hamiltonian systems*, (84j:58001)
- (Brézis, Haim) See *Nonlinear partial differential equations and their applications*. Collège de France Seminar. (84i:35004)
- (Brosowski, Bruno) See *Methods and techniques of mathematical physics*, (84h:00004)
- (Cea, Jean) See *Optimization of distributed parameter structures*, (84c:73004a)
- (Dimitriev, V. I.) See *Problems in numerical mathematics*, (84c:65011)
- (Drenick, R. F.) See *System modeling and optimization*, (84g:93006)
- (Ekeland, Ivar) See *Advances in Hamiltonian systems*, (84j:58001)
- (Haug, Edward J.) See *Optimization of distributed parameter structures*, (84c:73004a)
- (Hiriart-Urruty, Jean-Baptiste) See *Optimization: theory and algorithms*, (84i:00018)
- (Kozin, F.) See *System modeling and optimization*, (84g:93006)
- (Leonides, Cornelius T.) See *Control and dynamic systems*, (84f:93002)
- (Lions, Jacques-Louis) See *Nonlinear partial differential equations and their applications*. Collège de France Seminar. (84i:35004)
- (Martensen, Erich) See *Methods and techniques of mathematical physics*, (84h:00004)
- (Oettli, Karl Werner) See *Optimization: theory and algorithms*, (84i:00018)
- (Olakh, D.) See *Problems in numerical mathematics*, (84c:65011)
- (Stoer, Josef) See *Optimization: theory and algorithms*, (84i:00018)
- (Tsyplin, Ya. Z.) See *Control problems in engineering, economics and biology*, (84h:93002)
- (Zakharova, M. N.) See *Multivalued mappings in the theory of differential games and necessary conditions for an extremum*, (84j:90006)
- Advances in Hamiltonian systems** ★ *Advances in Hamiltonian systems*. (84j:58001)
- Conference:**
- Advances in Hamiltonian systems** ★ *Advances in Hamiltonian systems*. (84j:58001)
- Methods and techniques of mathematical physics** ★ *Methods and techniques of mathematical physics*. (84h:00004)
- Optimization: theory and algorithms** ★ *Optimization: theory and algorithms*. (84i:00018)
- Confolant** ★ *Optimization: theory and algorithms*. (84i:00018)
- Control and dynamic systems** ★ *Control and dynamic systems*. Vol. 18. (84f:93002)
- Control problems in engineering, economics and biology** ★ *Проблемы управления в технике, экономике, биологии*. (Russian) [Control problems in engineering, economics and biology] (84h:93002)
- IFIP Conference:**
- System Modeling and Optimization** ★ *System modeling and optimization*. (84g:93006)
- Iowa City, Iowa ★ *Optimization of distributed parameter structures*. Vol. I. (84c:73004a)
- Methods and techniques of mathematical physics** ★ *Methods and techniques of mathematical physics*. (84h:00004)
- Multivalued mappings in the theory of differential games and necessary conditions for an extremum** ★ *Многозначные отображения в теории дифференциальных игр в необходимых условиях экстремума*. (Russian) [Multivalued mappings in the theory of differential games and necessary conditions for an extremum] (84j:90006)
- NATO Advanced Study Institute:**
- Optimization of Distributed Parameter Structural Systems** ★ *Optimization of distributed parameter structures*. Vol. I. (84c:73004a)
- New York ★ *System modeling and optimization*. (84g:93006)
- Nonlinear partial differential equations and their applications**. Collège de France Seminar. Vol. IV. (84i:35004)

- Oberwolfach** ★ *Methods and techniques of mathematical physics*. (84h:00004)
- Optimization of distributed parameter structures** ★ *Optimization of distributed parameter structures*. Vol. I. (84c:73004a)
- Optimization: theory and algorithms** ★ *Optimization: theory and algorithms*. (84i:00018)
- Paris ★ *Nonlinear partial differential equations and their applications*. Collège de France Seminar. Vol. IV. (84i:35004)
- Problems in numerical mathematics** ★ *Проблемы численной математики*. (Russian) [Problems in numerical mathematics] (84c:65011)
- Rome ★ *Advances in Hamiltonian systems*. (84j:58001)
- Seminar:**
- Applied Mathematics** ★ *Nonlinear partial differential equations and their applications*. Collège de France Seminar. Vol. IV. (84i:35004)
- System modeling and optimization** ★ *System modeling and optimization*. (84g:93006)

49Axx Existence theory for optimal solutions

49A05 Free problems in one independent variable

49A10 Problems involving ordinary differential equations, optimal control

- Anisovich, V. V. (with Kryukov, B. I.) *Optimal control of periodic motions of linear systems with impulsive action*. 84j:49001
- Optimization of a quadratic performance index on solutions of nonlinear two-point boundary value problems. 84m:49006
- Breitenecker, Felix *On the solution of the linear-quadratic optimal control problem by extended invariant imbedding*. 84j:49002
- Brunovsky, Pavel (with Komornik, Jozef) *The matrix Riccati equation and the noncontrollable linear-quadratic problem with terminal constraints*. 84m:49007
- Capuzzo Dolcetta, Italo (with Matzeu, Michele) *A constructive approach to the deterministic stopping time problem*. (Russian and Polish summaries) 84m:49008
- Clarke, Frank H. *The applicability of the Hamilton-Jacobi verification technique*. (See 84g:93006)
- Dajović, S. *Necessary and sufficient conditions of optimality for a linear control problem with moving ends*. (Serbo-Croatian. Russian summary) 84d:49003
- De Santis, Romano M. *Optimal output feedback gains for a linear hereditary system*. (See 84g:93005d)
- Di Blasio, Gabriella *Synthesis of optimal bilinear controls*. 84c:49005
- Dontchev, Asen L. (with Vel'ov, V. M.) *A singularly perturbed optimal control problem with fixed final state and constrained control*. (Russian and Polish summaries) 84i:49003
- (with Vel'ov, V. M.) *Singular perturbation in Mayer's problem for linear systems*. 84h:49003
- See also Gichev, Todor R. 84c:49001
- Doraiswami, R. *An optimal nonlinear control strategy for the problem of tracking of a nonlinear system*. (See 84i:93006b)
- Gaines, Robert E. (with Peterson, J. K.) *Degree theoretic methods in optimal control*. 84m:49009
- Gichev, Todor R. (with Dontchev, Asen L.) *Convergence of the solution of an optimal control problem with a free right end with respect to a small parameter multiplying the derivative*. (Russian. English summary) 84c:49001
- Gillis, Paul P. *Méthodes variationnelles en théorie du contrôle*. [Variational methods in control theory] 84h:49004
- Gomez, A. F. (with Quinones Acosta, Héctor) *Proof of the Pontryagin maximum principle for systems with lag in the control and nonsmooth objective functions*. (Spanish. English summary) 84c:49002
- Gusev, D. E. *Turnpike properties of optimal trajectories in a stationary problem of continuous optimization*. (Russian. English summary) 84c:49003
- Janković, Vladimir *Existence theorems for some optimal control problems*. 84c:49001
- The linear control problem. 84d:49004
- Jovanov, Djurica *Compactness and problems of optimal control*. (Serbo-Croatian. Russian summary) 84b:49004
- Kilorenko, B. N. *Nonoptimality of one-dimensional singular controls of the first order of degeneracy*. (Russian) 84h:49005
- Komornik, Jozef See Brunovsky, Pavel, 84m:49007
- Kreinidler, E. *Additional necessary conditions for optimal control with state-variable inequality constraints*. 84j:49003
- Kryukov, B. I. See Anisovich, V. V., 84j:49001
- Kun, L. A. *On the time-optimality problem for differential inclusions*. (Russian) 84g:49004
- Kunisch, Karl *The Riccati integral equation arising in optimal control of delay differential equations*. 84m:49010
- Luhmer, A. *Optimal control with switching dynamics*. 84c:49004
- Matzeu, Michele See Capuzzo Dolcetta, Italo, 84m:49008
- Niewinowska-Jacak, D. *Optimal control in linear systems without the condition of regular controllability*. (Polish summary) 84j:49004
- Nikol'skii, M. S. *A remark on Filippov's lemma*. (Russian) 84b:49005
- Nistri, Paolo *Periodic control problems for a class of nonlinear periodic differential systems*. 84c:49002
- Orel, B. P. See Pshenichnyi, B. N., 84i:49004
- Pappas, Georgios S. *An approximation result for normal integrands and applications to relaxed controls theory*. 84g:49005
- Peterson, J. K. See Gaines, Robert E., 84m:49009
- Pshenichnyi, B. N. (with Orel, B. P.) *The problem of the simplest motion of a controlled object with rebounds*. (Ukrainian. Russian summary) 84i:49004
- Quinones Acosta, Héctor See Gomez, A. F., 84c:49002
- Ragab, M. Z. *On a higher order optimal synthesis*. 84j:49005
- Shayman, Mark A. *On the periodic solutions of the matrix Riccati equation*. 84i:49005
- Stanev, G. P. *Optimal discrete control of a linear plant*. 84h:49006
- Stoner, R. J. *Liapunov reachability and optimization in control*. 84m:49011

- Vel'ov, V. M. See Donchev, Asen L., 84h:49003 and 84i:49003
- Voronin, A. N. Multicriterion optimization of dynamic control systems. 84f:49005
- Walczak, Stanislaw On some properties of cones in normed spaces and their application to investigating extremal problems. I. (Polish summary) 84i:49006a
- The local extremum principle for problems with constraints upon phase coordinates. (Polish summary) 84i:49006b
- Zakharov, G. K. Optimization of step control systems. 84f:49006
- Zavalishchin, S. T. Synthesis of impulse control in the problem of quadratic optimization of linear systems. (Russian) 84i:49005

secondary classifications:

- Aguilera M., J. C. Optimal control of coupled systems and the seismic inverse problem. (84h:86003)
- Andria, F. A method for the algebraic solution of a class of nonstationary, discrete-time, two-point boundary value problems. (84h:65073)
- Blaquiere, Austin (with Marzollo, Angelo) Some relations between optimal control theory and classical mechanics. (See 84a:58006)
- Korobov, V. I. (with Sklyar, G. M.) Solution of a problem of synthesis by means of a control functional for systems in infinite-dimensional spaces. (Russian. English summary) (84i:93033)
- Landron, Claude Optimisation sous contrainte des systèmes dynamiques. [Constrained optimization of dynamical systems] (84i:90022)
- Marzollo, Angelo See Blaquiere, Austin, (See 84a:58006)
- Panasjuk, A. I. (with Panasjuk, V. I.) The behavior of infinite optimal trajectories of a class of dynamical systems. (Russian) (84a:49052)
- Panasjuk, V. I. See Panasjuk, A. I., (84a:49052)
- Rousselet, Bernard Implementation of some methods of shape optimal design. (See 84e:73004b)
- Sklyar, G. M. See Korobov, V. I., (84i:93033)
- Vuillermot, Pierre-A. A class of Orlicz-Sobolev spaces with applications to variational problems involving nonlinear Hill's equations. (84e:46025)

49A21 Free problems in two or more independent variables

- Milman, Mark (with Schumitzky, Alan) A vector measure approach to state feedback control in Banach resolution spaces: summary of results. (See 84g:93005d)
- Nitsche, Werner ★ Zu dem Regularitätsproblem zweidimensionaler Variationsprobleme höherer Ordnung. (German) [On the regularity problem of two-dimensional variational problems of higher order] 84h:49007
- Schumitzky, Alan See Milman, Mark, (See 84g:93005d)

secondary classifications:

- Granlund, Seppo (with Lindqvist, Peter; Martio, O.) Conformally invariant variational integrals. (84f:30030)
- Lindqvist, Peter See Granlund, Seppo; et al., (84f:30030)
- Martio, O. See Granlund, Seppo; et al., (84f:30030)
- Slugin, S. N. Existence of an optimal control for a system with a varying domain of definition. (Russian) (84f:49011)

49A22 Problems involving partial differential equations, optimal control

- Abbasov, A. A. (with Sapozhnikov, M. E.) Existence of a solution of an optimal problem of Stefan type for a quasilinear equation. (Russian) 84h:49008
- Bashirov, A. E. (with Karasik, B. G.) On a problem of optimization for a second-order linear operator-differential equation. (Russian. English and Azerbaijani summaries) 84i:49007
- Baumeister, Johann On the boundary control of the heat equation in materials with memory. 84i:49006
- Boundary control of an integro-differential equation. 84f:49007
- Bershadanskii, Ya. M. (with Meerov, M. V.) Optimal control of systems described by an elliptic-type partial differential equation. 84f:49008
- Choo, K. G. (with Teo, K. L.; Wu, Zhan Sheng) On an optimal control problem involving second order hyperbolic systems with boundary controls. 84g:49006
- Chrysosverghi, I. Approximate methods for optimal pointwise control of parabolic systems. 84c:49006
- Emmanuele, Giovanni Remark on a minimum problem for a control process with distributed parameters. (Italian) 84m:49012
- Friedman, Avner (with Jiang, Li Shang) Nonlinear optimal control problems in heat conduction. 84m:49013
- Gali, I. M. Optimal control of systems governed by elliptic operator of infinite order. 84i:49008
- Gasanov, K. K. (with Kuliev, G. F.) Optimality of singular controls in a boundary value problem for second-order hyperbolic equations. (Russian) 84f:49009
- Granlund, Seppo An L^p -estimate for the gradient of extremals. 84c:49007
- Hou, Shui Hung Existence theorems of optimal control problems in Banach spaces. 84g:49007
- Huang, Guang Yuan Principle of pulse variation and its application to the design of optimal control systems. (See 84g:93005d)
- Jiang, Li Shang See Friedman, Avner, 84m:49013
- Just, Andrzej Optimal control of an object described by the two-dimensional equation of heat conduction. (Russian and Polish summaries) 84d:49005
- Karasik, B. G. See Bashirov, A. E., 84i:49007
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- Yao, Yun Long Vector measure and maximum principle of distributed parameter systems. 84g:49008

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- Cibulis, A. Theorem on the solvability of a nonlinear elliptic boundary value problem and its applications in problems of optimal control. (Russian) (84c:35062)
- Falk, Richard S. Approximation of an optimal control problem. (84d:49029)
- Getz, W. M. Feedback control for a class of pest management problems modeled by a noninteractively distributed system. (84i:92075)
- Hlaváček, Ivan (with Nečas, Jindřich) Optimization of the domain in elliptic unilateral boundary value problems by finite element method. (French summary) (84g:49048)
- Iwamoto, Seiichi (with Wang, Chung Lie) Continuous dynamic programming approach to inequalities. (84m:90125)
- Jiang, Li Shang See Pang, Zhi Yuan; et al., (84c:35078)
- Knowles, Greg Finite element approximation of parabolic time optimal control problems. (84h:49059)
- Lasiecka, I. (with Triggiani, R.) Dirichlet boundary control problem for parabolic equations with quadratic cost: analyticity and Riccati's feedback synthesis. (84h:93039)
- Lions, Pierre-Louis Le problème de Cauchy pour les équations de Hamilton-Jacobi-Bellman. (English summary) [The Cauchy problem for Hamilton-Jacobi-Bellman equations] (84g:35103)
- Mackenroth, Uwe Weak duality for parabolic boundary control problems. (84c:49026)
- Manselli, Paolo A variational problem for convex functions with bounds on the curvatures. (Italian. English summary) (84h:49020)

- Musabekov, K. S. Existence theorems for a solution in a problem of optimal control of a chemical reactor. (Russian) (84j:93055)
- Nečas, Jindřich See Hlaváček, Ivan, (84g:49048)
- Ohayon, R. (with Sánchez-Palencia, Enrique) On the vibration problem for an elastic body surrounded by a slightly compressible fluid. (French summary) (84f:73030)
- Pang, Zhi Yuan (with Wang, Yao Dong; Jiang, Li Shang) Semilinear diffusion equations with Dirac measure on the right side and the related optimal control problems. (Chinese) (84c:35078)
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- Steinberger, M. (with Schumitzky, Alan; Silverman, Leonard M.) Optimal control in Hilbert space. (See 84g:93005b)

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- Castaing, Charles (with Clauzure, Paulette) Semicontinuité des fonctionnelles intégrales. [Semicontinuity of integral functionals] (84j:49014)
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- Ding, Xia Xi (with Luo, Pei Zhu) Spaces of differentiable functions and calculus of variations with strong nonlinearity. (See 84i:00020)
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- Peter, Gerhard Ein Steuerproblem mit kompaktem Eingabeoperator. [A control problem with compact input operator] (84c:49029)
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- Tarsi Santolini, Adelina Regularity and homogenization estimates for a quasivariational inequality. (Italian. English summary) **84b:49018**
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- Alt, Hans Wilhelm (with Caffarelli, Luis A.; Friedman, Avner) Jet flows with gravity. **84c:76012**
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- Ben-El-Mechaiekh, Hichem (with Deguire, Paul; Granas, Andrzej) Une alternative non linéaire en analyse convexe et applications. (English summary) [A nonlinear alternative in convex analysis and some consequences] **84f:52008**
- Biancardi, Mirella (with Esposito, Anna; Macchetta, Luisa Anna) A regularity theorem for a unilateral problem. (Italian. English summary) **84c:35065**
- Birol, Marco Regularity results for some elliptic variational inequalities with bounded measurable coefficients and applications. **84c:35066**
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- Brauner, Claude (with Nicolaenko, Basil) Regularization and bounded penalization in free boundary problems. **84c:35013**
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- Garroni, Maria Giovanna Regularity of a nonlinear variational inequality with obstacle on the boundary. (Italian summary) **84c:35062**
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- Hlaváček, Ivan (with Nečas, Jindřich) Optimization of the domain in elliptic unilateral boundary value problems by finite element method. (French summary) **84g:49048**
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- Iordanov, Iordan V. Solutions hölderiennes d'inéquations variationnelles à contraintes discontinues. I. [Hölder solutions of variational inequalities with discontinuous constraints. I] **84c:35063**
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- Lapin, A. V. Approximation of nonlinear stationary variational inequalities. (Russian) **84d:65083**
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- Lions, Jacques-Louis See Glowinski, Roland; et al., **84f:65001**
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- cylindrical beam via regularization and discretization of an inf-sup problem on $H_0^1(\Omega) \times L^2(\Omega)$ (84d:73033)
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- Serovaiskii, S. Ya. A control problem in coefficients for equations of parabolic type. (Russian) (84f:49037)
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- Tarzia, Domingo Alberto Étude de l'inéquation variationnelle proposée par Duvaut pour le problème de Stefan à deux phases. I. (Italian summary) [Study of the variational inequality proposed by Duvaut for the two-phase Stefan problem. I] (84c:35067)
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- Schoenberg, Isaac J. The Landau problem. II. The case of motions on curves. (84d:26020a)
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- Auslander, Alfred On the differential properties of the support function of the ε -subdifferential of a convex function. (84d:58007)
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- Barbato, Carlo The generalized Steiner inequality for sublinear functions of measures. (Italian) (84j:49040)
- Caputi, Telma The plenary hull of the generalized Jacobian matrix and the inverse function theorem in subdifferential calculus. (84i:59016)
- Castaing, Charles Solutions continues à droite d'un problème d'évolution dans $\mathcal{C}(X)$ et dans les espaces hilbertiens. [Right-continuous solutions of an evolution problem in $\mathcal{C}(X)$ and in Hilbert spaces] (84j:34067)
- Das, Chakradhar Generalized convexity and optimization problems. (84b:26011)
- Dolecki, Szymon (with Lechicki, Alojzy) On structure of upper semicontinuity. (84a:54033)
- Dykhta, V. A. Conditions of local minimum for singular modes in systems with linear control. (84g:49033)
- Gavioli, Andrea An approximation result for integrands of the calculus of variations. (84g:49010)
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- Khachatryan, R. A. See Puhnichnyi, B. N., (84d:90096)
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- Papageorgiou, Nikolaos S. Nonsmooth analysis on partially ordered vector spaces. I. Convex case. (84c:47039)
- Pomerol, J.-Ch. Optimization in Banach spaces of systems involving convex processes. (84j:90069)
- Puhnichnyi, B. N. (with Khachatryan, R. A.) Equality-type constraints in nonsmooth problems of optimization. (Russian) (84d:90096)
- Singer, Ivan Abstract Pontryagin maximum principles for linear systems. (84b:49046)
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- Strodiot, J.-J. (with Nguyen, V. Hien; Heukemes, Norbert) ε -optimal solutions in nondifferentiable convex programming and some related questions. (84d:90087)
- Teo, K. L. See Wu, Zhan Sheng. (84b:49045)
- Wu, Zhan Sheng (with Teo, K. L.) A conditional gradient method for an optimal control problem involving a class of nonlinear second-order hyperbolic partial differential equations. (84b:49045)

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- Abramov, Yu. Sh. Solvability of extremal problems generated by operator pencils. (Russian) 84f:49022
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- Deumlich, R. (with Elster, Karl-Heinz) Zur Theorie nichtkonvexer Optimierungsprobleme: Lagrange-Dualität bei nichtkonvexen Optimierungsproblemen. [On the theory of nonconvex optimization problems: Lagrange duality in nonconvex optimization problems] (See 84i:49002)

- Elster, Karl-Heinz See Deumlich, R., (See 84i:49002)
- Fougères, Alain Optimisation convexe dans les Banachs non réflexifs: méthode de relaxation-projection. [Convex optimization in nonreflexive Banach spaces: the relaxation-projection method] 84c:49018
- Gerstewitz, Chr. (with Göpfert, Alfred) Zur Dualität in der Vektoroptimierung. (English and Russian summaries) [On duality in vector optimization] (See 84i:49002)
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- Hoffmann, Armin Properties of a multiplier-multifunction. I. 84m:49034
- Kemperman, J. H. B. On the role of duality in the theory of moments. 84j:49017
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- Lai, Han Ch'ing (with Yang, Shu Shih) Saddle point and duality in the optimization theory of convex set functions. 84i:49036
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- Benveniste, L. M. (with Scheinkman, José A.) Duality theory for dynamic optimization models of economics: the continuous time case. (84j:90022)
- Britton, Wray ★ Conjugate duality and the exponential Fourier spectrum. (84j:62079)
- Caligaris, Ottavio The Bolza and Lagrange problem for multiple integrals. (Italian. English summary) (84j:49013)
- Dietrich, Helmut Anwendung der Dualitätstheorie auf ein Problem der optimalen Steuerung mit nichtlinearer Zustandsgleichung. (English and Russian summaries) [Application of the duality theory to a problem of optimal control with nonlinear equation of state] (See 84i:49002)
- Dontchev, Asen L. On the sensitivity of convex problems of optimal control with phase constraints. (Russian. English summary) (84b:49053)
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- Marcellini, Paolo A relation between existence of minima for nonconvex integrals and uniqueness for nonstrictly convex integrals of the calculus of variations. (84i:49033)
- Martinez-Legaz, J.-E. A generalized concept of conjugation. (84i:90075)
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- Bensoussan, Alain Stochastic control in discrete time and applications to the theory of production. 84b:49038
- Bordunov, N. N. Dynamic programming and control of random convex mappings. (Russian) 84a:49021
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- Cutland, Nigel Optimal controls for partially observed stochastic systems: an infinitesimal approach. (84d:93065)

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- Fuller, A. T. Optimization of stochastic relay control systems by means of dimensional analysis. (84c:93079)
- Kohlmann, Michael See Elliott, Robert J., (84c:93078)
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- Mirzokhmedov, F. (with Uryas'ev, S. P.) ★ Метод негладкой оптимизации с адаптивной регуляцией шага в детерминированном и стохастическом случаях. (Russian) [The nonsmooth optimization method with adaptive step control in deterministic and stochastic cases] (84b:49035)
- Mitter, Sanjoy K. Nonlinear filtering and stochastic mechanics. I. (84c:93048)
- Mosco, Umberto See Birolì, Marco, (84c:49008) and Matzeu, Michele; et al., (84m:49024)
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- Banichuk, N. V. Design of plates for minimum deflection and stress. (See 84c:73004a)
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- Kutateladze, S. S. A criterion for a Hilbert space. (Russian) (84a:46032)
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- Wachutka, G. (with Bross, H.) Bivariational methods applied to Schrödinger's and Dirac's equations. (84j:81024)
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- Koussouris, Trifon G. A necessary condition for optimization in the frequency domain. 84c:49025
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- Zabrejko, P. P. A new approach and new results in the theory of extrema. (See 84a:49002)

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- Agamaliyev, A. G. Minimax problem in processes described by extreme-differential equations. (Russian. English and Azerbaijani summaries) 84c:49022
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- 49B22 Problems involving partial differential equations, optimal control
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- Borrelli, Robert L. Shaking a piece of string to rest. (See 84j:00019)
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Emmanuele, Giovanni Remark on a minimum problem for a control process with distributed parameters. (Italian) (84m:49012)

Fedorov, A. V. See Lur'e, K. A.; et al., (84h:73035)

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Azimov, A. Ya. The perturbation method and duality in problems of vector optimization. (Russian. English and Azerbaijani summaries) (84k:90079)

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Gani, N. Théorie de la commande optimale en temps prescrit. (English summary) [Optimal control theory in prescribed time] (84a:49024a)

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secondary classifications:

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49B50 Sensitivity of optimal solutions in the presence of perturbations

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secondary classifications:

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Utkin, V. I. See Vostrikov, A. S.; et al., **(84c:93049)**

Vostrikov, A. S. (with Utkin, V. I.; Frantsuzova, G. A.) Systems with state vector derivative in the control. **(84c:93049)**

49B99 None of the above, but in this section

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Bernis, F. Compactness of the support in convex and nonconvex fourth order elasticity problems. **84h:49030**

Glushkov, V. M. (with Ivanov, Viktor Vladimirovich; Yatsenko, Yu. P.) Analytic study of a class of dynamic models. I. **84c:49035a**

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Jarník, Jiří Generalized Filippov operator and multivalued mappings. (See **84c:34002**)

Lewis, Frank L. A general Riccati equation solution to the deadbeat control problem. **(84b:93044)**

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Seah, Sek Wui Existence of solutions and asymptotic equilibrium of multivalued differential systems. **(84c:34017)**

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secondary classifications:

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DeWitt, Bryce S. A gauge invariant effective action. (See **84j:83003**)

Ekeland, Ivar Dualité et stabilité des systèmes hamiltoniens. (English summary) [Duality and stability of Hamiltonian systems] **(84h:58026)**

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Fully nonlinear elliptic equations and applications. **(84b:35045)**

49C15 Problems in abstract spaces or involving functional relations other than differential equations

Barbu, Viorel (with Da Prato, Giuseppe) Global existence for the Hamilton-Jacobi equations in Hilbert space. **84c:49047**

Da Prato, Giuseppe See Barbu, Viorel, **84c:49047**

Deumlich, R. (with Elster, Karl-Heinz) Neuere Entwicklungen in der nichtlinearen Optimierung. [Recent developments in nonlinear optimization] **84g:49043**

Elster, Karl-Heinz See Deumlich, R., **84g:49043**

Ho Si Hau The linear-quadratic problem with constrained terminal state. **84m:49052**

secondary classifications:

Barbu, Viorel (with Da Prato, Giuseppe) Hamilton-Jacobi equations and synthesis of nonlinear control processes in Hilbert spaces. **(84c:49048)**

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Henneaux, Marc Equations of motion, commutation relations and ambiguities in the Lagrangian formalism. **(84a:70014)**

49C20 Dynamic programming method

Barbu, Viorel (with Da Prato, Giuseppe) Hamilton-Jacobi equations and synthesis of nonlinear control processes in Hilbert spaces. **84c:49048**

(with Da Prato, Giuseppe; Popa, Cătălin) Existence and uniqueness of the dynamic programming equation in Hilbert space. **84f:49040**

Bellman, Richard Ernest Nonlinear hyperbolic partial differential equations and dynamic programming. **84j:49023**

Capuzzo Dolcetta, Italo On a discrete approximation of the Hamilton-Jacobi equation of dynamic programming. **84j:49024**

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Korczak, Maria Time-optimal control of a certain second-order nonoscillatory system. (Polish summary) **84d:49023**

Lions, Pierre-Louis (with Nisio, Makiko) A uniqueness result for the semigroup associated with the Hamilton-Jacobi-Bellman operator. **84h:49032**

Makowski, Maciej On the optimal control problem by a coefficient of the differential equation of the fourth order. (Russian and Polish summaries) **84c:49037**

Melikyan, A. A. Game problem of the design of a multi-impulse motion correction. **84d:49024**

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Popa, Cătălin See Barbu, Viorel; et al., **84f:49040**

Pustovalova, N. N. An algorithm for solving a class of optimization problems for systems with lag. (Russian) **84d:49025**

Salukvadze, M. An approach to the solution of the vector optimization problem of dynamic systems. **84g:49044**

secondary classifications:

- Iwamoto, Seichi Reverse function, reverse program, and reverse theorem in mathematical programming. (84j:90102)
 Popov, V. I. (with Savchenko, V. S.) p -indicator of entire functions and optimal control problems. (Russian) (84b:32004)
 Rodé, Gerd Asymptotic properties of a finite state continuous time Markov decision process. (84i:49038)
 Savchenko, V. S. See Popov, V. I., (84b:32004)
 Subbotin, A. I. (with Subbotina, N. N.) The optimal result function in a control problem. (Russian) (84d:49016)
 Subbotina, N. N. See Subbotin, A. I., (84d:49016)
 Whittle, Peter ★ Optimization over time. Vol. I. (84f:90002)

49C99 None of the above, but in this section

- Blackwell, William A. See Fatić, Vuk M., (See 84g:93005b)
 Fatić, Vuk M. (with Blackwell, William A.) Lagrangians with integrals. An approach to the variational theory of dissipative systems. (See 84g:93005b)
 Marris, A. W. Two new theorems on Ericksen's problem. 84k:49038

secondary classifications:

- Aguirre, Eduardo See González-Gascón, F., (84b:58042)
 Della Riccia, Giacomo On the Lagrange representation of a system of Newton equations. (See 84a:58066)
 Ekeland, Ivar Oscillations forcées de systèmes hamiltoniens non linéaires. [Forced oscillations of nonlinear Hamiltonian systems] (84i:58098a)
 Forced oscillations of nonlinear Hamiltonian systems. II. (84i:58098b)
 González-Gascón, F. (with Aguirre, Eduardo) Notes on a paper by M. Lutzky on the noncanonical symmetries of Hamiltonian systems: "Noncanonical symmetries and isospectral representations of Hamiltonian systems" [Phys. Lett. A 87 (1981/82), no. 6, 274-276; MR 83g:58023]. (84b:58042)
 van Groesen, E. W. C. On normal modes in classical Hamiltonian systems. (French and German summaries) (84h:70022)
 Henvey, Frank S. Gauge groups and Noether's theorem for continuum mechanics. (See 84c:76002)
 Hussain, Munawar An invariance theory for a second order variational problem in group variables. (84m:58035)
 Khamitova, R. S. The structure of a group and the basis of conservation laws. (Russian. English summary) (84d:58083)
 Kozlov, V. V. Instability of equilibrium in a potential field. (Russian) (84a:58055)
 Lavenda, B. H. Optimal control of the decay of nonequilibrium statistical correlations. (84m:82053)
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 Ortman, J. Singularités de champs hamiltoniens. Lien avec l'existence de solutions optimales en calcul des variations. [Singularities of Hamiltonian fields. Connection with the existence of optimal solutions in the calculus of variations] (84b:58031)
 Ray, John R. (with Lutzky, M.) General Hamiltonian form of Noether's theorem with applications to time-dependent nonlinear oscillators. (Italian and Russian summaries) (84a:58035)
 Trostel, Robert Geometrical treatment of nonpotential interactions: the exterior variational calculus, dynamical systems, physical 1-forms and variational selfadjointness. (84a:70012)
 Vinter, Richard B. Weakest conditions for existence of Lipschitz continuous Krotov functions in optimal control theory. (84b:49047a)
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49Dxx Methods of successive approximations { For discrete problems, see 90Cxx; see also 65Kxx. }

- Evtushenko, Yu. G. ★ Методы решения экстремальных задач и их применение в системах оптимизации. (Russian) [Methods for solving extremal problems and their application in systems of optimization] 84k:49039

49D05 Methods based on necessary conditions

- Benikov, A. I. (with Vasil'ev, O. V.; Terlets'kii, V. A.) A method of minimization of convex functionals in nonlinear systems. (Russian) 84b:49056
 Chernous'ko, F. L. (with Lyubushin, A. A.) Method of successive approximations for solution of optimal control problems. 84a:49040
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secondary classifications:

- Chen, Goong (with Grimmer, Ronald) Asymptotic expansions of a penalty method for computing a regulator problem governed by Volterra equations. (84j:49027)
 Grimmer, Ronald See Chen, Goong. (84j:49027)
 Levikov, A. A. Duality relations for a convex optimal control problem. (Russian) (84b:49040)
 Makowski, Maciej On the optimal control problem by a coefficient of the differential equation of the fourth order. (Russian and Polish summaries) (84c:49037)
 Polak, Elijah An implementable algorithm for the optimal design centering, tolerancing, and tuning problem. (84k:90076)

- Pourciau, B. H. Multiplier rules and the separation of convex sets. (84j:90075)
 Reid, D. W. See Teo, K. L., (84j:49006)
 Schmidt, Franz Banach-space valued stationary processes on partially ordered groups. (84k:60050)
 Teo, K. L. (with Reid, D. W.) First-order strong variation algorithm for optimal control problems involving parabolic systems. (84j:49008)

49D07 Gradient methods

- Al'ber, Ya. I. (with Shil'man, S. V.) A unified approach to the problem of minimizing smooth and nonsmooth functions. 84i:49050
 (with Shil'man, S. V.) The generalized gradient method: convergence, stability and error estimates. (Russian) 84c:49029
 Bartish, M. Ya. (with Nikol'skii, Yu. V.) Gradient-parametric method for minimization of functions. (Ukrainian. Russian summary) 84b:49057
 Beiko, M. F. See Ivanov, Viktor Vladimirovich, 84d:49027
 Bernussou, Jacques See Geromel, J. C., 84c:49030
 Buttu, Anna (with D'Ambra, G.; Gaviano, M.) Some properties of a gradient projection algorithm. 84g:49045
 D'Ambra, G. See Buttu, Anna; et al., 84g:49045
 Dyurkovich, Eva Numerical method for solving linear problems of time optimality with an accuracy estimation. (Russian) 84c:49041
 Fukata, Satoru (with Mohri, Akira; Takata, Masaru) Optimization of linear systems with integral control for time-weighted quadratic performance indices. 84i:49051
 Gaviano, M. (with Piazza, Giuseppe) On the rate of convergence of a reduced-gradient method. 84m:49053
 See also Buttu, Anna; et al., 84g:49045
 Geromel, J. C. (with Bernussou, Jacques) Optimal decentralized control of dynamic systems. 84c:49030
 Gill, Philip E. (with Murray, Walter; Saunders, Michael A.; Wright, Margaret H.) Computing forward-difference intervals for numerical optimization. 84i:49052
 Ilioi, C. On the convergence of a feasible directions algorithm for minimization of convex nonsmooth functionals subjected to convex nonsmooth constraints. 84j:49025
 Ivanov, S. L. (with Katkovnik, V. Ya.) Choice of parameters and realization of gradient algorithms of limit optimization. (Russian) 84i:49041
 Convergence of the gradient method of limit optimization. (Russian) 84d:49026
 Ivanov, Viktor Vladimirovich (with Beiko, M. F.) Numerical solution of problems of optimal control of dynamic distribution processes described by V. M. Glushkov's integral equations. (Russian) 84d:49027
 Kallauer, A. An algorithm for hierarchical optimization of large-scale problems with nested structure. 84b:49034
 Kamovskii, Yu. M. Asymptotic properties of a stochastic analogue of the gradient method of optimization in a Hilbert space. (Russian) 84i:49053
 Limit behavior of iterations of a stochastic two-step method. (Russian) 84g:49046
 Katkovnik, V. Ya. See Ivanov, S. L., 84i:49041
 Koivo, H. N. See Mayorga, R. V.; et al., (See 84f:93006b)
 Kreinin, M. I. See Zabotin, Ya. I., 84i:49055
 Krutikov, V. N. The rate of convergence of the minimization method along vectors of a given system of directions. (Russian) 84d:49058
 Kubintsev, G. M. (with Tsaturyan, K. T.) Iterative synthesis of control using predictors. 84f:49042
 Lyashko, S. I. (with Man'kovskii, A. A.) Optimal impulse control of a system with distributed parameters of hyperbolic type. (Russian. English summary) 84c:49054
 Man'kovskii, A. A. See Lyashko, S. I., 84c:49054
 Matov, Vasil M. Gradient evaluation in the optimization of dynamic models dependent on parameters. (Bulgarian. English summary) 84c:49040
 Matvienko, V. T. Minimax modal regulators. (Russian) 84c:49031
 Mayorga, R. V. (with Koivo, H. N.; Quintana, V. H.) A new algorithm for optimal control problems. (See 84f:93006b)
 (with Quintana, V. H.) A class of accelerated conjugate direction methods in function space. (See 84f:93006d)
 Mirzokhmedov, F. (with Uryas'ev, S. P.) ★ Метод вставки оптимизации с адаптивной регуляцией шага в детерминированном и стохастическом случаях. (Russian) [The nonsmooth optimization method with adaptive step control in deterministic and stochastic cases] 84b:49035
 Mohri, Akira See Fukata, Satoru; et al., 84i:49051
 Murray, Walter See Gill, Philip E.; et al., 84i:49052
 Nikol'skii, Yu. V. See Bartish, M. Ya., 84b:49057
 Pan, Ping Qi Differential equation methods for unconstrained optimization. (Chinese. English summary) 84d:49028
 Piazza, Giuseppe See Gaviano, M., 84m:49053
 Popov, L. D. A modification of the Arrow-Hurwitz method of search for saddle points with an adaptive procedure for determining the iteration step. (Russian) 84c:49032
 Quintana, V. H. See Mayorga, R. V.; et al., (See 84f:93006b) and (See 84f:93006d)
 Saunders, Michael A. See Gill, Philip E.; et al., 84i:49052
 Schwartz, Bernd See Tichatschke, R., 84c:49033
 Shil'man, S. V. See Al'ber, Ya. I., 84i:49029 and 84i:49050
 Steihaug, Trond The conjugate gradient method and trust regions in large scale optimization. 84g:49047
 Takata, Masaru See Fukata, Satoru; et al., 84i:49051
 Tichatschke, R. (with Schwartz, Bernd) Ein Verfahren der zulässigen Richtungen für das lineare kontinuierliche Tschebyscheff-Problem. (English and Russian summaries) [A method of feasible directions for the linear continuous Chebyshev problem] 84c:49033
 Tsaturyan, K. T. See Kubintsev, G. M., 84f:49042
 Uryas'ev, S. P. See Mirzokhmedov, F., 84b:49035
 Wright, Margaret H. See Gill, Philip E.; et al., 84i:49052
 Yashko, O. V. A quasigradient method of solution of a minimax problem with nonconvex constraints. (Russian) 84j:49026
 Zabotin, Ya. I. (with Kreinin, M. I.) Construction of nonrelaxation subgradients of methods of unconditional minimization of convex functions. (Russian) 84i:49055

Zelyk, Ya. I. Solution of a constrained inverse linear problem for reproduction of a vibroacoustic field. **84c:49056**

secondary classifications:

- Cea, Jean. Numerical methods of shape optimal design. (See **84c:73004b**)
 Cherpurnoi, N. D. A graduated step regulation for the quassgradient method of minimization of weakly convex functions. (Russian) (**84j:90073**)
 Dolibre, Z. O. Solution of a variational inequality for a class of monotone mappings. (Russian) (**84c:49012**)
 Convergence of an analogue of the gradient method for finding the solution of a variational inequality. (Russian) (**84c:49009**)
 Gershorich, V. I. See Shor, N. Z., (**84c:90077**)
 Gómez, Susana. See Levy, A. V., (**84c:90090**)
 Gorsha, L. E. Accuracy of computation of partial derivatives in gradient methods of unconditional optimization. (Russian) (**84c:65020b**)
 Ichim, Ion. Sur un problème de minimum. [A minimum problem] (**84d:65025**)
 Körner, Frank. (with Richter, Claus) Zur effektiven Lösung von booleschen, quadratischen Optimierungsproblemen. (English summary) [On the efficient solution of Boolean quadratic programming problems] (**84c:90066**)
 Levy, A. V. (with Gómez, Susana) Sequential gradient-restoration algorithm for the optimization of a nonlinear constrained function. (**84c:90090**)
 Panin, V. M. (with Pshenichnyi, B. N.) Parametric linearization method in mathematical programming problems. (Russian) (**84d:90103**)
 Pshenichnyi, B. N. See Panin, V. M., (**84d:90103**)
 Reid, J. Gary. A functional analysis approach to minimum sensitivity control design. (See **84c:93005a**)
 Richter, Claus. See Körner, Frank, (**84c:90066**)
 Rubinstein, R. Y. Smoothed functionals in stochastic optimization. (**84c:90137**)
 Shor, N. Z. (with Gershorich, V. I.) Solution of problems of high dimensionality by modified gradient minimization with space expansion. (**84c:90077**)

49D10 Methods of steepest descent type

- Allwright, J. C. (with Mao, J. Q.) Optimal output feedback by minimizing $\|K(F)\|_2$. **84c:49036**
 Belonosova, Zh. Yu. (with Garashchenko, F. G.; Kushin, V. V.; Fedotov, P. A.) Some problems of structural optimization and their application to the design of linear accelerators. (Russian) **84c:49037**
 Cherpurnoi, N. D. Almost sure convergence of a random descent algorithm with averaging of the direction of motion. (Russian) **84c:49057**
 Fedotov, P. A. See Belonosova, Zh. Yu.; et al., **84c:49037**
 Garashchenko, F. G. See Belonosova, Zh. Yu.; et al., **84c:49037**
 Khabibullin, R. F. A step regularization in an iteration process of minimization of a functional. (Russian) **84c:49038**
 See also Perfilov, S. N., **84c:49042**
 Kushin, V. V. See Belonosova, Zh. Yu.; et al., **84c:49037**
 Liu, De Fu. See Yang, Zhen Hai, **84c:49058**
 Mao, J. Q. See Allwright, J. C., **84c:49036**
 Mikhailovich, M. V. An algorithm for solution of problems of nonstationary optimization and determination of saddle points. (Russian) **84c:49039**
 Perfilov, S. N. (with Khabibullin, R. F.) On the question of optimality of iteration processes. (Russian) **84c:49042**
 Redkovskii, N. N. ★ Методы криволинейного спуска в задачах безусловной минимизации. (Russian) [Methods of curvilinear descent in problems of unconditional minimization] **84c:49034**
 Remke, Werner. Stetigkeit der maximalen ε -Richtungsableitung bei einer Klasse von implizit gegebenen nichtglatten Funktionen. [Continuity of the maximal ε -directional derivative in a class of implicitly given nonsmooth functions] **84c:49041**
 Vasil'ev, O. V. An algorithm for optimization in Goursat-Darboux systems, based on the principle of the maximum. (Russian) **84c:49042**
 Yang, Zhen Hai (with Liu, De Fu) Method of multiple steepest descent. (Chinese. English summary) **84c:49058**
 Zabotin, I. Ya. On the question of the choice of directions of descent in problems of unconditional minimization of functions. (Russian) **84c:49040**
 Methods for the conditional minimization of functions with best paths of descent relative to the set. (Russian) **84c:49043**

secondary classifications:

- Malivert, Christian. A descent method for Pareto optimization. (**84f:58036**)
 Osborne, M. R. An algorithm for minimizing polyhedral convex functions. (**84j:49029**)
 Primak, M. E. On estimation of the convergence rate of an algorithm of steepest descent. (Russian) (**84c:65049**)

49D15 Methods of Newton-Raphson, Galerkin and Ritz types

- Alliney, Stefano. On the numerical solution of constrained variational problems by boundary and finite elements. **84c:49059**
 Chen, C. F. (with Hsiao, C. H.) A Walsh operational matrix for solving variational problems. (See **84c:93005a**)
 Dunn, Joseph C. Extremal types for certain L^p minimization problems and associated large scale nonlinear programs. **84c:49043**
 Falk, Richard S. Approximation of an optimal control problem. **84d:49029**
 Felgenhauer, Andreas. Direkte Behandlung gestörter Variationsprobleme. [Direct treatment of perturbed variational problems] **84c:49044**
 Gaskovich, I. V. Variational methods of investigating systems with distributed and lumped parameters. **84c:49060**
 Gu, Yong Geng. See Shen, Yao Tian, **84c:49060**

- Hlaváček, Ivan. (with Nečas, Jindřich) Optimization of the domain in elliptic unilateral boundary value problems by finite element method. (French summary) **84c:49048**
 Holnicki, P. On the discrete-time approximation to unconstrained optimal control problems for systems governed by hyperbolic equations. (See **84c:90007**)
 Hsiao, C. H. See Chen, C. F., (**84c:93005a**)
 Knowles, Greg. Finite element approximation of parabolic time optimal control problems. **84c:49059**
 Koh, Hock Lye. A Newton's method in an optimal control problem. **84c:49034**
 Litvin, O. N. Construction of optimal schemes of the finite element method. (Russian) **84c:49043**
 Mayorga, R. V. (with Quintana, V. H.) Accelerated rate of convergence for a class of optimization algorithms in function space. (See **84c:93006c**)
 McCormick, S. F. (with Ruge, J. W.) Multigrid methods for variational problems. **84c:49049**
 Nečas, Jindřich. See Hlaváček, Ivan, **84c:49048**
 Nefedov, V. N. A way of increasing the efficiency of minimization methods. (Russian) **84c:49044**
 Prösel, Martin. Über Möglichkeiten der Anwendung eines modifizierten Newton-ähnlichen Verfahrens. [On possibilities for the application of a modified Newton-like method] **84c:49050**
 Quintana, V. H. See Mayorga, R. V., (**84c:93006c**)
 Ruge, J. W. See McCormick, S. F., **84c:49049**
 Scarpini, Francesco. The numerical treatment of some fourth order variational inequalities. (See **84c:92002**)
 Shen, Yao Tian. (with Gu, Yong Geng) A note on "calculus of variations with strong nonlinearity". (Chinese. English summary) **84c:49060**
 Sorensen, D. C. Newton's method with a model trust region modification. **84c:49061**
 Spedicato, Emilio. A class of rank-one positive definite quasi-Newton updates for unconstrained minimization. (German and Russian summaries) **84c:49045**
 Szlezian, János. Numerical solution of an optimization problem. **84c:49054**
 Yabe, Hiroshi. See Yamaki, Naokazu, **84c:49062**
 Yamaki, Naokazu. (with Yabe, Hiroshi) On factorized variable-metric methods. **84c:49062**

secondary classifications:

- Chrysosverghi, I. Approximate methods for optimal pointwise control of parabolic systems. (**84c:49006**)
 Fei, Jing Gao. The rate of termination convergence of a parallel gradient projection quasi-Newton algorithm. (Chinese. English summary) (**84c:90070**)
 Leipholz, H. H. E. On direct methods in the calculus of variations. (**84c:49002**)
 Ortiz, Miguel. (with Pinsky, Peter M.; Taylor, Robert Leroy) Unconditionally stable element-by-element algorithms for dynamic problems. (**84d:73050**)
 Pinsky, Peter M. See Ortiz, Miguel; et al., (**84d:73050**)
 Slivker, V. I. Ritz' method in problems of elasticity, based on successive minimization of two functionals. (**84c:73018**)
 Taylor, Robert Leroy. See Ortiz, Miguel; et al., (**84d:73050**)

49D20 Methods of relaxation type

- Adamenko, G. M. (with Gaishun, I. V.) Synthesis of optimal hybrid minimization algorithms. **84c:49035**
 Baizel, M. M. (with Tarasenko, G. S.) Investigation of an adaptive optimization algorithm under conditions of noise. (Russian) **84c:49063**
 Bulavskii, V. A. ★ Методы релаксации для систем неравенств. (Russian) [Relaxation methods for systems of inequalities] **84c:49045**
 Fenchich, Rachida. Application de la méthode de relaxation-projection aux problèmes min-max. [Application of the relaxation-projection method to min-max problems] **84c:49041**
 Gaishun, I. V. See Adamenko, G. M., **84c:49035**
 Kohn, Robert V. (with Strang, Gilbert) Explicit relaxation of a variational problem in optimal design. **84c:49064**
 Strang, Gilbert. See Kohn, Robert V., **84c:49064**
 Tarasenko, G. S. An adaptive random search algorithm for problems with constraints of inequality type. (Russian) **84c:49065**
 Sufficient conditions for convergence of relaxation random search algorithms. (Russian) **84c:49066**
 See also Baizel, M. M., **84c:49063**

secondary classifications:

- Bouchitté, Guy. Inf-convolution et relaxation-projection dans les banachs non reflexifs, approximation de la minimisation d'une fonctionnelle intégrale ou du calcul des variations. [Inf-convolution and relaxation-projection in nonreflexive Banach spaces, approximation of the minimization of an integral functional or of the calculus of variations] (**84c:49009**)
 Gill, Philip E. (with Murray, Walter; Saunders, Michael A.; Wright, Margaret H.) Computing forward-difference intervals for numerical optimization. (**84c:49052**)
 Murray, Walter. See Gill, Philip E.; et al., (**84c:49052**)
 Saunders, Michael A. See Gill, Philip E.; et al., (**84c:49052**)
 Wright, Margaret H. See Gill, Philip E.; et al., (**84c:49052**)

49D25 Finite difference methods

- Azhogin, V. V. (with Zgurovskii, M. Z.) Optimal discrete control of a certain class of partial differential equations. **84c:49036**
 Beiko, I. V. (with Tsyganok, L. V.) Discretization of a problem of optimal deviation and investigation of the convergence of solutions. (Russian) **84c:49051**
 Beran, Z. See Tuzar, A., **84c:49069**
 Burns, John A. Finite difference methods for identification of hereditary control systems. (See **84c:00009**)

- Chhotaray, R. K.** See Mohanty, A. K., 84i:49063
- Domschke, Steffen** (with Weinelt, Wilfried) Optimale Konvergenzaussagen für ein Differenzenverfahren zur Lösung einer Klasse von Variationsungleichungen. [Optimal statements of convergence for a difference method for solving a class of variational inequalities] 84i:49061
- Gonzalez, Roberto L.** (with Rofman, E.) A discrete maximum principle concerning the optimal cost of deterministic control problems. (See 84g:93006)
- Ivanović, L. D.** Difference approximation and regularization of a problem on optimal heating of a rod. (Russian) 84i:49046
- Kuleshov, A. A.** Difference approximation and regularization of a problem of optimal control of a process described by an elliptic equation. (Russian) 84i:49067
- Levikhov, A. A.** Error estimate for solution of the linear optimal control problem. 84g:49052
- Lobok, A. P.** Construction of optimal regulators for a one-dimensional equation of parabolic type by the method of finite-difference approximation. (Russian) 84i:49062
- Maikov, E. V.** See Zorich, V. A., 84c:49035
- Malanowski, Kazimierz** On convergence of finite difference approximations to control and state constrained convex optimal control problems. (Russian and Polish summaries) 84i:49068
- Mohanty, A. K.** (with Chhotaray, R. K.) Sub-optimal output feedback control for linear quadratic systems with delay. (Russian summary) 84i:49063
- Mordukhovich, B. Sh.** On difference approximations of optimal control systems. 84i:49064
- Rofman, E.** See Gonzalez, Roberto L., (See 84g:93006)
- Song, Chang Ho** Approximation of a parabolic variational inequality of the first kind. (Korean. English summary) 84i:49065
- Tsyganok, L. V.** See Beiko, I. V., 84g:49051
- Tuzar, A.** (with Beran, Z.) Optimization of the discrete description for continuous systems. (Russian summary) 84i:49069
- Vasin, V. V.** Discrete approximation and stability in extremal problems. (Russian) 84i:49030
- Weinelt, Wilfried** See Domschke, Steffen, 84i:49061
- Zgurovskii, M. Z.** See Azhugin, V. V., 84c:49036
- Zorich, V. A.** (with Maikov, E. V.) A problem of optimal control. (Russian. English summary) 84c:49035

secondary classifications:

- Liskovets, O. A.** Consistent discretization in variational methods for solving ill-posed extremal problems. (Russian) (84a:65052)

49D27 Decomposition methods

- Tsintsadze, Z. A.** An optimal problem with mixed constraints and general final conditions. (Russian. English summary) 84i:49046

secondary classifications:

- Filippov, V. K.** (with Sokolov, V. A.) Isochoric heat capacity of heterogeneous systems. (Russian) (84b:80003)
- Haines, Yacov Y.** See Tarvainen, Kyosti; et al., (84c:90087)
- Kalliauer, A.** An algorithm for hierarchical optimization of large-scale problems with nested structure. (84b:49034)
- Lefkowitz, I.** See Tarvainen, Kyosti; et al., (84c:90087)
- Morozov, V. A.** See Tikhonov, A. N., (84c:65006)
- Sokolov, V. A.** See Filippov, V. K., (84b:80003)
- Tarvainen, Kyosti** (with Haines, Yacov Y.; Lefkowitz, I.) Decomposition methods in multiobjective discrete-time dynamic problems. (84c:90087)
- Tikhonov, A. N.** (with Morozov, V. A.) Methods for the regularization of ill-posed problems. (Russian) (84c:65006)

49D29 Multiplier methods

- Cortey-Dumont, Philippe** (with Loinger, E.) Sur l'approximation d'une I. Q. V. liée à des problèmes d'infiltration en milieu poreux. (English summary) [Approximation of a quasivariational inequality related to problems of infiltration in porous media] 84g:49053
- Jarušek, Jiří** See Outrata, Jiří V., 84i:49070
- Loinger, E.** See Cortey-Dumont, Philippe, 84g:49053
- Moulaif, Khalil** Approximation du problème de point de selle sur des banachs non réflexifs. [Approximation of the saddle-point problem on nonreflexive Banach spaces] 84b:49042
- Outrata, Jiří V.** (with Jarušek, Jiří) On Fenchel dual schemes in convex optimal control problems. 84i:49070

secondary classifications:

- Kolpakov, A. G.** Stability of an inhomogeneous plate with unilateral constraints. (Russian) (84j:73047)

49D30 Other methods, not based on necessary conditions (penalty function, etc.)

- Abasov, T. M.** Modified Lagrangian functions in minimax problems. (Russian) 84d:49031
- Burdakov, O. P.** Conjugate direction methods for solving systems of equations and finding saddle points. II. 84m:49055
- Cavazzuti, Ennio** Multiple Γ -convergences, saddle-point and max-min-point convergences. (Italian. English summary) 84i:49047

- (with Morgan, Jacqueline) Problemes d'optimisation uniformement bien posés et méthodes de pénalisation. (Italian summary) [Uniformly well-posed optimization problems and penalty methods] 84i:49032
- Chen, Goong** (with Grimmer, Ronald) Asymptotic expansions of a penalty method for computing a regulator problem governed by Volterra equations. 84i:49027
- Chen, Zu Hao** The optimal control problems of bounded phase coordinate and penalty function methods. 84i:49047
- Colgen, Rainer** On parametric optimization in Hilbert spaces. 84i:49043
- Finkel'shtein, A. V.** Generalized necessary conditions in extremal problems. (Russian. English and German summaries) 84i:49033
- Grimmer, Ronald** See Chen, Goong, 84i:49027
- Hackbusch, Wolfgang** A note on the penalty correction method. (German and Russian summaries) 84i:49056
- Hamada, El-Said** (with Taha El-Shirbeeny, El-Hosseiny) New iterative solution of optimal multivariable control problem. (See 84f:00033)
- Kalliauer, A.** Optimization of large-scale problems. (See 84f:92002)
- Kaplan, A. A.** Estimates with respect to the argument of the rate of convergence of the penalty method. (Russian) 84i:49066
- Khasanov, V. Kh.** (with Osipov, V. A.) Optimized control of the form of plane polynomial contours. (Russian) 84m:49057
- Khobotov, E. N.** An extrapolational method for solution of convex problems in control of discrete-time processes. (See 84i:90007)
- Korotchenko, A. G.** An algorithm for seeking the minimum of a function of two variables that does not require evaluation of the derivatives. 84i:49044
- Kunisch, Karl** Approximation schemes for the linear-quadratic optimal control problem associated with delay equations. 84i:49048
- Mayne, David Q.** The continuity of the reachable set of a linearized system. (See 84g:93005c)
- Mayorga, R. V.** (with Quintana, V. H.) Improved penalty functions via an auxiliary function. (See 84f:93006f)
- Morgan, Jacqueline** See Cavazzuti, Ennio, 84d:49032
- Osipov, V. A.** See Khasanov, V. Kh., 84m:49057
- Pokrovskii, A. V.** Class of discontinuous systems. 84i:49048
- Polak, Elijah** (with Wardi, Y.) Nondifferentiable optimization algorithm for designing control systems having singular value inequalities. 84d:49034
- Quintana, V. H.** See Mayorga, R. V., (See 84f:93006f)
- Ramík, Jaroslav** Penalty methods for solving problems in mathematical programming. (Czech. English summary) 84i:49049
- Taha El-Shirbeeny, El-Hosseiny** See Hamada, El-Said, (See 84f:00033)
- Tatjewski, P.** The use of local augmented Lagrangians for coordination of complex optimization problems. (See 84i:90007)
- Tokareva, O. N.** An algorithm for determining the initial admissible point for barrier function methods. (Russian) 84i:49044
- Wardi, Y.** See Polak, Elijah, 84d:49034

secondary classifications:

- Ambühl, Michael** The choice of a parameter in a penalty method. (See 84g:90003)
- Bazarsa, Mokhtar S.** (with Goode, Jamie J.) Sufficient conditions for a globally exact penalty function without convexity. (84b:90055)
- Bercovier, Michel** (with Engelman, M. S.; Borman, J.) Numerical simulation of non-Newtonian blood flow models by a finite element method. (84f:92004)
- Bertsekas, Dimitri P.** Variable metric methods for constrained optimization using differentiable exact penalty functions. (See 84b:94004)
- Borman, J.** See Bercovier, Michel; et al., (84f:92004)
- Chen, Goong** (with Mills, Wendell H., Jr.; Sun, Shun Hua; Yost, David A.) Sharp error estimates for a finite element-penalty approach to a class of regulator problems. (84b:65061)
- Engelman, M. S.** See Bercovier, Michel; et al., (84f:92004)
- Fix, George J.** (with Liang, G.; Lee, D. N.) Penalty-hybrid finite element method. (84c:65090)
- Goode, Jamie J.** See Bazarsa, Mokhtar S., (84b:90055)
- Hartung, Joachim** On two-stage minimax problems. (84g:49021)
- Jacimović, M. D.** See Vasil'ev, F. P.; et al., (84c:65064)
- Janiak, Andrzej** (with Kreglewski, T.; Wierzbicki, Andrzej P.) Convergence properties of single-iterative saddle-point algorithms for constrained optimization. (See 84i:90007)
- Katayama, Ryu** See Shimizu, Kiyotaka, (84i:93024)
- Khromova, L. N.** See Vasil'ev, F. P.; et al., (84c:65064)
- Kreglewski, T.** See Janiak, Andrzej; et al., (See 84i:90007)
- Larin, R. M.** Combination of the perturbation method with the method of penalty functions. (Russian) (84i:90074)
- Lee, D. N.** See Fix, George J.; et al., (84c:65090)
- Liang, G.** See Fix, George J.; et al., (84c:65090)
- Loridan, P.** (with Morgan, Jacqueline) Penalty functions in ϵ -programming and ϵ -minimax problems. (84i:90130)
- Marchuk, I. M.** Application of the "penalty method" to the solution of a problem of bending of an ideal elastoplastic plate. (Ukrainian. Russian summary) (84j:73058)
- Mills, Wendell H., Jr.** See Chen, Goong; et al., (84b:65061)
- Morgan, Jacqueline** See Loridan, P., (84i:90130)
- Oden, John Tinsley** Penalty methods for constrained problems in nonlinear elasticity. (84j:73026)
- Radoslovescu, A.** L'approximation par pénalisation-Éléments finis d'une classe d'inéquations variationnelles de première espèce. [Approximation by penalty-finite elements of a class of first-order variational inequalities] (84i:49012)
- Ramos Méndez, Eduardo** Penalty functions and augmented Lagrangians. (Spanish) (84f:90086)
- Shakhverdyan, S. V.** On the solution of optimization problems with constraints. (84c:49026)
- Shi, Ying Guang** The minimal problem on a finite set. (Chinese. English summary) (84i:41046)

- Shimizu, Kiyotaka (with Katayama, Ryu) A solution to a multi-object decision problem for distributed-parameter control system. (84i:93024)
 Sun, Shun Hua See Chen, Goong; et al., (84b:65061)
 Vasil'ev, F. P. (with Khromova, L. N.; Jachimov, M. D.) Iterative regularization of a minimization method with a high rate of convergence. (Russian. English summary) (84i:65064)
 Wierzbicki, Andrzej P. See Janiak, Andrzej; et al., (See 84b:90007)
 Yost, David A. See Chen, Goong; et al., (84b:65061)

49D35 Methods of linear programming type

- Anderson, E. J. (with Philpott, A. B.) Algorithms for some simple infinite-dimensional linear programs. 84m:49058
 (with Nash, Peter; Perold, A. F.) Some properties of a class of continuous linear programs. 84i:49049
 Jasiulek, J. The structure and computation of solutions to continuous linear programs. 84i:49067
 Mayne, David Q. (with Polak, Elijah) Algorithms for the design of control systems subject to singular value inequalities. 84i:49068
 Nash, Peter See Anderson, E. J.; et al., 84i:49049
 Perold, A. F. See Anderson, E. J.; et al., 84i:49049
 Philpott, A. B. See Anderson, E. J., 84m:49058
 Polak, Elijah See Mayne, David Q., 84i:49068

secondary classifications:

- Brujin, P. M. See de Vlieger, J. H.; et al., (84d:49036)
 Pham Van An On a method that uses derivatives of nonlinear functionals for solving linear equations and inequalities, with some applications. (Vietnamese. Russian summary) (84j:90050)
 Verbruggen, H. B. See de Vlieger, J. H.; et al., (84d:49036)
 de Vlieger, J. H. (with Verbruggen, H. B.; Brujin, P. M.) A time-optimal control algorithm for digital computer control. (84d:49036)

49D37 Nonlinear programming

- Boender, C. G. E. (with Rinnooy Kan, A. H. G.; Timmer, G. T.; Stougie, L.) A stochastic method for global optimization. 84a:49050
 Brujin, P. M. See de Vlieger, J. H.; et al., 84d:49036
 Dietrich, Helmut Anwendung der Dualitätstheorie auf ein Problem der optimalen Steuerung mit nichtlinearer Zustandsgleichung. (English and Russian summaries) [Application of the duality theory to a problem of optimal control with nonlinear equation of state] (See 84i:49002)
 Di Pillo, G. (with Grippo, L.; Lampariello, F.) A class of methods for the solution of optimization problems with inequalities. 84i:49069
 Ellis, J. E. (with Roberts, P. D.) Measurement and modelling trade-offs for integrated system optimization and parameter estimation. 84f:49045
 Gabay, Daniel Minimizing a differentiable function over a differential manifold. 84i:49071
 Gfrerer, H. (with Guddat, J.; Wacker, H.; Zulehner, W.) Globalization of locally convergent algorithms for nonlinear optimization problems with constraints. 84j:49028
 Grippo, L. See Di Pillo, G.; et al., 84i:49069
 Guddat, J. See Gfrerer, H.; et al., 84j:49028
 Janiak, Andrzej (with Kęrglewski, T.; Wierzbicki, Andrzej P.) Convergence properties of single-iterative saddle-point algorithms for constrained optimization. (See 84b:90007)
 Kim, Hyong Sop On the computational procedure of a mathematical programming problem. (Korean. English summary) 84c:49036
 Kęrglewski, T. See Janiak, Andrzej; et al., (See 84b:90007)
 Kurbanov, V. G. An algorithm for finding saddle points of a nonsmooth convex-concave function. (Russian. English and Azerbaijani summaries) 84f:49046
 Lampariello, F. See Di Pillo, G.; et al., 84i:49069
 Lemarechal, Claude Bundle methods in nonsmooth optimization. 84g:49054
 Pestryakov, A. K. One method of solving linear dynamic control problems. 84i:49070
 Rabinovich, Ya. I. On dialogue search for an extremum of a function with undetermined gradient. 84g:49055
 Rinnooy Kan, A. H. G. See Boender, C. G. E.; et al., 84a:49050
 Roberts, P. D. See Ellis, J. E., 84f:49045
 Schoen, F. On a sequential search strategy in global optimization problems. 84f:49047
 Sorensen, D. C. Collinear scaling and sequential estimation in sparse optimization algorithms. 84g:49056
 Stougie, L. See Boender, C. G. E.; et al., 84a:49050
 Timmer, G. T. See Boender, C. G. E.; et al., 84a:49050
 Torsney, Ben A moment inequality and monotonicity of an algorithm. 84m:49059
 Verbruggen, H. B. See de Vlieger, J. H.; et al., 84d:49036
 de Vlieger, J. H. (with Verbruggen, H. B.; Brujin, P. M.) A time-optimal control algorithm for digital computer control. 84d:49036
 Wacker, H. See Gfrerer, H.; et al., 84j:49028
 Wierzbicki, Andrzej P. See Janiak, Andrzej; et al., (See 84b:90007)
 Zhu, Ci You Subspace iteration for unconstrained minimization. (Chinese. English summary) 84d:49035
 Zulehner, W. See Gfrerer, H.; et al., 84j:49028

secondary classifications:

- Chan, D. See Pang, J. S., (84d:49009)
 Duca, Dorel I. Linear optimality criteria in nonlinear programming in complex space. (Romanian summary) (84f:90075)
 Gershovich, V. I. See Shor, N. Z., (84i:90077)
 Gfrerer, H. (with Guddat, J.; Wacker, H.) A globally convergent algorithm based on imbedding and parametric optimization. (German summary) (84k:90071)

- Glover, B. M. Differentiable programming in Banach spaces. (German and Russian summaries) (84k:90098)
 Guddat, J. See Gfrerer, H.; et al., (84k:90071)
 Haslinger, Jaroslav (with Hlaváček, Ivan) Contact between elastic perfectly plastic bodies. (Czech summary) (84a:73039)
 Hlaváček, Ivan See Haslinger, Jaroslav, (84a:73039)
 Li, Yuan Xi See Yu, Wen Ci, (84a:90078)
 Lukšan, Ladislav Quasi-Newton methods without projections for unconstrained minimization. (84g:90088a)

Quasi-Newton methods without projections for linearly constrained minimization. (84g:90088b)

- Pang, J. S. (with Chan, D.) Iterative methods for variational and complementarity problems. (84d:49009)
 Rosenberg, Eric A globally convergent condensation method for geometric programming. (84j:90077)
 Rubinstein, R. Y. Solution of nonlinear programming with unknown distribution function. (84g:90071)
 Shor, N. Z. (with Gershovich, V. I.) Solution of problems of high dimensionality by modified gradient minimization with space expansion. (84k:90077)
 Wacker, H. See Gfrerer, H.; et al., (84k:90071)
 Yu, Wen Ci (with Li, Yuan Xi) A direct search method by the local positive basis for the nonlinearly constrained optimization. (Chinese summary) (84a:90078)

49D39 Semi-infinite programming

- Borwein, Jonathan M. Semi-infinite programming duality: how special is it? 84g:49057
 Colgen, Rainer (with Schnatz, K.) Stetigkeit bei parametrischer semi-infiniter Optimierung. [Continuity in parametric semi-infinite optimization] 84b:49045
 Grossmann, I. E. See Halemane, K. P., 84g:49058
 Halemane, K. P. (with Grossmann, I. E.) Optimal process design under uncertainty. 84g:49058
 Ioffe, Alexandre D. Second order conditions in nonlinear nonsmooth problems of semi-infinite programming. 84m:49060
 Karney, Dennis F. A pathological semi-infinite program verifying Karlovitz's conjecture. 84d:49037
 Nuttall, Albert H. See Streit, Roy L., 84g:49059
 Osborne, M. R. An algorithm for minimizing polyhedral convex functions. 84j:49029
 Polak, Elijah Semi-infinite optimization in engineering design. 84i:49071
 Schnatz, K. See Colgen, Rainer, 84b:49045
 Sommer, Rolf Numerische Behandlung semi-infiniter Optimierungsaufgaben bei der approximativen Lösung elliptischer Randwertaufgaben. [Numerical treatment of semi-infinite optimization problems in the approximative solution of elliptic boundary value problems] 84c:49037
 Finite-Element-Approximation und semi-infinite Optimierungsaufgaben. (English and Russian summaries) [Finite element approximation and semi-infinite optimization problems] (See 84i:49002)
 Streit, Roy L. (with Nuttall, Albert H.) A note on the semi-infinite programming approach to complex approximation. 84g:49059
 Watson, G. A. Numerical experiments with globally convergent methods for semi-infinite programming problems. 84i:49072

secondary classifications:

- Alt, Walter Lipschitzian perturbations of infinite optimization problems. (84j:90094)
 Brosowski, Bruno An optimality condition and its application to parametric semi-infinite optimization. (84i:90123)
 Gfrerer, H. (with Guddat, J.; Wacker, H.; Zulehner, W.) Globalization of locally convergent algorithms for nonlinear optimization problems with constraints. (84j:49028)
 Goberna, M. A. (with López, Marco Antonio; Pastor Ciurana, Jesús) Farkas-Minkowski systems in semi-infinite programming. (84c:90090)
 (with López, Marco Antonio; Pastor Ciurana, Jesús) Finite representation of infinite systems of inequalities. (Spanish. English summary) (84c:90091)
 Guddat, J. See Gfrerer, H.; et al., (84j:49028)
 Hettich, Rainer (with Zencke, Peter) Numerische Methoden der Approximation und semi-infiniter Optimierung. (German) [Numerical methods of approximation and semi-infinite optimization] (84a:90069)
 Karney, Dennis F. A duality theorem for semi-infinite convex programs and their finite subprograms. (84i:90117)
 Kemperman, J. H. B. On the role of duality in the theory of moments. (84j:49017)
 Linnemann, Arno Higher-order necessary conditions for infinite and semi-infinite optimization. (84d:90093)
 López, Marco Antonio See Goberna, M. A.; et al., (84c:90090) and (84c:90091)
 Pastor Ciurana, Jesús See Goberna, M. A.; et al., (84c:90090) and (84c:90091)
 Polak, Elijah (with Tits, A. L.) A recursive quadratic programming algorithm for semi-infinite optimization problems. (84a:90074)
 Rudolph, H. Basislösungen und Extrempunkte in der semi-infiniten linearen Optimierung. (English and Russian summaries) [Basic solutions and extreme points in semi-infinite linear optimization] (84k:90041)
 Schwartz, Bernd See Tichatschke, R., (See 84i:49002)
 Tichatschke, R. (with Schwartz, Bernd) Ein Verfahren der zulässigen Richtungen für das lineare kontinuierliche Tschebyscheff-Problem. (English and Russian summaries) [A method of feasible directions for the linear continuous Chebyshev problem] (See 84i:49002)
 Tits, A. L. See Polak, Elijah, (84a:90074)
 Wacker, H. See Gfrerer, H.; et al., (84j:49028)
 Zencke, Peter See Hettich, Rainer, (84a:90069)
 Zulehner, W. See Gfrerer, H.; et al., (84j:49028)

49D40 Methods of quadratic programming type

Parlar, Mahmut A decomposition technique for an optimal control problem with "PQDZ" cost and bounded controls. **84c:49038**

secondary classifications:

Fortin, Michel (with Glowinski, Roland) ★Méthodes de lagrangien augmenté. (French) [Augmented Lagrangian methods] **(84c:49002)**
Glowinski, Roland See **Fortin, Michel**. **(84c:49002)**
Goldfarb, D. (with Idnani, A.) A numerically stable dual method for solving strictly convex quadratic programs. **(84c:90058)**
Idnani, A. See **Goldfarb, D.**, **(84c:90058)**

49D45 Methods of convex programming type

Finin, G. S. See **Val'ev, K. G.**, **84c:49051**
Lemarechal, Claude (with Mifflin, Robert) Global and superlinear convergence of an algorithm for one-dimensional minimization of convex functions. **84c:49048**
Lucchetti, Roberto Some aspects of the connections between Hadamard and Tyhonov well-posedness of convex programs. (Italian summary) **84j:49030**
Malanowski, Kazimierz On convergence of finite dimensional approximation to control constrained optimal control problems for distributed systems. (See **84c:90007**)
Mifflin, Robert See **Lemarechal, Claude**, **84c:49048**
Val'ev, K. G. (with Finin, G. S.) A numerical method for solving a linear differential game with a quadratic functional. (Russian. English summary) **84c:49051**
Venets, V. I. Stability of continuous subgradient algorithms. **84m:49061**
Zhikov, V. V. Problems of convergence, duality, and averaging for a class of functionals of the calculus of variations. (Russian) **84c:49060**
Zlobec, S. Marginal values for regions of stability in convex optimization. (Serbo-Croatian summary) **84c:49073**

secondary classifications:

Antsiferov, E. G. (with Danilenko, Yu. Ya.) Solution of a convex programming problem by the modified support cone method. (Russian) **(84c:90051)**
Danilenko, Yu. Ya. See **Antsiferov, E. G.**, **(84c:90051)**
Garanina, V. A. A multistep subgradient method of linearization. (Russian. English summary) **(84c:90065)**
Ghiță, Constantin A method of convex analysis for the study of elastoplastic deformation. (Romanian. English summary) **(84c:73034)**
Ilioi, C. An extension of a Pshechny's method to constrained minimization of convex nondifferentiable functions. **(84c:90060)**
Kaplan, A. A. Estimates with respect to the argument of the rate of convergence of the penalty method. (Russian) **(84c:49066)**
Lemarechal, Claude (with Zowe, J.) Some remarks on the construction of higher order algorithms in convex optimization. **(84c:90118)**
Luderer, Bernd Subdifferential representation of implicitly defined functions. (German and Russian summaries) **(84c:58019)**
Magill, Michael J. P. Pricing infinite horizon programs. **(84b:90015)**
Mayne, David Q. The continuity of the reachable set of a linearized system. (See **84g:93005c**)
Zowe, J. See **Lemarechal, Claude**, **(84c:90118)**

49D49 Geometric programming

Rigler, A. K. See **Rountree, D. H.**, **84c:49072**
Rountree, D. H. (with Rigler, A. K.) A penalty treatment of equality constraints in generalized geometric programming. **84c:49072**

secondary classifications:

Dinkel, John J. (with Kochenberger, Gary A.; Wong, Danny S.) A sensitivity analysis approach to iteration skipping in the harmonic mean algorithm. **(84c:90128)**
Kochenberger, Gary A. See **Dinkel, John J.**; et al., **(84c:90128)**
Pokataev, A. V. An algorithm for solving the problem of unconditional optimization of geometric programming. **(84c:90135)**
Wong, Danny S. See **Dinkel, John J.**; et al., **(84c:90128)**

49D50 Periodic optimization

Carbone, Luciano (with Salerno, Saverio) On a problem of homogenization with quickly oscillating constraints on the gradient. **84c:49038**
Panasnyuk, A. I. (with Panasnyuk, V. I.) The behavior of infinite optimal trajectories of a class of dynamical systems. (Russian) **84c:49052**
Panasnyuk, V. I. See **Panasnyuk, A. I.**, **84c:49052**
Paşa, Gelu (with Poligevski, Dan) Homogenization of a hydrodynamic model. (Romanian. English summary) **84c:49037**
Poligevski, Dan See **Paşa, Gelu**, **84c:49037**
Salerno, Saverio See **Carbone, Luciano**, **84c:49038**

secondary classifications:

Artola, Michel (with Duvaut, Georges) Un résultat d'homogénéisation pour une classe de problèmes de diffusion non linéaires stationnaires. (English summary) [A homogenization result for a class of stationary nonlinear diffusion problems] **(84j:35020)**
Berdichevskii, V. L. (with Sutyryn, V. G.) Dynamics of periodic structures. (Russian) **(84f:73017)**
Duvaut, Georges See **Artola, Michel**, **(84j:35020)**

Fleury, Françoise Acoustique dans une suspension de particules élastiques. (English summary) [Acoustics in a suspension of elastic particles] **(84b:76071)**
Gibert, Philippe Les basses et moyennes fréquences dans des structures fortement hétérogènes. (English summary) [Low and medium frequencies in highly heterogeneous structures] **(84f:73034)**
Kolpakov, A. G. Stability of an inhomogeneous plate with unilateral constraints. (Russian) **(84j:73047)**
Luhmer, A. Optimal control with switching dynamics. **(84c:49004)**
Mignot, F. (with Puel, J.-P.; Suquet, Pierre) Homogenization and bifurcation of perforated plates. **(84c:73046)**
Puel, J.-P. See **Mignot, F.**; et al., **(84c:73046)**
Suquet, Pierre See **Mignot, F.**; et al., **(84c:73046)**
Sutyryn, V. G. See **Berdichevskii, V. L.**, **(84f:73017)**

49D99 None of the above, but in this section

Aslanyan, A. A. Averaging of equations of motion in problems of control of systems of differential equations with impulse action. (Russian) **84c:49053**
Attouch, Hedy (with Wets, Roger J.-B.) Convergence de points min/sup et de points fixes. (English summary) [Convergence of min/sup points and of fixed points] **84c:49073**
Avakov, E. R. Conditions for the regularization of an approximating family of maximin problems along connected sets. (Russian) **84c:49074**
Banks, H. T. (with Burns, John A.) Approximation techniques for control systems with delays. (See **84c:90007**)
Burdakov, O. P. Conjugate direction methods for solving control systems and finding saddle points. I. **84c:49050**
Burns, John A. See **Banks, H. T.**, (See **84c:90007**)
Chen, Guan Rong Spline function methods in optimal control calculations. (Chinese) **84c:49075**
Dorea, Chang C. Y. Expected number of steps of a random optimization method. **84c:49051**
Ermakov, S. M. (with Zhiglyavskii, A. A.) Random search for a global extremum. (Russian. English summary) **84c:49049**
Fujii, Hiroshi Bifurcation theory via group theory and finite element methods. (Japanese) **84c:49038**
Gabasov, R. (with Kirillova, F. M.; Kostyukova, O. I.) A direct exact algorithm for solving a linear optimal-control problem. **84c:49076**
Glinkin, I. A. The simultaneous search for extrema of several functions. (Russian) **84c:49061**
Gorodetskii, S. Yu. (with Neimark, Yu. I.) Application of global search optimization with an adaptive stochastic model to search for the absolute minimum of functions. (Russian) **84m:49062**
 (with Neimark, Yu. I.) Search characteristics of a global optimization algorithm with an adaptive stochastic model. (Russian) **84c:49077**
Grishagin, V. A. A comparative investigation of the search dynamics of two global optimization algorithms. (Russian) **84c:49050**
Hoppe, Ronald H. W. On the approximate solution of time-optimal control problems. **84c:49062**
Hwang, Myong Il On the problem of determining cluster points. I. (Korean. English summary) **84c:49039a**
 On the problem of determining cluster points. II. (Korean. English summary) **84c:49039b**
Ivakhnenko, M. M. (with Korol', L. V.) Functions with a nonstationary period in the study of the integral method of direct search for an extremum. (Russian) **84c:49052**
Kirillova, F. M. See **Gabasov, R.**; et al., **84c:49076**
Korol', L. V. See **Ivakhnenko, M. M.**, **84c:49052**
Kostyukova, O. I. See **Gabasov, R.**; et al., **84c:49076**
Kulagin, V. V. See **Vinogradova, T. K.**, **84c:49075**
Marti, K. Minimizing noisy objective functions by random search methods. **84c:49054**
Medvedev, V. S. (with Puzanov, V. P.) Application of spline functions in problems of optimizing program controls for dynamical systems. (Russian. English summary) **84c:49046**
Naidu, D. S. See **Rao, A. Kailasa**, **84c:49055**
Nakonechnii, O. G. Approximate minimax estimates for functionals of solutions to elliptic equations. (Russian) **84c:49047**
Neimark, Yu. I. See **Gorodetskii, S. Yu.**, **84c:49077** and **84m:49062**
Pevnyi, A. B. Optimal strategies for search of the maximum of a function with a bounded higher derivative. (Russian) **84m:49063**
Puzanov, V. P. See **Medvedev, V. S.**, **84c:49046**
Rao, A. Kailasa (with Naidu, D. S.) Singular perturbation method applied to the open-loop discrete optimal control problem. **84c:49055**
Redkovskii, N. N. Some minimization methods for solving problems with equality type constraints. (Russian) **84c:49048**
Rzhevskii, S. V. Closed mappings in unconstrained minimization problems for convex functions. **84m:49064**
Stoer, Josef The n -step square convergence of some minimization algorithms related to Powell's derivative free method. **84c:49053**
Tarasova, V. P. Optimal search for the extremum of quasimodal functions. (Russian) **84c:49074**
 Optimal search algorithms for the interval of largest values for some class of functions. (Russian) **84m:49065**
Ustyuzhaninov, V. G. Existence and effectiveness of optimal random search algorithms. (Russian) **84j:49031**
Veremei, E. I. Solution of a problem of synthesis of optimal regulators with graphic specification of the spectral density of perturbation. (Russian) **84c:49039**
Vinogradova, T. K. (with Kulagin, V. V.) Synthesis of optimal control as a principle of optimality in problems with incomplete information. (Russian) **84c:49075**
Vlach, M. On nonenlarging closures in affine spaces. (See **84c:54003**)
Wets, Roger J.-B. See **Attouch, Hedy**, **84c:49073**

- Zhang, Lian Sheng Convergence and optimality conditions of a global extremum with adaptive change of domain. (Chinese. English summary) **84f:49051**
 Zhiglavskii, A. A. See Ermakov, S. M., **84f:49049**

secondary classifications:

- Al'ber, Ya. I. Recurrence relations and variational inequalities. (Russian) **(84m:49018)**
 Bauman, E. V. (with Dorofeyuk, A. A.) Recursive automatic classification algorithms. **(84k:68121)**
 Cherruault, Yves (with Guillez, Arthur) Une méthode pour la recherche du minimum global d'une fonctionnelle. (English summary) [A method for finding the global minimum of a functional] **(84g:65081)**
 Dolecki, Szymon (with Salinetti, Gabriella; Wets, Roger J.-B.) Convergence of functions: equi-semicontinuity. **(84k:58064)**
 Dorofeyuk, A. A. See Bauman, E. V., **(84k:68121)**
 Gaponenko, Yu. L. Method of seeking the global extremum for a nonlinear functional. **(84f:90078)**
 Grasmann, J. On a class of sensitive cheap control problems. (See **84g:93005d**)
 Guillez, Arthur See Cherruault, Yves, **(84g:65081)**
 Gulyanitskii, L. F. See Sergienko, I. V., **(84g:90096)**
 Gyurzhiev, V. G. Convergence of the method of successive approximations for solving a special nonlinear problem of optimal control. (Russian) **(84a:49027)**
 Gyurkovics, E. (with Vörös, T.) Numerical methods for solving the linear time-optimal control problem with error estimation. **(84m:65095)**
 Hahnwald-Busch, Andreas See Müller, P. Heinz; et al., **(84f:90066)**
 Kowalski, Paweł (with Pochcial, Jan) On convergence of sequence of point-to-set maps. **(84f:54025)**
 Kuo, Y. M. See Miele, A.; et al., **(84g:49022)**
 Miele, A. (with Mohanty, B. P.; Venkataraman, P.; Kuo, Y. M.) Numerical solution of minimax problems of optimal control. I, II. **(84g:49022)**
 Mitidieri, Enzo On the strong convergence of an iterative scheme related to subdifferentials. (Italian summary) **(84a:47067)**
 Mohanty, B. P. See Miele, A.; et al., **(84g:49022)**
 Müller, P. Heinz (with Hahnwald-Busch, Andreas; Neumann, Peter; Nollau, Volker) Optimierung mittels stochastischer Suchverfahren. [Optimization by means of stochastic search methods] **(84f:90066)**
 Nakonechnyi, A. G. (with Vladimirova, A. I.) ★Метод возмущений в задачах минимаксного оценивания. (Russian) [The perturbation method in problems of minimax estimation] **(84i:49025)**
 Neumann, Peter See Müller, P. Heinz; et al., **(84f:90066)**
 Nikulina, V. N. (with Timoshina, I. R.) Use of the packet minimax principle for solution of certain nonsmooth problems in control theory. (Russian) **(84k:49018)**
 Nollau, Volker See Müller, P. Heinz; et al., **(84f:90066)**
 Pashkovskii, G. S. The optimal choice of controllable parameters for systems of built-in control. **(84h:93031)**
 Pavlov, D. B. The problem of determining the boundary states of dynamic systems. **(84g:49023)**
 Pochcial, Jan See Kowalski, Paweł, **(84f:54025)**
 Salinetti, Gabriella See Dolecki, Szymon; et al., **(84k:58064)**
 Seidman, Thomas I. Convergent approximation methods for ill-posed problems. I. General theory. (Russian and Polish summaries) **(84g:65070a)**
 Convergent approximation methods for ill-posed problems. II. Applications. (Russian and Polish summaries) **(84g:65070b)**
 Sergienko, I. V. (with Gulyanitskii, L. F.) Frontal optimization algorithms for multiprocessor computers. **(84g:90096)**
 Timoshina, I. R. See Nikulina, V. N., **(84k:49018)**
 Tyukhtin, V. B. The rate of convergence of approximation methods of solution of one-sided variational problems. II. (Russian. English summary) **(84m:35008)**
 Venkataraman, P. See Miele, A.; et al., **(84g:49022)**
 Vladimirova, A. I. See Nakonechnyi, A. G., **(84i:49025)**
 Vörös, T. See Gyurkovics, E., **(84m:65095)**
 Wets, Roger J.-B. See Dolecki, Szymon; et al., **(84k:58064)**

49Exx Controllability and geometry of control problems

49E05 General dependence on controls

- Lasiecka, I. (with Triggiani, R.) Structural assignment of Neumann boundary feedback parabolic equations: the unbounded case in the feedback loop. **84i:49076**
 (with Triggiani, R.) Feedback semigroups and cosine operators for boundary feedback parabolic and hyperbolic equations. **84i:49077**
 Triggiani, R. See Lasiecka, I., **84i:49076** and **84i:49077**

secondary classifications:

- Russell, David L. Functional equations as control canonical forms for distributed parameter control systems and a state space theory for certain differential equations of infinite order. **(84j:93026)**
 49E10 Orienter fields (contingency equations)
 Borówko, Piotr Application of a certain method of approximation to the theory of orienter fields and differential games. **84g:49063**
 Fryszkowski, A. Properties of the set of solutions of orienter equation. **84f:49052**
 Makhlin, A. R. See Ukolov, I. S., **84f:49053**
 Olech, Czesław Boundary solutions of differential inclusion. (See **84g:49003**)
 Ukolov, I. S. (with Makhlin, A. R.) The method of Lyapunov functions in the theory of analytical construction of nonlinear regulators. (Russian) **84f:49053**

secondary classifications:

- Ahmed-Gamal, Mohamed Perturbation non convexe d'un problème d'évolution dans un espace hilbertien. [Nonconvex perturbation of an evolution problem in a Hilbert space] **(84c:34089)**
 Blagodatskikh, V. I. On the theory of sufficient conditions for optimality. (Russian) **(84i:49044)**
 Di Guglielmo, F. J. Differential inclusions with multivalued boundary conditions. **(84m:34014)**
 Levakov, A. A. Some properties of multivalued mappings and an existence theorem for solutions of differential inclusions. (Russian) **(84m:34017)**
 Pucci, Patrizia Identifying all of the solutions of an orientor field by an approximation method. (Italian) (See **84c:34003**)

49E15 Attainable sets, controllability

- Alekseev, N. K. Dependence of the control set on the value of the control parameter. (Russian) **84k:49054**
 Bacciotti, Andrea (with Stefani, Gianna) The region of attainability of nonlinear systems with unbounded controls. **84h:49078**
 Ball, John MacLeod (with Marsden, Jerrold E.; Slemrod, M.) Controllability for distributed bilinear systems. **84h:49079**
 Barmish, B. Ross Global and point controllability of uncertain dynamical systems. **84j:49032**
 Bartosiewicz, Zbigniew A criterion of closedness of an attainable set of a delay system. **84m:49066**
 Belikov, S. A. (with Samborskiĭ, S. M.) Sets of admissibility for systems described by partial differential equations. (Russian) **84h:49080a**
 Sets of admissibility for some classes of systems in a Banach space. (Russian) **84h:49080b**
 Chernenko, I. V. See Rudenko, A. V., **84m:49067**
 Chernous'ko, F. L. On equations of ellipsoids approximating reachable sets. (Russian summary) **84j:49033**
 Colonius, Fritz Stable and regular reachability for relaxed hereditary differential systems. **84h:49081**
 Frolov, E. B. See Pupkov, K. A., **84i:49079**
 Hermes, Henry Control systems which generate decomposable Lie algebras. **84h:49082**
 Komarov, V. A. Estimates for the accessibility set and the construction of admissible controls for linear systems. (Russian) **84f:49054**
 Luczak-Kumorek, Elzbieta (with Sosulski, Wladyslaw) Controllability of generalized functional-differential systems. **84k:49055**
 Marsden, Jerrold E. See Ball, John MacLeod; et al., **84h:49079**
 Medved', Milan On genericity of complete controllability in the space of linear parametrized control systems. **84i:49078**
 Orseovich, A. I. Extremal properties of ellipsoids approximating attainability sets. (Russian. English summary) **84k:49056**
 Pupkov, K. A. (with Frolov, E. B.) An algorithm for testing attainability for a certain class of nonlinear systems. **84i:49079**
 Rudenko, A. V. (with Chernenko, I. V.) Some properties of smooth sections of a multivalued attainability mapping. **84m:49067**
 Samborskiĭ, S. M. See Belikov, S. A., **84h:49080a**
 van der Schaft, A. J. Controllability and observability of affine nonlinear Hamiltonian systems. **84c:49040**
 Semenov, V. N. Modeling of attainability sets of dynamical systems. (Russian) **84k:49057**
 Semenov, Yu. M. The problem of null-attainability of linear control systems with constant coefficients. (Russian) **84h:49049**
 Silin, D. B. On linear inertial control systems. (Russian) **84i:49080**
 Slemrod, M. See Ball, John MacLeod; et al., **84h:49079**
 Sosulski, Wladyslaw See Luczak-Kumorek, Elzbieta, **84k:49055**
 Stefani, Gianna See Bacciotti, Andrea, **84h:49078**
 Vu Kuok Khan' Controllability of nonlinear systems. (Russian. English summary) **84c:49041**
 Wyderka, Zdzisław On the attainable set for linear systems with measures as coefficients. **84c:49040**

secondary classifications:

- Bacciotti, Andrea Topological aspects of the minimum time problem. (Italian) **(84h:58045)**
 Baumeister, Johann On the boundary control of the heat equation in materials with memory. **(84k:49006)**
 Blaquièrre, Austin Optimization and controllability in problems of relativistic dynamics and of geometrical optics. **(84k:58054)**
 Florkiewicz, B. On the necessary condition for the optimality of control in the problem of evasion in differential games. (Polish summary) **(84j:49020)**
 Narukawa, Kimiaki Boundary value control of isotropic elastodynamic systems with constrained controls. **(84g:73030)**
 Niewinowska-Jacak, D. Optimal control in linear systems without the condition of regular controllability. (Polish summary) **(84j:49004)**
 Pliss, P. V. On the curve of discontinuities of a set of controllability of a van der Pol equation with control. (Russian. English summary) **(84a:34077)**
 Stefani, Gianna (with Zecca, Pietro) Multivalued vector field and multivalued differential equations. **(84h:58046)**
 Zecca, Pietro See Stefani, Gianna, **(84h:58046)**

49E20 Interrelations between stability problems and optimization problems

- Aslanyan, A. A. The principle of the maximum for discontinuous dynamical systems. (Russian) **84h:49083**

(Barmish, B. Ross) See **Barnard, R. D.**, 84d:49039

Barnard, R. D. Comments on: "Instability of optimal-aim control" [IEEE Trans. Automat. Control 25 (1980), no. 6, 1250-1252; MR 83j:49059] by B. R. Barmish and A. Feuer. 84d:49039

Boichuk, A. A. Optimal Lyapunov functions for linear periodic systems. (Russian) (See 84c:34002)

Corless, Martin J. (with Leitmann, George) Erratum to: "Continuous state feedback guaranteeing uniform ultimate boundedness for uncertain dynamic systems" [IEEE Trans. Automat. Control 26 (1981), no. 5, 1139-1144; MR 83j:49073]. 84d:49081

(Feuer, Arie) See **Barnard, R. D.**, 84d:49039

Gutman, Shaul (with Palmer, Z.). Properties of min-max controllers in uncertain dynamical systems. 84c:49041

Kalouptsidis, Nicholas Topological dynamics and stability of control systems. (See 84g:93005c)

Leitmann, George See **Corless, Martin J.**, 84d:49081

Martynuk, A. A. Practical stability and stabilization of control processes. 84d:49055

Milić, Mirko M. See **Novak, Ladislav A.**, 84d:49050

Miroshnik, I. V. Properties of controls with assigned integral transient performance criterion. 84d:49082

Novak, Ladislav A. (with Milić, Mirko M.) On the existence of variational formulation for general time-variant systems. 84d:49050

Palmer, Z. See **Gutman, Shaul**, 84d:49041

Taylor, Jean E. F -minimal hypersurfaces characterize F up to a point. 84d:49058

Vasil'ev, S. N. The comparison method in systems analysis. I. (Russian) 84a:49056a

The comparison method in systems analysis. II. (Russian) 84a:49056b

The comparison method in systems analysis. III. (Russian) 84a:49056c

The comparison method in systems analysis. IV. (Russian) 84a:49056d

secondary classifications:

Callier, F. M. See **Willems, Jacques L.**, (84g:93040)

Makhlin, A. R. See **Ukolov, I. S.**, (84f:49053)

Ukolov, I. S. (with Makhlin, A. R.) The method of Lyapunov functions in the theory of analytical construction of nonlinear regulators. (Russian) (84f:49053)

Willems, Jacques L. (with Callier, F. M.) Large finite horizon and infinite horizon LQ-optimal control problems. (84g:93040)

49E25 Effect of perturbations on controllability

Boglaev, I. P. Finding a feasible optimal program in the problem of programmed control under disturbances. 84d:49083

Grasse, Kevin A. Nonlinear perturbations of control-semilinear control systems. 84d:49084

Some topological covering theorems with applications to control theory. 84j:49034

Krikorian, Kapriel V. (with Leondes, Cornelius T.) Application of singular perturbations to optimal control. (See 84f:93002)

Leondes, Cornelius T. See **Krikorian, Kapriel V.**, (See 84f:93002)

Mikhailov, A. G. Guaranteed bounds for control quality in the presence of perturbations. (Russian) 84j:49035

Simionescu, Claudia Lidia Computational aspects for nonlinear models. (See 84f:00031)

secondary classifications:

Kuleshov, A. A. An optimal control problem for a mixed system. (Russian) (84f:49036)

49E30 Relations between controllability and optimal solutions

Angell, Thomas S. Optimal control problems for nonlinear Volterra equations: existence and controllability. 84j:49036

Davydov, E. G. (with Ringo, N. I.) Some questions of the theory of the L -problem of moments. 84d:49085

Grasman, J. Nonuniqueness in singular optimal control. (See 84g:93005c)

On a class of optimal control problems with an almost cost-free solution.

84d:49051

Leitmann, George Optimality and reachability with feedback control. 84f:49056

Ringo, N. I. See **Davydov, E. G.**, 84d:49085

49E99 None of the above, but in this section

Fannin, D. R. See **Keerthi, S. S.**, 84d:49040

Gould, L. A. See **Usoro, P. B.**; et al., 84d:49042

Keerthi, S. S. (with Fannin, D. R.) Comments on and modifications to: "On the asymptotic behaviour of optimal root loci" [Internat. J. Control 33 (1981), no. 6, 1165-1170; MR 82m:49054] by B. Kouvaritakis. 84d:49040

(Kouvaritakis, B.) See **Keerthi, S. S.**; et al., 84d:49040

Ranguin, Michail Propriété hôlderienne de la fonction temps minimal d'un système linéaire autonome. (English summary) (Hölder property of the minimal time function in an autonomous linear system) 84d:49041

Schweppe, F. C. See **Usoro, P. B.**; et al., 84d:49042

Usoro, P. B. (with Schweppe, F. C.; Wormley, D. N.; Gould, L. A.) Ellipsoidal set-theoretic control synthesis. 84d:49042

Wormley, D. N. See **Usoro, P. B.**; et al., 84d:49042

secondary classifications:

Warga, J. Errata: "Fat homeomorphisms and unbounded derivate containers" [J. Math. Anal. Appl. 81 (1981), no. 2, 545-560; MR 83f:58007]. (84b:58016)

49Fxx Manifolds [See also 58Exx.]

49F05 Exterior differential forms, invariant integrals (Cartan theory) [See mainly 58A15.]

Arens, Richard Manifestly dynamic forms in the Cartan-Hamilton treatment of classical fields. 84g:49064

Chrastina, Jan Another approach to the classical calculus of variations. 84b:49086

Kabanov, N. I. The geometric theory of Carathéodory transformations in a singular variational problem for a hypermultiple integral. (Russian) 84j:49037

Katayama, Tohru See **Takagi, Tomoaki**, 84d:49059

Losik, M. V. The invariant theory of variational problems. (Russian) 84d:49084

Takagi, Tomoaki (with Katayama, Tohru) Study of singular control problem by a differential form theory. I. n -dimensional nonlinear control system with n controls appearing linearly. (Japanese. English summary) 84d:49059a

(with Katayama, Tohru) Study of singular control problem by a differential form theory. II. n -dimensional nonlinear control system with one control variable appearing linearly. (Japanese. English summary) 84d:49059b

secondary classifications:

Gardner, Robert B. Differential geometric methods interfacing control theory. (84d:58009)

Griffiths, Phillip ★ Exterior differential systems and the calculus of variations. (84d:58007)

Langlois, Michel Étude lagrangienne du théorème de Noether et d'une méthode d'intégration. (English summary) [Lagrangian study of Noether's theorem and of a method of integration] (84h:70019)

Shadwick, W. F. The Hamiltonian formulation of regular r th-order Lagrangian field theories. (84d:58059)

49F10 Minimal surfaces [See mainly 53A10, also 58E12.]

Almgren, F. J., Jr. Minimal surface forms. 84c:49042

Q valued functions minimizing Dirichlet's integral and the regularity of area minimizing rectifiable currents up to codimension two. 84b:49052

Dacorogna, Bernard Minimal hypersurfaces problems in parametric form with nonconvex integrands. 84j:49038

Đào Trọng Thi Isoperimetric inequalities for multivarifolds. 84d:49060

Fomenko, A. T. Minimal volumes of topological globally minimal surfaces in cobordisms. (Russian) 84c:49057

Massari, Umberto A Dirichlet problem for the equation of minimal surfaces. (Portuguese) (See 84b:00011)

Miranda, Mario Solutions of the equation of minimal surfaces in an infinite open set. (Portuguese) 84d:49087

Parks, Harold Elliptic isoperimetric problems. 84b:49088

Temam, Roger Fonction convexe d'une mesure et applications. [Convex function of a measure and applications] (See 84d:35006)

secondary classifications:

Barbashov, B. M. (with Nesterenko, V. V.; Chervyakov, A. M.) General solutions of nonlinear equations in the theory of minimal surfaces. (Russian. English summary) (84d:53059)

Barbosa, João Lucas Marquês (with Mori, Hiroshi) Stability of constant mean curvature surfaces in Riemannian 3-space form. (84d:53060)

Beson, Michael J. Some results on finiteness in Plateau's problem. II. (84c:53006)

Böhme, Reinhold New results on the classical problem of Plateau. On the existence of many solutions. (84c:58021)

Borisenko, A. A. Explicitly represented minimal surfaces. (Russian) (84d:53008)

Brezis, Haim (with Coron, Jean-Michel) Sur la conjecture de Rellich pour les surfaces à courbure moyenne prescrite. (English summary) [On Rellich's conjecture for surfaces with prescribed mean curvature] (84d:58034)

do Carmo, M. (with Dajczer, Marcos) Necessary and sufficient conditions for existence of minimal hypersurfaces in spaces of constant curvature. (84d:53061)

Chen, Chi Cheng (with Gackstatter, Fritz) Elliptische und hyperelliptische Funktionen und vollständige Minimalflächen vom Enneper'schen Typ. [Elliptic and hyperelliptic functions and complete minimal surfaces of Enneper type] (84d:53005)

Chen, Jin Tzu (with Huang, Wu Hsiung) Convexity of capillary surfaces in the outer space. (84b:53066)

Chervyakov, A. M. See **Barbashov, B. M.**; et al., (84d:53059)

Coron, Jean-Michel See **Brezis, Haim**, (84d:58034)

Dajczer, Marcos See **do Carmo, M.**, (84d:53061)

Finn, Robert Existence criteria for capillary free surfaces without gravity. (84g:53014)

Fomenko, A. T. Multidimensional variational methods in the topology of extremals. (Russian) (84c:58022)

Gackstatter, Fritz See **Chen, Chi Cheng**, (84d:53005)

Hoffman, David A. (with Osserman, Robert) The area of the generalized Gaussian image and the stability of minimal surfaces in S^n and R^n . (84d:53006)

Huang, Wu Hsiung See **Chen, Jin Tzu**, (84b:53066)

Kawai, Shigeo On the instability of a minimal surface in a 4-manifold whose curvature lies in the interval $(\frac{1}{2}, 1)$. (84c:53075)

Korevaar, Nicholas J. Capillary surface convexity above convex domains. (84b:58054)

Lichnerowicz, A. Un problème modèle en théorie de la plasticité; analogie avec le problème des surfaces minimales. [A model problem in elasticity theory; analogy with the problem of minimal surfaces] (84d:73026)

Meeks, William H., III A survey of the geometric results in the classical theory of minimal surfaces. (84d:53007)

(with Simon, Leon; Yau, Shing Tung) Embedded minimal surfaces, exotic spheres, and manifolds with positive Ricci curvature. (84f:53053)

- Miklyukov, V. M. See Vorob'ev, A. G., (84d:35052)
 Morgan, Frank Measures on spaces of surfaces. (84c:53066)
 Mori, Hiroshi See Barbosa, João Lucas Marques, (84d:53060)
 Nesterenko, V. V. See Barabshov, B. M.; et al., (84d:53059)
 Nitsche, Johannes C. C. Minimal surfaces and partial differential equations. (84j:53009)
 Osserman, Robert See Hoffman, David A., (84c:53006)
 Ōtsuki, Tominosuke On minimal surfaces. (Japanese) (84c:53010)
 Rassias, Themistocles M. Morse theory and Plateau's problem. (84h:58040)
 Sibner, L. M. An existence theorem for a nonregular variational problem. (84i:58035)
 Simon, Leon See Meeks, William H., III; et al., (84f:53053)
 Tromba, A. J. A sufficient condition for a critical point of a functional to be a minimum and its application to Plateau's problem. (84i:58033)
 Ural'tseva, N. N. Estimates of the maximum moduli of gradients for solutions of capillarity problems. (Russian) (84d:53008)
 Vogel, Thomas I. Symmetric unbounded liquid bridges. (84f:53007)
 Vorob'ev, A. G. (with Miklyukov, V. M.) Some asymptotic properties of subsolutions of equations of minimal surface type. (Russian) (84d:35052)
 Yau, Shing Tung See Meeks, William H., III; et al., (84f:53053)

49F15 Morse theory in Hilbert and other spaces [See also 57R27, 58Exx.]

Rassias, Themistocles M. Morse theory and Plateau's problem. 84i:49085

secondary classifications:

Combet, Edmond ★Intégrales exponentielles. Développements asymptotiques, propriétés lagrangiennes. (French) [Exponential integrals. Asymptotic expansions, Lagrangian properties] (84m:58143)

49F20 Geometric measure and integration theory, integral and normal currents, flat chains and cochains, varifolds [See also 28A75, 32C30, 58A25, 58C35.]

- Gonzalez, E. (with Massari, Umberto; Tamanini, Italo) On the regularity of boundaries of sets minimizing perimeter with a volume constraint. 84d:49043
 Massari, Umberto See Gonzalez, E.; et al., 84d:49043
 Morgan, Frank On the singular structure of three-dimensional, area-minimizing surfaces. 84h:49053
 Schoen, Richard M. (with Simon, Leon) A new proof of the regularity theorem for rectifiable currents which minimize parametric elliptic functionals. 84j:49039
 Simon, Leon See Schoen, Richard M., 84j:49039
 Tamanini, Italo See Gonzalez, E.; et al., 84d:49043
 Taylor, Jean E. Surface tension functions and their surfaces of least energy. 84h:49089

secondary classifications:

- Barozzi, Elisabetta An elastic shopping bag. (Italian summary) (84m:73054)
 Harvey, Reese (with Lawson, H. Blaine, Jr.) Calibrated foliations (foliations and mass-minimizing currents). (84h:53095)
 Lawson, H. Blaine, Jr. See Harvey, Reese, (84h:53095)
 Marino, Antonio (with Tosques, M.) Curves of maximal slope for a certain class of nonregular functions. (Italian summary) (84f:58025)
 Tosques, M. See Marino, Antonio, (84f:58025)

49F22 Existence and structure of solutions to variational problems in geometric measure-theoretic setting

- Lipovan, Octavian On the Ω -T-submeasurability of multivalued maps. (Romanian. French summary) 84c:49061
 Massari, Umberto (with Miranda, Mario) A remark on minimal cones. (Italian summary) 84h:49090
 Mattila, Pertti Lower semicontinuity, existence and regularity theorems for elliptic variational integrals of multiple valued functions. 84m:49068
 Miranda, Mario See Massari, Umberto, 84h:49090
 Moreau, Jean-Jacques Variations horizontales première et seconde d'une intégrale de trace. [First and second horizontal variations of a trace integral] 84e:49042
 Morgan, Frank On the singular structure of two-dimensional area minimizing surfaces in \mathbb{R}^n . 84c:49043

secondary classifications:

- Almgren, F. J., Jr. Minimal surface forms. (84c:49042)
 Finn, Robert Global size and shape estimates for symmetric sessile drops. (84c:53007)
 Gonzalez, E. (with Massari, Umberto; Tamanini, Italo) On the regularity of boundaries of sets minimizing perimeter with a volume constraint. (84d:49043)
 Korevaar, Nicholas J. Capillary surface continuity above irregular domains. (84f:53005)
 Massari, Umberto See Gonzalez, E.; et al., (84d:49043)
 Simon, Leon Boundary behaviour of solutions of the nonparametric least area problem. (84f:53006)
 Tamanini, Italo See Gonzalez, E.; et al., (84d:49043)
 Temam, Roger Fonction convexe d'une mesure et applications. [Convex function of a measure and applications] (See 84i:35006)

49F25 Surface area; Weierstrass and Burkill integrals, subadditive set functions

- Barbieri, Francesco (with Tondi, Adriana) On the geometry of spaces of rectifiable curves. (Italian) 84b:49054
 Bardaro, Carlo The generalized Steiner inequality for sublinear functions of measures. (Italian) 84j:49040

(with Candeloro, Domenico) Approximation theorems for the multiple integral of the calculus of variations. (Italian. English summary) 84i:49086

Brandi, Primo (with Salvadori, Anna) On convergence in area in the generalized sense. 84i:49087

Brocani Ragni, Gioia (with Salvadori, Anna) The parametric integral of the calculus of variations with second-order differential elements in the sense of Weierstrass and Cesari. (Italian) 84j:49041

Brunozzi, Anna Maria (with Fiacca, Antonella; Lodovici, Carla) "Absolute continuity" and "quasiboundedness with respect to a pair" in measure spaces. (Italian. English summary) 84h:49091

Candeloro, Domenico See Bardaro, Carlo, 84i:49086

Coelho, Renato Pereira Sur l'inégalité de Cavalieri-Cesari. [On the Cavalieri-Cesari inequality] 84h:49092

Fiacca, Antonella See Brunozzi, Anna Maria; et al., 84h:49091

Lodovici, Carla Measures associated with a Burkill-Cesari integral. (Italian) 84a:49058
 See also Brunozzi, Anna Maria; et al., 84h:49091

Ragni, Marcello Rectangle functions. I. The generalized variation. (Italian) 84a:49059
 Rectangle functions. II. The Burkill integral in generalized sense. (Italian) 84a:49060

The classical and generalized Weierstrass integral. (Italian) 84c:49044
 The generalized Weierstrass parametric integral in the calculus of variations. (Italian) 84d:49044

Salvadori, Anna On the nonconservation of quasiadditivity in subsets. (Italian) 84d:49045
 See also Brandi, Primo, 84i:49087 and Brocani Ragni, Gioia, 84j:49041

Tondi, Adriana See Barbieri, Francesco, 84b:49054

Toralballe, L. C. See Toralballe, L. V., 84a:49061a and 84a:49061b

Toralballe, L. V. (with Toralballe, L. C.) A theory of surface integrals. I. Surface integrals on nonparametric surfaces. 84a:49061a
 (with Toralballe, L. C.) A theory of surface integrals. II. Integrals on parametric surfaces. 84a:49061b

Vinti, Calogero Existence theorems, representation and approximation by the integral of the calculus of variations. (Italian) 84c:49063

Nonlinear integration and Weierstrass integral over a manifold: connections with theorems on martingales. 84c:49062

Young, L. C. Generalized curve, generalized varieties, optimal control. (See 84m:00013)

secondary classifications:

Zanelli, Vanna Moment functions converging "from below" in variation of noninteger order. (Italian) (84i:44008)

49F99 None of the above, but in this section

Vogel, Thomas I. Asymmetric unbounded liquid bridges. 84e:49043

secondary classifications:

- Chen, Kuo Tsai The Euler operator. (84f:58039)
 Jost, Jürgen Existence proofs for harmonic mappings with the help of a maximum principle. (84c:58056)
 Luke, Jon C. A method for the calculation of vesicle shapes. (84a:73035a)
 Erratum: "A method for the calculation of vesicle shapes". (84a:73035b)
 Marino, Antonio (with Scolozzi, D.) Geodesics with obstacles. (Italian. English summary) (84h:58037)
 Schöffler, Karl-Heinz Isoliertheit und Stabilität von Flächen konstanter mittlerer Krümmung. (English summary) [Isolation and stability of surfaces of constant mean curvature] (84h:58032)
 Scolozzi, D. See Marino, Antonio, (84h:58037)
 Yomdin, Yosef Some results on finite determinacy and stability not requiring the explicit use of smoothness. (84j:58035)

49Gxx Variational methods for eigenvalues [See also 47A70.]

49G05 Variational approach to eigenvalues

- Benvenuto, E. (with Corsanego, A.) Nonconservative stability evaluation by means of an associated variational eigenvalue problem. 84i:49088
 Chang, Jung Yu (with Wang, Mao Ling) Shifted Legendre direct method for variational problems. 84f:49057
 Choi, Kyung K. See Haug, Edward J., 84b:49055
 Corsanego, A. See Benvenuto, E., 84i:49088
 Donchev, T. An isoperimetric inequality in mathematical physics. (Russian) (See 84c:34002)
 Fox, David W. A method for lower bounds for frequencies of thin skew plates. 84i:49089
 Haug, Edward J. (with Choi, Kyung K.) Systematic occurrence of repeated eigenvalues in structural optimization. 84b:49055
 Karjalao, B. L. Eigenvalue problems in multipurpose structural optimization. 84i:49090
 Miersemann, Erich Stabilitätsprobleme für Eigenwertaufgaben bei Beschränkungen für die Variationen mit einer Anwendung auf die Platte. (English summary) [Stability problems for unilateral eigenvalue problems with an application to plates] 84a:49062
 Pucci, Patrizia An existence theorem for isoperimetric problems. 84d:49046
 Shen, Yao Tian Weighted Wirtinger inequalities on unbounded domains. (Chinese summary) 84i:49091
 Wang, Mao Ling See Chang, Jung Yu, 84f:49057

secondary classifications:

- Benguria, Rafael (with Depassier, M. Cristina) Upper and lower bounds for eigenvalues of nonlinear elliptic equations. I. The lowest eigenvalue. (84k:35113)
 Colautti, Maria Pia Eigenvalue problems for incompressible elastic bodies. (84h:73022)

- Colgen, Rainer On parametric optimization in Hilbert spaces. (84b:49043)
- Demeur, M. Polynômes orthogonaux naturels. [Natural orthogonal polynomials] (84g:33017)
- Depassier, M. Cristina See Benguria, Rafael, (84c:35113)
- Ghiță, Constantin The solutions of a nonlinear problem in plasma physics. A uniqueness result. (Romanian. English summary) (84c:76047)
- Haug, Edward J. (with Rousset, Bernard) Design sensitivity analysis of eigenvalue variations. (84g:73056)
- See also Rousset, Bernard, (84f:73045)
- Hofer, Helmut Variational and topological methods in partially ordered Hilbert spaces. (84g:58030)
- Ivanov, B. A. Spectral properties of positive operator-valued functions. (Russian) (84g:34028)
- Mahar, T. J. See Willner, B. E., (84f:34042)
- Rall, L. B. Interval bounds for stationary values of functionals. (84a:65036)
- Rousset, Bernard Dependence of eigenvalues with respect to shape. (See 84f:73004b)
- (with Haug, Edward J.) Design sensitivity analysis of shape variation. (84f:73045)
- Singular dependence of repeated eigenvalues. (84f:73046)
- See also Haug, Edward J., (84g:73056)
- Stumpf, Helmut Bounds for eigenvalues and eigenvectors of elastic systems. (84f:73055)
- Talenti, Giorgio Some upper bounds for solutions of Monge-Ampère equations. (Italian) (See 84c:53004)
- Willner, B. E. (with Mahar, T. J.) The two-dimensional eigenvalue range and extremal eigenvalue problems. (84f:34042)

49G10 Rayleigh-Ritz methods

- Fox, David W. Two-sided Rayleigh-Ritz bounds. 84i:49092
- Voss, Heinrich (with Werner, Bodo) A minimax principle for nonlinear eigenvalue problems with applications to nonoverdamped systems. 84a:49063
- Werner, Bodo See Voss, Heinrich, 84a:49063

secondary classifications:

- Abdel-Raouf, Mohamed Assad On the variational methods for bound-state and scattering problems. (84j:81106)
- Bodur, I. N. (with Marangoni, R. D.) Upper and lower bounds to eigenvalues by weighting function approximations. (84m:73037)
- Castro, Eduardo A. See Fernández, Francisco M.; et al., (84i:35111)
- Fernández, Francisco M. (with Mesón, Alejandro M.; Castro, Eduardo A.) Complementary tight upper and lower bounds to eigenvalues of the Schrödinger equation. (Spanish summary) (84i:35111)
- Kuttler, James R. (with Sigillito, Vincent G.) The a posteriori-a priori method of bounding eigenvalues with applications to the eigenvalues of clamped rhombical plates. (84f:73053)
- Marangoni, R. D. See Bodur, I. N., (84m:73037)
- Mesón, Alejandro M. See Fernández, Francisco M.; et al., (84i:35111)
- Richlik, Gy. (with Tóth, Gy.) Application of Trefftz-Fichera's method for improvable bracketing of the natural angular eigenfrequencies of a beam subject to bending vibration. (German summary) (84b:73030)
- Sigillito, Vincent G. See Kuttler, James R., (84f:73053)
- Stumpf, Helmut Bounds for eigenvalues and eigenvectors of elastic systems. (84f:73055)
- Tóth, Gy. See Richlik, Gy., (84b:73030)

49G15 Weinstein and Aronszajn methods, intermediate problems

- Greenlee, W. M. A convergent variational method of eigenvalue approximation. 84d:49047

secondary classifications:

- Abdel-Raouf, Mohamed Assad Partitioning "opposite" bounds for potential scattering phase shifts. (84f:81021)

49G20 Linear operators in Hilbert spaces

secondary classifications:

- Binding, Paul Dual variational approaches to multiparameter eigenvalue problems. (84m:47028)
- Fichera, Gaetano The problem of the computation of the geometric multiplicity of an eigenvalue. (84c:58121)
- Kolomý, Josef On determination of eigenvalues and eigenvectors of selfadjoint operators. (84a:47018)

49G99 None of the above, but in this section

- Huang, Ch'i (with Shih, Yen P'ing) Laguerre series direct method for variational problems. 84i:49093
- Lions, Pierre-Louis Bifurcation and optimal stochastic control. 84f:49058
- Shih, Yen P'ing See Huang, Ch'i, 84i:49093

secondary classifications:

- Capozzi, A. (with Salvatore, A.) Periodic solutions for nonlinear problems with strong resonance at infinity. (84j:34034)
- Levin, V. L. Theorems of convex analysis and guaranteed profit under conditions of uncertainty. (Russian) (84h:90010)
- Payne, L. E. (with Philipin, G. A.) Isoperimetric inequalities in the torsion and clamped membrane problems for convex plane domains. (84m:73056)
- Philipin, G. A. See Payne, L. E., (84m:73056)

- Salvatore, A. See Capozzi, A., (84j:34034)
- Sperb, René P. ★ Maximum principles and their applications. (84a:35033)
- Trostel, Robert Geometric formulation of the indirect analytic representation of dynamical systems, exterior differential calculus on Banach spaces and variational selfadjointness. (84m:58036)

49H05 Variational principles of physics [See also 70-XX, 81-XX.]

- Anderson, Norman (with Arthurs, A. M.) Complementary variational principles for Maxwell's equations. II. 84a:49064
- (with Arthurs, A. M.) Variational principles for a class of coupled linear equations. 84a:49065
- Arthurs, A. M. See Anderson, Norman, 84a:49064 and 84a:49065
- Bailey, C. D. Hamilton's principle and the calculus of variations. 84a:49066
- Bampi, Franco (with Morro, Angelo) The inverse problem of the calculus of variations applied to continuum physics. 84c:49044
- Ghinda, Theodor On Noether's theorem. (Romanian. English summary) 84b:49056
- Kesavan, H. K. See Savage, G. J., 84c:49045
- Morro, Angelo See Bampi, Franco, 84c:49044
- Rumyantsev, V. V. Certain variational principles of mechanics [ibid. pp. 74-90; MR 81d:49030]. (See 84b:00032)
- Savage, G. J. (with Kesavan, H. K.) Variational principle for potential fields from the graph-theoretic field model. 84c:49045
- Temam, Roger Dual variational principles in mechanics and physics. 84g:49065

secondary classifications:

- Arens, Richard Reducing the order of a Lagrangian. (84b:58047)
- Atanacković, T. M. (with Bačić, B. S.) An extremal variational principle for a class of boundary value problems. (German and Serbo-Croatian summaries) (84c:73033)
- Bačić, B. S. See Atanacković, T. M., (84c:73033)
- Bampi, Franco (with Morro, Angelo) Hamiltonian cosmology and gravitational solitons: a variational outlook. (84c:83035)
- Barbour, Julian B. (with Bertotti, B.) Mach's principle and the structure of dynamical theories. (84b:70010)
- Barrett, Kenneth E. (with Demunshi, G.) Optimal control methods for the numerical solution of partial differential equations. (84c:65123)
- Baumgarte, J. W. Stabilisierung von Bindungen über Zwangsimpulse. (English and Russian summaries) [Stabilization of constraints over momenta of force] (84m:70020)
- Berdichevskii, V. L. Variational principles in a problem of random structure averaging. (Russian) (84f:73014)
- Berk, Alexander Complementary variational principle for density-functional theories. (84c:81087)
- Bertotti, B. See Barbour, Julian B., (84b:70010)
- Biot, M. A. Thermodynamic principle of virtual dissipation and the dynamics of physical-chemical fluid mixtures including radiation pressure. (84i:80007)
- Generalized Lagrangian equations of nonlinear reaction-diffusion. (84c:80004)
- Blackwell, William A. See Fatic, Vuk M., (See 84g:93005b)
- Bordley, Robert F. A central principle of science: optimization. (84g:00024)
- Broer, L. J. F. A variational principle for electromagnetic waves with dispersion. (84b:78013)
- Chen, Shi Gang The Glansdorff-Prigogine criterion and the principle of minimum energy production. (Chinese) (See 84m:82011)
- Clarke, Frank H. A classical variational principle for periodic Hamiltonian trajectories. (84b:34071)
- Dai, Tian Min On various variational principles in nonlinear theory of elasticity. (84b:73010)
- Demunshi, G. See Barrett, Kenneth E., (84c:65123)
- Detyna, Edward Perfect inviscid fluids and gauge theory. (See 84c:76002)
- Duruisseau, J.-P. Scalar-tensor theory of gravitation: generalizations and experimental limitations. (84c:83040)
- Farias, J. Ronald On the conditions for the existence of a Lagrangian in field theory. (84d:70020)
- Fatic, Vuk M. (with Blackwell, William A.) Lagrangians with integrals. An approach to the variational theory of dissipative systems. (See 84g:93005b)
- A new derivation of generalized Euler-Lagrange equations for a class of Lagrangians containing path-dependent integrals. (See 84f:93006c)
- Variational principle for lossy transmission lines by the image method. (See 84f:93006d)
- Favorskii, A. P. See Korshiya, T. K.; et al., (84g:76007)
- Ferraris, Marco (with Kijowski, Jerzy) General relativity is a gauge type theory. (84a:83018)
- Finlayson, Bruce A. Variational principles for heat transfer. (84m:80008)
- Geffen, Nima Alternative variational formulations for first order partial differential systems. (84c:49029)
- Goldstein, Yu. B. (with Solomeshch, M. A.) ★ Вариационные задачи статистики оптимальных стержневых систем. (Russian) [Variational problems of the statics of optimal rod systems] (84f:73042)
- Grinfeld, M. A. Gibbs' principle and thermodynamic inequalities for nonlinear-elastic bodies. (84b:73053)
- Variational principles and stability of stationary flows of barotropic ideal fluid. (84m:76055)
- Grioli, Giuseppe A variational approach to finite elasticity. (84a:73015)
- Hemeaux, Marc (with Shepley, L. C.) Lagrangians for spherically symmetric potentials. (84c:70016)
- Hlaváček, Ivan Optimization of the shape of axisymmetric shells. (84m:73073)
- Optimization of the domain or coefficients in some elliptic unilateral boundary value problems by finite elements. (84m:73062)
- Hu, Hai Chang On the rational utilization of generalized variational principles for approximate solutions. (84c:73016)

- Hussain, Munawar. An invariance theory for a second order variational problem in group variables. (84m:58035)
- Ionescu-Pallas, Nicholas Jean (with Sofonea, Liviu). A connection between the variational principles of analytical mechanics and the concepts of probability and entropy. (84f:70033)
- Jarić, J. See Vukobrat, M., (84b:73042)
- Kijowski, Jerzy. See Ferraris, Marco, (84a:83018)
- Koishibev, N. The variational principle and parametrized post-Newtonian theories. (Russian) (84m:83020)
- Korshiya, T. K. (with Lyubimov, B. Ya.; Favorskii, A. P.). The Hamiltonian principle for a fluid in Euler variables. (Russian) (84g:76007)
- Kozák, Imre. Remarks and contributions to the variational principles of the linearized theory of elasticity in terms of the stress functions. (German summary) (84b:73007)
- Kramer, Peter (with Saraceno, M.). Geometry of the time-dependent variational principle in quantum mechanics. (84b:81117)
- Kudin, V. I. Spherically symmetric gravitational fields in the gauge theory of gravitation. (Russian. English summary) (84c:83041)
- Kuti, I. On the primal variational principles in linear elastodynamics. (German summary) (84c:73027)
- Lavenda, B. H. (with Santamato, E.). Thermodynamic criteria governing irreversible processes under the influence of small thermal fluctuations. (84f:82025)
- Lavorgna, M. See de Ritis, R.; et al., (84c:83070)
- Levine, R. D. See Tishby, N. Z., (84c:82068)
- Lim, P. H. Manifestly covariant equations of motion for a particle in an external field. (84c:83008)
- Modification of the Palatini variational principle in general relativity. (84b:83004)
- Lutzky, M. See Ray, John R., (84c:58035)
- Lyubimov, B. Ya. See Korshiya, T. K.; et al., (84g:76007)
- Maissner, P. Der Lagrange-Formalismus für diskrete elektromechanische Systeme in anholonomen Koordinaten und seine Anwendung in der Theorie elektrischer Maschinen. [The Lagrange formalism for discrete electromechanical systems in nonholonomic coordinates and its application in the theory of electric machines] (84b:73045)
- Maravall Casesnoves, Dario. Variational principles and differential equations of the relativistic dynamics of systems. (Spanish. English summary) (84j:70026)
- Matsuyuk, R. Ya. Variational principle for uniformly accelerated motion. (Russian) (84g:83003)
- Moritz, Helmut. A variational principle for Molodensky's liquid-core problem. (84c:86004)
- Morro, Angelo. See Bampi, Franco, (84a:83035)
- Mosolov, P. P. (with Myasnikov, V. P.). ★Механика жесткопластических сред. (Russian) [Mechanics of rigid plastic media] (84c:73029)
- Myasnikov, V. P. See Mosolov, P. P., (84c:73029)
- Onyszkiewicz, Z. Unified variational principle for statistical and quantum mechanics. (84j:82036)
- Quantum mechanical variational principle for statistical mechanics. (84j:82037)
- Orlov, V. N. (with Rozonoër, L. I.). The variational principle for equations of macroscopic dynamics and its application to chemical kinetics. (Russian) (84b:80011)
- Papastavridis, J. G. Complementary variational principles and their application to rheo-linear and rheo-nonlinear vibrations. (84j:70027)
- Petrov, A. G. Hamilton's variational principle for the motion of a contour of variable form in a vortical plane-parallel flow. (Russian) (84j:76015)
- Platania, G. See de Ritis, R.; et al., (84c:83070)
- Qian, Wei Chang. Incompatible elements and generalized variational principles. (See 84c:65012)
- Rall, L. B. Interval bounds for stationary values of functionals. (84a:65036)
- Ramm, Alexander G. Variational principles for eigenvalues of compact nonselfadjoint operators. II. (84f:47022)
- Ray, John R. (with Lutzky, M.). General Hamiltonian form of Noether's theorem with applications to time-dependent nonlinear oscillators. (Italian and Russian summaries) (84c:58035)
- (with Smalley, Larry L.). Spinning fluids in general relativity. (84a:83020)
- (with Smalley, Larry L.). Perfect fluids in the Einstein-Cartan theory. (84a:83029)
- de Ritis, R. (with Lavorgna, M.; Platania, G.; Stornaiolo, C.). Spin fluid in Einstein-Cartan theory: a variational principle and an extension of the velocity potential representation. (84c:83070)
- Rozonoër, L. I. See Orlov, V. N., (84b:80011)
- Rumyantsev, V. V. On integral principles for nonholonomic systems. (84c:70015)
- Rund, Hanno. Differential-geometric and variational background of classical gauge field theories. (84j:53003)
- Santamato, E. See Lavenda, B. H., (84f:82025)
- Saraceno, M. See Kramer, Peter, (84b:81117)
- Shepley, L. C. See Hemeaux, Marc, (84c:70016)
- Smalley, Larry L. See Ray, John R., (84a:83020) and (84a:83029)
- Sofonea, Liviu. See Ionescu-Pallas, Nicholas Jean, (84f:70033)
- Solomeshch, M. A. See Gol'dstein, Yu. B., (84f:73042)
- Stornaiolo, C. See de Ritis, R.; et al., (84c:83070)
- Tessarotto, Massimo. Variational theory of collisional transport for a toroidal axisymmetric plasma in the weakly collisional regime. (Italian and Russian summaries) (84b:82105)
- Thangaraj, D. (with Venkatarangan, S. N.). Dual variational principles for a class of nonlinear partial differential equations. (84c:35018)
- (with Venkatarangan, S. N.). Complementary variational principles for generalized Euler-Poisson-Darboux equations. (84j:35137)
- Tishby, N. Z. (with Levine, R. D.). Surprisal analysis derived from a variational principle for mechanical systems. (84j:82068)
- Trostel, Robert. Geometrical treatment of nonpotential interactions: the exterior variational calculus, dynamical systems, physical 1-forms and variational selfadjointness. (84c:70012)
- Fermionic lifting of variational selfadjointness. (84i:58039)

- Tu, Yih-O. Variational principle for magnetostatic potential. (84i:78017)
- Turygin, A. Yu. The theory of direct interparticle gravitational interaction on a Riemannian background. (Russian) (84c:83012)
- Venkatarangan, S. N. See Thangaraj, D., (84j:35137) and (84c:35018)
- Vukobrat, M. (with Jarić, J.). Noether's theorem in the linear theory of elastic dielectrics. (German and Serbo-Croatian summaries) (84b:73042)
- Westhaus, Paul. The constrained variational formulation of energy functionals. (84c:81150)
- Willis, J. R. Variational and related methods for the overall properties of composites. (84b:73030)
- Wu, Rui Feng (with Xi, Xiao Feng). The generalized variational principles in the theory of nonlinear elastocreeching solids. (Chinese. English summary) (84c:73037)
- Xi, Xiao Feng. See Wu, Rui Feng, (84c:73037)

51-XX GEOMETRY (For algebraic geometry, see 14-XX.)

51-01 Elementary exposition, textbooks

- Atiyah, Michael. What is geometry? 84g:51001
- Faber, Richard L. ★Foundations of Euclidean and non-Euclidean geometry. 84j:51001
- Führer, Lutz. Die Kreisberechnung als Brennspiegel der Schulmathematik. I. [The computation of the circle as a focus in school mathematics. I] 84i:51001a
- Die Kreisberechnung als Brennspiegel der Schulmathematik. II. [The computational of the circle as a focus in school mathematics. II] 84i:51001b
- Kelly, Paul Joseph (with Matthews, Gordon) ★The non-Euclidean, hyperbolic plane. 84b:51001
- Kordos, Marek (with Włodarski, Ludomir) ★O geometrii dla postronnych. (Polish) [Geometry for the layman] 84c:51001
- Martin, George Edward ★Transformation geometry. 84b:51001
- Matthews, Gordon. See Kelly, Paul Joseph, 84b:51001
- Melzak, Z. A. ★Invitation to geometry. 84g:51002
- Millman, Richard S. (with Parker, George D.) ★Geometry. 84j:51002
- (Moszyńska, Maria). See Szmielew, Wanda, 84j:51003
- Parker, George D. See Millman, Richard S., 84j:51002
- Pedersen, Jean. Combinatorics, group theory and geometric models. 84b:51002
- Rees, Elmer G. ★Notes on geometry. 84c:51001a
- ★Notes on geometry. 84c:51001b
- Szmielew, Wanda. ★From affine to Euclidean geometry. 84j:51003
- Vidav, Ivan. ★Afina in projektivna geometrija. (Slovenian) [Affine and projective geometry] 84d:51001
- Włodarski, Ludomir. See Kordos, Marek, 84c:51001

secondary classifications:

- (Babenko, G. P.) See Faux, Ivor D.; et al., (84j:68066)
- (Babenko, K. I.) See Faux, Ivor D.; et al., (84j:68066)
- Banchoff, Thomas (with Werner, John) ★Linear algebra through geometry. (84f:15001)
- Boltyskii, V. G. Combinatorial geometry. (Russian) (84a:52001)
- (Burkhardt, Johann Jakob) See Coxeter, Harold S. M., (84f:00002)
- Coxeter, Harold S. M. ★Unvergängliche Geometrie. (German) [Immortal geometry] (84f:00002)
- Faux, Ivor D. (with Pratt, M. J.) ★Вычислительная геометрия: применение в проектировании и на производстве. (Russian) [Computational geometry for design and manufacture] (84j:68066)
- (Gschwind, Peter) See Ziegler, Renatus, (84i:51032)
- Lardicci, Cristiani. Geometric aspects of cartography. (Italian) (84c:01032)
- Mandelbrot, Benoit B. ★The fractal geometry of nature. (84b:00021)
- Olson, A. T. The decomposition of polygons. (84m:51022)
- Pickert, Günter. Analytische Geometrie oder nur lineare Algebra? [Analytic geometry or only linear algebra?] (84f:01045)
- Pratt, M. J. See Faux, Ivor D., (84j:68066)
- Tallini, Giuseppe. ★Geometrie d'incidenza e matroidi. (Italian) [Incidence geometries and matroids] (84m:05001)
- Ulshöfer, Klaus. Zur darstellenden Geometrie in der Sekundarstufe II. IV. Über die Zentralprojektion im Kupferstich "Der heilige Hieronymus im Gehäus" von Albrecht Dürer. [Descriptive geometry for the upper level of secondary schools. IV. On the central projection in the engraving "Saint Jerome in his cell" by Albrecht Dürer] (84i:01046)
- (Voskresenskii, G. P.) See Faux, Ivor D.; et al., (84j:68066)
- Werner, John. See Banchoff, Thomas, (84f:15001)
- Ziegler, Renatus. ★Synthetische Liniengeometrie. (German) [Synthetic line geometry] (84i:51032)

51-02 Advanced exposition (research surveys, monographs, etc.)

- (Blind, G.) See Problems: Discrete geometry, 84c:51003
- Giering, Oswald. ★Vorlesungen über höhere Geometrie. (German) [Lectures on higher geometry] 84c:51002
- (Goodman, Jacob Eli) See Problems: Discrete geometry, 84c:51003
- (Hartl, Johann) See Giering, Oswald, 84c:51002
- (Kelly, L. M.) See Problems: Discrete geometry, 84c:51003
- (Klee, Victor) See Problems: Discrete geometry, 84c:51003
- (Monson, B. R.) See Problems: Discrete geometry, 84c:51003
- (Moser, W. O. J.) See Problems: Discrete geometry, 84c:51003
- (Moszyńska, Maria). See Szmielew, Wanda, 84j:51002
- (Purdy, G. B.) See Problems: Discrete geometry, 84c:51003
- (Rousseau, Christiane) See Problems: Discrete geometry, 84c:51003
- Szmielew, Wanda. ★Od geometrii afinicznej do euklidesowej. (Polish) [From affine geometry to Euclidean geometry] 84d:51002

(Wetzel, John E.) See **Problems: Discrete geometry**, 84c:51003

(Wilker, J. B.) See **Problems: Discrete geometry**, 84c:51003

Problems:

Discrete geometry ★ **Problems in discrete geometry**, 1980. 84c:51003

secondary classifications:

Boltysanskii, V. G. **Combinatorial geometry**. (Russian) (84a:52001)

Erdős, Paul Some of my favourite problems which recently have been solved. (84f:10003)

Goodman, Jacob Eli (with Pollack, Richard) A combinatorial perspective on some problems in geometry. (84b:05003)

Pollack, Richard See Goodman, Jacob Eli, (84b:05003)

Wieting, Thomas W. ★ **The mathematical theory of chromatic plane ornaments**. (84b:51043)

51-03 Historical (must also be assigned at least one classification number from Section 01)

Wagner, Ascher Some reflections on the history of the study of finite projective planes. 84b:51002

secondary classifications:

Ahmad, Afzal On Vedic square-circle conversion. (84i:01030)

(Apollonius of Perga) See Knorr, Wilbur Richard, (84f:01006)

(Bolzano, Bernard) See Foltá, Jaroslav, (84b:01045)

Brackenridge, J. Bruce Kepler, elliptical orbits, and celestial circularity: a study in the persistence of metaphysical commitment. I. (84c:01017a)

Kepler, elliptical orbits, and celestial circularity: a study in the persistence of metaphysical commitment. II. (84c:01017b)

Di Stefano, Maria Elena (with Ginepro Tinti, Marisa) Apollonios and the circle. (Italian) (84j:01009)

(Euclid) See Mueller, Ian, (84j:01013)

Faber, Richard L. ★ **Foundations of Euclidean and non-Euclidean geometry**. (84j:51001)

Foltá, Jaroslav Bolzano's first achievements in the development of elementary geometry at the beginning of the 19th century. (Czech. English and Russian summaries) (84b:01045)

Freudenthal, Hans The impact of von Staudt's foundations of geometry. (84c:01034)

Gerike, Helmut Gauss und die Grundlagen der Geometrie. [Gauss and the foundations of geometry] (84j:01005)

Ginepro Tinti, Marisa See Di Stefano, Maria Elena, (84j:01009)

Gregory, Frederick Neo-Kantian foundations of geometry in the German Romantic period. (German summary) (84c:01063)

Höle, Vittorio Platons Grundlegung der Euklidizität der Geometrie. [Plato's establishment of the Euclideaness of geometry] (84j:01011)

Johnson, Norman Lloyd The geometry of Ostrom: the contributions to geometry of T. G. Ostrom. (84f:01068)

Kawaguchi, Akitsugu The notion of geometry. (See 84j:01001a)

(Kepler, Johannes) See Brackenridge, J. Bruce, (84c:01017a) and (84c:01017b)

Knorr, Wilbur Richard The hyperbola-construction in the *Conics*, Book II: ancient variations on a theorem of Apollonius. (84f:01006)

Observations on the early history of the conics. (84c:01006)

Lambert, Johann Heinrich ★ *Essai sur la perspective* (août 1752). (French) [Essay on perspective (August 1752)] (84c:01031)

Lardicci, Cristiana Geometric aspects of cartography. (Italian) (84c:01032)

(Laurent, Roger) See Lambert, Johann Heinrich, (84c:01031)

Maier, Luigi Euclid's fifth postulate from C. Clavius (1589) to G. Saccheri (1733). (Italian) (84j:01006)

Meyer, Henrik On Georg Mohr and *Euclides Curiosus*. (Danish. English summary) (84f:01008)

Michiaki, Yoshimasa (with Takinami, Osamu) On the comparison of mathematicians' ways of thinking in Japan—old and new. (84j:01048)

Mueller, Ian ★ **Philosophy of mathematics and deductive structure in Euclid's *Elements***. (84j:01013)

(Ostrom, Theodore G.) See Johnson, Norman Lloyd, (84f:01068)

(Peiffer, Jeanne) See Lambert, Johann Heinrich, (84c:01031)

Pepe, Luigi Notes on the dissemination of Descartes' *Géométrie* in Italy in the 17th century. (Italian) (84i:01052)

Taibak, C. M. ★ **Coloured quadrangles**. (84i:01022)

Takinami, Osamu See Michiaki, Yoshimasa, (84j:01048)

(Taton, René) See Lambert, Johann Heinrich, (84c:01031)

Ulivi, Elisabetta The Pappus-Guldino theorem: proofs and attributions. (Italian) (84c:01025)

Yaglom, I. M. **Elementary geometry, then and now**. (84h:01059)

Biography:

Ostrom, Theodore G. See Johnson, Norman Lloyd, (84f:01068)

51-04 Explicit machine computation and programs (not the theory of computation or programming)

Belov, N. V. See Lebedev, V. A.; et al., 84b:51003

Kuz'min, E. A. See Lebedev, V. A.; et al., 84b:51003

Lebedev, V. A. (with Soldatov, E. A.; Kuz'min, E. A.; Belov, N. V.) Application of the algebraic method for obtaining a fundamental system from a vector system. (Russian) 84b:51003

Seybold, Hans Construction of functions for the representation of surfaces. (See 84g:65014)

Soldatov, E. A. See Lebedev, V. A.; et al., 84b:51003

secondary classifications:

Bar, Gert Ein neuer Sichtbarkeitsalgorithmus zur graphischen Darstellung von Polyedern.

[A new visibility algorithm for the graphic representation of polyhedra] (84b:68142b)

Cates, Marshall L. (with Killgrove, Ray B.) One-directional translation planes of order 13. (84b:51009)

Giblin, P. J. **Parallels**. (84c:51035)

Hermeline, F. Triangulation automatique d'un polyèdre en dimension n . (English summary) [Automatic triangulation of an n -dimensional polyhedron] (84c:52002)

Killgrove, Ray B. See Cates, Marshall L., (84b:51009)

Kirkpatrick, David G. Optimal search in planar subdivisions. (84b:68042)

Lee, Yong Tsui (with Requicha, Aristides A. G.) Algorithms for computing the volume and other integral properties of solids. I. Known methods and open issues. (84a:52003a)

(with Requicha, Aristides A. G.) Algorithms for computing the volume and other integral properties of solids. II. A family of algorithms based on representation conversion and cellular approximation. (84a:52003b)

Requicha, Aristides A. G. See Lee, Yong Tsui, (84a:52003a) and (84a:52003b)

Samaga, Hans-Joachim Zur Kennzeichnung von Lorentztransformationen in endlichen Ebenen. (English summary) [On the characterization of Lorentz transforms in finite planes] (84c:51010)

Smelyakov, S. V. See Stoyan, Yu. G., (84b:05039)

Stoyan, Yu. G. (with Smelyakov, S. V.) Discovery of the optimal path in a multiply connected domain on a class of paths in \mathbb{R}^2 . (Russian) (84b:05039)

51-06 Proceedings, conferences, etc.

(Johnson, Norman Lloyd) See **Finite geometries**, 84b:51003

(Kalliaher, Michael J.) See **Finite geometries**, 84b:51003

(Long, Calvin T.) See **Finite geometries**, 84b:51003

(Ostrom, Theodore G.) See **Finite geometries**, 84b:51003

Wilbrink, Hendrikus Adrianus ★ **Characterization theorems in finite geometry**. 84b:51001

Conference:

Finite Geometries ★ **Finite geometries**. 84b:51003

Finite geometries ★ **Finite geometries**. 84b:51003

Pullman, Wash. ★ **Finite geometries**. 84b:51003

secondary classifications:

(Bariotti, Adriano) See **Combinatorics**, (84c:05001)

(Ceccherini, Pier Vittorio) See **Combinatorics**, (84c:05001)

(Segre, Beniamino) See **Combinatorics**, (84c:05001)

(Shashkin, Yu. A.) See **Combinatorial properties of convex sets and graphs**, (84g:05004)

(Tallini, Giuseppe) See **Combinatorics**, (84c:05001)

(Ustinov, G. M.) See **Combinatorial properties of convex sets and graphs**, (84g:05004)

Combinatorial properties of convex sets and graphs ★ **Комбинаторные свойства выпуклых множеств и графов**. (Russian) [Combinatorial properties of convex sets and graphs] (84g:05004)

Combinatorics ★ **Combinatorics** '81. (84c:05001)

Conference:

Combinatorial Geometries and their Applications ★ **Combinatorics** '81. (84c:05001)

Rome ★ **Combinatorics** '81. (84c:05001)

51Axx Linear incidence geometry

51A05 General theory and projective geometries

(Bednarczuk, Jerzy) See Szmelew, Wanda, 84i:51002

Farnsworth, David (with Suddaby, Steven) A unifying approach to projective geometry. 84b:51002

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Kárteszi, Ferenc (with Lénárt, István) A generalization of the concept of projective plane. (Italian. English summary) 84j:51004

Kordos, Marek Bisorted projective geometry. (Russian summary) 84j:51005a

On some union of two Klein models. (Russian summary) 84j:51005b

Lénárt, István See Kárteszi, Ferenc, 84j:51004

Lizzio, Angelo (with Milici, Salvatore) Some generalizations of the concept of projective plane. (Italian) 84b:51004

Milici, Salvatore See Lizzio, Angelo, 84b:51004

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Pickert, Günter Algebraic methods in the theory of projective planes. 84g:51003

Šifrar, Juraj On affine planes over A_n^2 -quasigroups (summary). (Serbo-Croatian summary) (See 84a:20002)

Suddaby, Steven See Farnsworth, David, 84b:51002

Szmelew, Wanda On n -ary equivalence relations and their application to geometry. 84i:51002

secondary classifications:

Bhattarai, Hom Nath An orbit space representation of a geometry. (84b:51009)

Buekenhout, Francis (with Percy, Nicolas) Permutations d'une droite affine respectant les échelles. [Permutations of an affine line that are compatible with the scales] (84f:51003)

Judd, B. R. Angular-momentum theory and projective geometry. (84i:81041)

Lausch, Huberta Eine geometrische Beschreibung des Tensorproduktes zweier torsionsfreier abelscher Gruppen endlichen Ranges. [A geometric description of the tensor product of two torsion-free abelian groups of finite rank] (84g:20094)

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Schober, A. On the geometries of planes and the states of particles. (84a:81042)

51A10 Homomorphism, automorphism and dualities

- Buonchout, Francis (with Percy, Nicolas) Permutations d'une droite affine respectant les échelles. [Permutations of an affine line that are compatible with the scales] 84f:51003
- Delandtsheer, Anne The rigidity of the smallest unknown π -space. 84c:51003
- Dubikajts, Lech (with Guciora, Henryk) On affine transformations of Cartesian plane. 84f:51001
- (with Fryda, Jan) Some generalization of the Klein's model. 84j:51006
- Fritsch, Rudolf (with Prestel, Alexander) Bewertungsfortsetzungen und nichtinjektive Kollineationen. [Extensions of valuations and noninjective collineations] 84b:51004
- Fryda, Jan See Dubikajts, Lech, 84f:51006
- Guciora, Henryk See Dubikajts, Lech, 84f:51001
- James, Donald G. Projective homomorphisms and von Staudt's theorem. 84f:51002
- Kolden, Kjell A proof of Pascal's theorem using fixed points. (Norwegian) 84m:51001
- Nikitin, A. A. Homomorphisms of freely generated projective planes. (Russian) 84d:51003
- Orbán, B. Extension of collineations defined on subsets of a Pappian projective plane containing a conic. (Romanian summary) 84c:51005
- Percy, Nicolas (p, q) -transitivité et configurations d'un plan projectif. [(p, q)-transitivity and configurations in a projective plane] 84i:51003
- See also Buonchout, Francis, 84f:51003
- Pickert, Günter Free mobility in affine planes. 84f:51004
- Prestel, Alexander See Fritsch, Rudolf, 84b:51004
- Quassier, Erhard Affinspiegelungen in affinen Räumen einer beliebigen Dimension ≥ 2 . [Affine reflections in affine spaces of arbitrary dimension ≥ 2] 84c:51004
- Schaaß, Hermann Zur Bestimmung der Quadratwurzeln affiner Abbildungen im $A^2(\mathbb{R})$. [On determining the square roots of affine mappings in $A^2(\mathbb{R})$] 84f:51005
- Witczyński, Krzysztof Projectivity on a line as a composition of cyclic projectivities. (Spanish summary) 84f:51006
- On generators of the group of projective transformations. 84b:51005

secondary classifications:

- Barlotti, Adriano Projective planes and 3-webs. (Italian) (84i:51005)
- Dymitrow, Georgi Properties and application of a polar bicentral transformation. (Polish. English summary) (84j:51047)
- Ellers, Erich W. Relations in the projective general linear group and in the affine subgroup. (84c:20039)
- Faltings, K. Zur Kennzeichnung von Elationen. [On the characterization of elations] (84d:20049)
- Grundhöfer, Theo Über Projektivitätengruppen affiner und projektiver Ebenen unter besonderer Berücksichtigung von Moufangebenen. [On groups of projectivities of affine and projective planes with special reference to Moufang planes] (84i:51010)
- Hering, Christoph On homologies in fixed-point-free affine groups. (84c:51008)
- Higman, D. G. Admissible graphs. (84c:05026)
- Reifart, A. (with Stroth, Gernot) On finite simple groups containing perspectivities. (84g:20005)
- Salzmann, Helmut R. Baer-Kollineationsgruppen der klassischen projektiven Ebenen. [Baer collineation groups of the classical projective planes] (84b:51027)
- Stroth, Gernot On Chevalley groups acting on projective planes. (84g:20006)
- See also Reifart, A., (84g:20005)
- Völklein, Helmut Transitivitätsfragen bei linearen Gruppen. [Transitivity problems in linear groups] (84j:51046)
- Walker, Michael On the generalised Fitting subgroup of collineation groups generated by central root automorphisms. (84c:20004)

51A15 Structures with parallelism

- André, Johannes On possible orders of noncommutative tactical spaces. 84b:51006
- Marchi, Mario (with Pianta, Silvia) On a class of weak affine spaces. (Italian. English summary) 84i:51004
- Pianta, Silvia See Marchi, Mario, 84i:51004

secondary classifications:

- Artzy, R. On free extension of a hyperbolic plane. (84j:51031)

51A20 Configuration theorems

- Amici, O. (with Casciaro, B.) Concerning Bukenhout's theorem on Pascalian ovals. (Italian. English summary) 84f:51007
- Barlotti, Adriano Projective planes and 3-webs. (Italian) 84i:51005
- Borwein, Peter B. The Desmic conjecture. 84i:51006
- Brejcha, Josef Some properties of a plane quadrangle with mutually perpendicular diagonals. (Czech. English and Russian summaries) 84a:51001
- Casciaro, B. See Amici, O., 84f:51007
- Chakhtauri, I. A. On the normalization of a projective plane by correspondence of incident elements. (Russian. English summary) 84i:51007
- Faina, Giorgio A construction of a class of 3-nets. (Italian. English summary) 84j:51007
- Lyakh, I. V. Proper collineations of algebraic nets. (Russian) 84i:51008
- Stojmenovski, K. Homomorphisms of nets. 84j:51008
- Zucco, Andrea The orchard problem. (Italian) 84b:51006

secondary classifications:

- Cordovil, Raul Sur les matroïdes orientés de rang 3 et les arrangements de pseudodroites dans le plan projectif réel. (English summary) [Oriented matroids of rank 3 and arrangements of pseudolines in the real projective plane] (84j:05031)

- Grundhöfer, Theo Über Projektivitätengruppen affiner und projektiver Ebenen unter besonderer Berücksichtigung von Moufangebenen. [On groups of projectivities of affine and projective planes with special reference to Moufang planes] (84i:51010)
- Percy, Nicolas (p, q) -transitivité et configurations d'un plan projectif. [(p, q)-transitivity and configurations in a projective plane] (84i:51003)
- Riesinger, R. Geometrische Überlegungen zum rechten Eigenwert-Problem für Matrizen über Schiefkörpern. [Geometric considerations on the right-hand eigenvalue problem for matrices over skew fields] (84b:16023)

51A25 Algebraization [See also 12Kxx, 20N10.]

- Barlotti, Adriano (with Strambach, Karl) The geometry of binary systems. 84c:51005
- Boerner, Victoria (with Kallaher, Michael J.) Half-Bol quasifields. 84g:51004
- Burian, Květoslav Nets and binary systems. (Czech. English summary) 84d:51004
- Faina, Giorgio An extension to abstract ovals of the Bukenhout theorem on Pascal ovals. (Italian summary) 84a:51002
- Kallaher, Michael J. See Boerner, Victoria, 84g:51004
- Milazzo, Filippo (with Vacirca, Vincenzo) Algebraic model of a projective space over an extended field. (Italian) 84i:51009
- Nagamuni Reddy, L. See Sitaram, K., 84c:51004
- Perencaj, Jan A point transformation of a 4-web. (Slovak. English, German and Russian summaries) 84b:51007
- Sitaram, K. (with Nagamuni Reddy, L.) Linearity in a Hall planar ternary ring. 84c:51004
- Strambach, Karl See Barlotti, Adriano, 84c:51005
- Vacirca, Vincenzo See Milazzo, Filippo, 84i:51009

secondary classifications:

- Biliotti, Mauro A Dembowski generalisation of the Hughes planes. (Italian. English summary) (84d:51024)
- Cohen, Stephen D. (with Ganley, Michael J.) Commutative semifields, two-dimensional over their middle nuclei. (84g:17002)
- Corsini, Piergiulio Recent results in the theory of hypergroups. (Italian. English summary) (84i:20077)
- Ganley, Michael J. See Cohen, Stephen D., (84g:17002)
- Kühlbrandt, Harold Algebraisierung scharf 2-fach transitiver Permutationsmengen durch Quasibereiche. (English summary) [Algebraization of sharply 2-transitive sets of permutations by quasidomains] (84d:20008)
- Mäurer, Helmut Die harmonischen Involutionen der Permutationsgruppe $PTL_2(K)$. [The harmonic involutions of the permutation group $PTL_2(K)$] (84m:20009)
- Salow, Edzard Verallgemeinerte Halbdrehungsebenen. [Generalized semiroational planes] (84a:51004)

51A30 Desarguesian and Pappian geometries

- Capodaglio, Rita Elations in a projective Pappian plane. (Italian summary) 84c:51005
- Paukowitz, Hans Peter Zum Berührungsbegriff in projektiven Papposräumen. [On the concept of osculation in projective Pappos spaces] 84c:51006
- Wu, Wen Jun Toward mechanization of geometry—some comments on Hilbert's Grundlagen der Geometrie. 84b:51007

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- Amici, O. (with Casciaro, B.) Concerning Bukenhout's theorem on Pascalian ovals. (Italian. English summary) (84f:51007)
- Bruen, Aiden A. Intersection of Baer subgeometries. (84c:51006)
- Bukenhout, Francis (with Percy, Nicolas) Permutations d'une droite affine respectant les échelles. [Permutations of an affine line that are compatible with the scales] (84f:51003)
- Casciaro, B. See Amici, O., (84f:51007)
- Faina, Giorgio (with Korchmáros, Gábor-Gabriele) A characterization of the linear group $PGL(2, K)$ and of abstract conics in the sense of Bukenhout. (Italian. English summary) (84b:51028)
- Hortig, Berndt (with Razen, Reinhard; Schöpf, Peter) n -Färbungen der Ebene, wobei jede Gerade k -färbig ist. [n -colorings in the plane where every straight line is k -colored] (84f:51047)
- Kantor, William M. Ovoids and translation planes. (84b:51019)
- Kloth, Siegfried Büschel in äquialleinen Räumen. [Pencils in equiaffine spaces] (84b:51025)
- Korchmáros, Gábor-Gabriele See Faina, Giorgio, (84b:51028)
- LeFèvre-Percy, Christiane Characterization of Bukenhout-Metz unitals. (84e:51011)
- Möller, Reinhard Über die Anzahl projektiver Desargues-Konfigurationen in endlichen desarguesschen affinen Inzidenzebenen. [On the number of projective Desargues configurations in finite Desarguesian affine incidence planes] (84j:51019)
- Orbán, B. Extension of collineations defined on subsets of a Pappian projective plane containing a conic. (Romanian summary) (84c:51005)
- Percy, Nicolas See Bukenhout, Francis, (84f:51003)
- Razen, Reinhard See Hortig, Berndt; et al., (84f:51047)
- Rosati, Luigi Antonio Ovals of finite Desarguesian planes of even order. (Italian. English summary) (84h:51031)
- Schöpf, Peter See Hortig, Berndt; et al., (84f:51047)
- Tecklenburg, Helga Zur algebraischen Darstellung fastaffiner Räume. (English summary) [Algebraic representation of near-affine spaces] (84g:51014)
- Schließungsaussagen in fastaffinen Räumen. [Configurations in near-affine spaces] (84g:51012)
- Algebraische Darstellung fastaffiner Ebenen. [Algebraic representation of near-affine planes] (84g:51013)

51A35 Non-Desarguesian affine and projective planes

- Foltz, François** Sur l'existence d'espaces affines à groupes de translations non commutatifs. [On the existence of affine spaces with noncommutative translation groups] **84c:51002**
- Grundhöfer, Theo** Über Projektivitätsgruppen affiner und projektiver Ebenen unter besonderer Berücksichtigung von Moufang-Ebenen. [On groups of projectivities of affine and projective planes with special reference to Moufang planes] **84c:51010**
- Hartmann, Erich** Über Moufang-Ovale. [On Moufang ovals] **84c:51006**
- Hering, Christoph** On homologies in fixed-point-free affine groups. **84b:51008**

secondary classifications:

- Biliotti, Mauro** (with Lunardon, Guglielmo) Derivation sets and Baer subplanes in a translation plane. (Italian. English summary) **(84c:51007)**
- Cohen, Stephen D.** (with Ganley, Michael J.) Commutative semifields, two-dimensional over their middle nuclei. **(84g:17002)**
- Fink, J. B.** A note on sharply flag-transitive projective planes. **(84c:51007)**
- Ganley, Michael J.** See Cohen, Stephen D., **(84g:17002)**
- Lorimer, Peter** On projective planes of type $(5, m)$. **(84c:51006)**
- Lunardon, Guglielmo** See Biliotti, Mauro, **(84c:51007)**
- Milazzo, Filippo** (with Vacirca, Vincenzo) Geometric representation and lattice characterization of certain algebras. (Italian) **(84g:12030)**
- Salzmann, Helmut R.** Baer-Kollineationsgruppen der klassischen projektiven Ebenen. [Baer collineation groups of the classical projective planes] **(84b:51027)**
- Vacirca, Vincenzo** See Milazzo, Filippo, **(84g:12030)**

51A40 Translation planes and spreads

- Biliotti, Mauro** (with Lunardon, Guglielmo) Derivation sets and Baer subplanes in a translation plane. (Italian. English summary) **84c:51007**
- On inherited groups of derivable translation planes. **84b:51008**
- Cates, Marshall L.** (with Killgrove, Ray B.) One-directional translation planes of order 13. **84c:51009**
- Dempwolff, Ulrich** Grosse Baer-Untergruppen auf Translationsebenen gerader Ordnung. (English summary) [Large Baer subgroups on translation planes of even order] **84b:51010**
- Foulser, David** (with Mason, Geoffrey; Walker, Michael) On irreducible translation planes in odd characteristic. I. **84j:51009**
- (with Walker, Michael) On a construction of Ostrom. **84f:51008**
- Jha, Vikram** On subgroups and factor groups of $GL(n, q)$ acting on spreads with the same characteristic. **84b:51011**
- Johnson, Norman Lloyd** The translation planes of order 16 that admit $SL(2, 4)$. **84b:51009**
- Translation planes of characteristic p that admit $SL(2, p')$. **84f:51009**
- (with Ostrom, Theodore G.) Translation planes of dimension two and characteristic two. **84f:51010**
- Elations in translation planes of order 16. **84c:51007**
- Kallaher, Michael J.** (with Kelly, Graham) Line-rank 3 affine planes. **84b:51010**
- (with Ostrom, Theodore G.) Translation planes admitting $SL(n, w)$ with $n \geq 3$. **84c:51008**
- Kantor, William M.** Expanded, sliced and spread spreads. **84d:51005**
- Kelly, Graham** See Kallaher, Michael J., **84b:51010**
- Killgrove, Ray B.** See Cates, Marshall L., **84b:51009**
- Lunardon, Guglielmo** See Biliotti, Mauro, **84c:51007**
- Mason, Geoffrey** See Foulser, David, et al., **84j:51009**
- Ostrom, Theodore G.** New developments in finite translation planes. **84g:51005**
- See also Kallaher, Michael J., **84c:51008** and Johnson, Norman Lloyd, **84f:51010**
- Vincenti, Rita** Some types of varieties V_2^3 of $S_{4,q}$ and Baer subplanes. (Italian. English summary) **84b:51012**
- Walker, Michael** See Foulser, David, **84f:51008** and **84j:51009**

secondary classifications:

- Bartolone, Claudio** On some translation planes admitting a Frobenius group of collineations. **(84f:51018)**
- Boerner, Victoria** (with Kallaher, Michael J.) Half-Bol quasifields. **(84g:51004)**
- Crisnale, Michele** $(q^2 + q + 1)$ -sets of type $(0, 1, 2, q + 1)$ in translation planes of order q^2 . **(84f:51028)**
- de Finis, Massimo** (with de Resmini, Maria Luisa J.) On spreads of type (m, n) with respect to primes in $PG(4, q)$, q a square. (Italian summary) **(84c:51018)**
- Jha, Vikram** On spreads admitting large autotopism groups. **(84f:51025)**
- Kallaher, Michael J.** See Boerner, Victoria, **(84g:51004)**
- Kantor, William M.** Ovoids and translation planes. **(84b:51019)**
- On point-transitive affine planes. **(84f:51026)**
- Non-Desarguesian planes, partial geometries, strongly regular graphs and codes arising from hyperbolic quadrics. **(84j:51017)**
- Kuppuswamy Rao, K.** See Satyanarayana, K., **(84d:51013)**
- Mason, Geoffrey** Irreducible translation planes and representations of Chevalley groups in characteristic 2. **(84j:20042)**
- Narayana Rao, M. L.** (with Satyanarayana, K.) A new class of square order planes. **(84b:51027)**
- de Resmini, Maria Luisa J.** See de Finis, Massimo, **(84c:51018)**
- Satyanarayana, K.** (with Kuppuswamy Rao, K.) Full collineation group of the second of Foulser's flag transitive planes of order 25. **(84d:51013)**
- See also Narayana Rao, M. L., **(84b:51027)**

51A45 Incidence structures imbeddable into projective geometries

- Bichara, Alessandro** (with Tallini, Giuseppe) On a characterization of Grassmann space representing the k -dimensional subspaces in a projective space. **84b:51013**
- (with Mazzocca, Francesco) On a characterization of the Grassmann spaces associated with an affine space. **84j:51010**
- Bocci, V.** (with Ceccherini, Pier Vittorio; Marchi, Mario) S -spaces deduced from affine spaces. (Italian. English summary) **84b:51011**
- Buekenhout, Francis** (with Sprague, Alan P.) Polar spaces having some line of cardinality two. **84m:51002**
- Ceccherini, Pier Vittorio** See Bocci, V.; et al., **84b:51011**
- Dow, Stephen** An improved bound for extending partial projective planes. **84m:51003**
- Kačihák, Josef** Imbeddable and nonimbeddable non-Euclidean spaces. (Slovak. English, German and Russian summaries) **84c:51003**
- Lefèvre-Percy, Christiane** Copolar spaces fully embedded in projective spaces. **84f:51011**
- Limbois, Monique** Plongements de $PG(n, q)$ et $AG(n, q)$ dans $PG(m, q')$, $m < n$. [Embeddings of $PG(n, q)$ and $AG(n, q)$ in $PG(m, q')$, $m < n$] **84b:51014**
- Marchi, Mario** See Bocci, V.; et al., **84b:51011**
- Mazzocca, Francesco** See Bichara, Alessandro, **84j:51010**
- Sprague, Alan P.** Dual-linear, linear diagrams. **84d:51006**
- See also Buekenhout, Francis, **84m:51002**
- Tallini, Giuseppe** See Bichara, Alessandro, **84b:51013**

secondary classifications:

- Limbois, Monique** Projective embeddings of small "Steiner triple systems". (See **84d:05039**)
- Lindner, C. C.** A survey of embedding theorems for Steiner systems. (See **84d:05039**)
- Percy, Nicolas** The bundle axiom and egglike subsets of projective spaces. **(84b:51016)**
- Ruginá, Andrei** A geometrical almost affine model. **(84b:51023)**
- Stinson, D. R.** A short proof of a theorem of de Witte. **(84c:05027)**
- Teirlinck, Luc** Factorization properties for isometries of matroids into projective spaces. **(84d:05066)**
- Vincenti, Rita** Some types of varieties V_2^3 of $S_{4,q}$ and Baer subplanes. (Italian. English summary) **(84b:51012)**

51A99 None of the above, but in this section

- Johnson, Peter Malcolm** (with Shult, Ernest) Gamma spaces which are locally polar spaces. **84m:51004**
- Lyubarschuk, I. V.** Classification of lower-order pseudoplanes and pseudoternaries. (Russian) **84b:51012**
- Shult, Ernest** See Johnson, Peter Malcolm, **84m:51004**

secondary classifications:

- Lizzio, Angelo** (with Milici, Salvatore) Some generalizations of the concept of projective plane. (Italian) **(84b:51004)**
- Milici, Salvatore** See Lizzio, Angelo, **(84b:51004)**

51Bxx Nonlinear incidence geometry

51B05 General theory

- Buekenhout, Francis** Some building geometries of spherical type as sets of points and lines. (See **84c:05001**)
- Cohen, Arjeh M.** Points and lines in metasymplectic spaces. (See **84c:05001**)
- On a theorem of Cooperstein. **84j:51011**
- Pasini, Antonio** Diagrams and incidence structures. **84b:51013**
- Canonical linearization of pure geometries. **84b:51015**
- Percy, Nicolas** The bundle axiom and egglike subsets of projective spaces. **84b:51016**
- Valette, Alain** Direct sums of Tits geometries. **84b:51014**
- Werner, Michael** Zur Problematik des Einbettungsbegriffs bei Kettengeometrien. [On the problems of the imbedding concept in chain geometries] **84g:51006**
- Zu einer Aussage über die kettengeometrischen Erzeugenden. [On an assertion concerning chain-geometric generators] **84c:51009**
- Die klassisch-projektive Natur der Kettengeometrien endlicher Dimension. [The classic-projective nature of the chain geometries of finite dimension] **84f:51012**

secondary classifications:

- Werner, Michael** Zur Darstellung der Automorphismengruppe einer kinematischen Kettengeometrie im Quadrikenmodell. (English summary) [Representation of the automorphism group of a kinematic chain geometry in the quadric model] **(84b:51038)**

51B10 Möbius geometries

- Grundhöfer, Theo** Projektivitätsgruppen von ovoidalen Möbius- und Laguerre-Ebenen. [Projectivity groups of ovoid-shaped Möbius and Laguerre planes] **84d:51007**
- Hsu, Chen Jung** Remarks on constructions of new systems of center circles. **84c:51011**
- Johnson, Norman W.** Absolute polarities and central inversions. **84b:51017**
- Khalifah, Mohammed F.** Polarity in embedding-spaces for weak Möbius-geometry. **84j:51012**
- Kroll, Hans-Joachim** On the characterization of finite Miquelian Möbius planes. **84f:51013**
- Lang, Konrad** Ein einfacher spiegelsymmetrischer Beweis für den Schließungssatz von Miquel. [A simple reflection-geometric proof for the closure theorem of Miquel] **84m:51005**
- Rigby, J. F.** Configurations of circles and points. **84g:51007**

- Weiss, Asia Ivrié On Coxeter's loxodromic sequences of tangent spheres. **84c:51003**
On isoclinic sequences of spheres. **84c:51018**
Wilker, J. B. Möbius transformations in dimension n . **84b:51019**
Zelinka, Bohdan Finite spherical geometries. (Czech summary) **84d:51008a**
A remark to my paper: "Finite spherical geometries". **84d:51008b**

secondary classifications:

- Ahlfors, Lars Valerian ★ Möbius transformations in several dimensions. **(84m:30028)**
Bruen, Aiden A. (with Fisher, J. C.; Wilker, J. B.) Apollonius by inversion. **(84g:51028)**
Chan, Agnes Hui Embedding of a pseudopoint residual design into a Möbius plane. **(84c:51020)**
Fisher, J. C. See Bruen, Aiden A.; et al., **(84g:51028)**
Foubser, David (with Walker, Michael) On a construction of Ostrom. **(84f:51008)**
Quaisser, Erhard Kreisspiegelung in metrischen affinen Ebenen und ihre konstruktive Darstellung unter besonderer Berücksichtigung von Endlichkeit. [Reflections in circles of metric affine planes and their constructive representations, in particular for the finite case] **(84f:51021)**
Rigby, J. F. Half-turns and infinite chains of Clifford configurations. **(84f:51044)**
Walker, Michael See Foubser, David, **(84f:51008)**
Wilker, J. B. The Apollonian octets and an inverse form of Krause's theorem. **(84d:51026)**
Topologically equivalent n -dimensional isometries. **(84m:51018)**
See also Bruen, Aiden A.; et al., **(84g:51028)**

51B15 Laguerre geometries

- Hartmann, Erich Transitivitätssätze für Laguerre-Ebenen. (English summary) [Transitivity theorems for Laguerre planes] **84g:51008**
Lang, Konrad Ein Beispiel zum Rechnen mit Involutionsen in der klassischen Laguerre-Geometrie. [An example of computing with involutions in classical Laguerre geometry] **84c:51020**
Schaal, Hermann Über die auf der affinen Ebene operierenden Laguerre-Abbildungen. [On Laguerre mappings operating in the affine plane] **84j:51013**
secondary classifications:
Grundhöfer, Theo Projektivitätsgruppen von ovoidalen Möbius- und Laguerreebenen. [Projectivity groups of ovoid-shaped Möbius and Laguerre planes] **(84d:51007)**
Werner, Michael Zur Krümmungskennzeichnung der kinematischen Laguerre-Ketten. (English summary) [On the characterization of curvature of kinematic Laguerre chains] **(84h:51039)**

51B20 Minkowski geometries

- Dragunov, V. K. An axiomatic definition of a nonconvex Minkowski metric. (Russian) **84c:51021**
Grozze-Chiorescu, Ioana On the isometries of a Minkowski plane over a field of characteristic 2. (Romanian summary) **84j:51014**
Hartmann, Erich Minkowski-Ebenen mit Transitivitätseigenschaften. [Minkowski planes with the property of transitivity] **84d:51009**
Laatsch, Richard Pyramidal sections in taxicab geometry. **84b:51015**
Malara, Nicola A. A new class of Benz planes. (Italian. English summary) **84d:51010**
Percy, Nicolas Les plans de Minkowski possédant des inversions sont miquelliens. [Minkowski planes with inversions are Miquelian] **84m:51006**
Samaga, Hans-Joachim Zur Kennzeichnung von Lorentztransformationen in endlichen Ebenen. (English summary) [On the characterization of Lorentz transforms in finite planes] **84c:51010**

secondary classifications:

- Antippa, Adel F. See Marchildon, Louis; et al., **(84b:83002)**
Benz, Walter On mappings preserving a single Lorentz-Minkowski-distance. II. **(84m:51013a)**
On mappings preserving a single Lorentz-Minkowski-distance. III. **(84m:51013b)**
On mappings preserving a single Lorentz-Minkowski-distance. I. **(84f:51041)**
Dimitriadis, B. D. Relativistic kinematical diagrams. (German summary) **(84i:83002)**
Everett, Allen E. See Marchildon, Louis; et al., **(84b:83002)**
Fahline, Donald E. Manifestly covariant, coordinate-free dyadic expression for planar homogeneous Lorentz transformations. **(84g:83002)**
Ionescu-Pallas, Nicholas Jean (with Sofonea, Liviu) Géométries non-classiques et pré-relativistes capables de décrire la phénoménalité relativiste. II. Le formalisme complexe vectoriel. [Nonclassical pre-relativistic geometries that can describe relativistic phenomenology. II. Complex vector formalism] **(84m:83002)**
Lang, Konrad Ein einfacher Spiegelungsgeometrischer Beweis für den Schließungssatz von Miquel. [A simple reflection-geometric proof for the closure theorem of Miquel] **(84m:51005)**
Lester, J. A. A physical characterization of conformal transformations of Minkowski spacetime. **(84g:83004b)**
Marchildon, Louis (with Antippa, Adel F.; Everett, Allen E.) Superluminal coordinate transformations: the two-dimensional case. **(84b:83002)**
Mundy, Brent Relational theories of Euclidean space and Minkowski spacetime. **(84m:83017)**
Pantaleo, Tito Block systems of a class of finite Minkowski planes of even order. (Italian. English summary) **(84c:51022)**
Popovici, Iulian (with Rădulescu, Dan Constantin) Sur les bases de la géométrie conforme minkowskienne. (English summary) [On the foundations of the Minkowski conformal geometry] **(84g:83004a)**
Quaisser, Erhard Kreisspiegelung in metrischen affinen Ebenen und ihre konstruktive Darstellung unter besonderer Berücksichtigung von Endlichkeit. [Reflections in circles

of metric affine planes and their constructive representations, in particular for the finite case] **(84f:51021)**

- Rădulescu, Dan Constantin See Popovici, Iulian, **(84g:83004a)**
Safarov, A. S. Nilpotent transformations of a four-dimensional Lorentz space. (Russian) **(84d:83005)**
Schütze, Martin (with Wendland, Horst) Zur Sonderstellung des ebenen Falles beim Spiegelungsgeometrischen Aufbau pseudoeuklidischer Räume. (English and Russian summaries) [The special place of the plane case in the reflection-geometric development of pseudo-Euclidean spaces] **(84f:51023)**
Sofonea, Liviu See Ionescu-Pallas, Nicholas Jean, **(84m:83002)**
Stettler, Raymond Zur Linearität 2-dimensionaler Raum-Zeit-Transformationen. [On the linearity of 2-dimensional space-time transformations] **(84e:51014)**
Tallini, Giuseppe On a theorem of W. Benz characterizing plane Lorentz transformations in Jaernefelt's world. **(84m:51012)**
Wendland, Horst See Schütze, Martin, **(84f:51023)**
Werner, Michael Zu einer Aussage über die kettengeometrischen Erzeugenden. [On an assertion concerning chain-geometric generators] **(84c:51009)**

51B25 Lie geometries

- Aschbacher, Michael (with Smith, Stephen D.) Tits geometries over $GF(2)$ defined by groups over $GF(3)$. **84g:51009**
Cohen, Arjeh M. An axiom system for metasymplectic spaces. **84c:51011**
Smith, Stephen D. See Aschbacher, Michael, **84g:51009**

secondary classifications:

- Aschbacher, Michael Flag structures on Tits geometries. **(84m:51010)**
Cohen, Arjeh M. Exceptional presentations of three generalized hexagons of order 2. **(84f:51038)**
Rigby, J. F. Five mutually tangent spheres and various associated configurations. **(84c:51016)**
Tits, J. Moufang octagons and the Ree groups of type 2F_4 . **(84m:20048)**
Walker, Michael Collineation groups of generalised polygons containing central root automorphisms. **(84e:51012)**

51B99 None of the above, but in this section

secondary classifications:

- Bichara, Alessandro (with Mazzocca, Francesco) On a characterization of the Grassmann spaces associated with an affine space. **(84j:51010)**
Johnson, Peter Malcolm (with Shult, Ernest) Gamma spaces which are locally polar spaces. **(84m:51004)**
Mazzocca, Francesco See Bichara, Alessandro, **(84j:51010)**
Shult, Ernest See Johnson, Peter Malcolm, **(84m:51004)**
Sprague, Alan P. Dual-linear, linear diagrams. **(84d:51006)**
Tecklenburg, Helga Zur algebraischen Darstellung fastaffiner Räume. (English summary) [Algebraic representation of near-affine spaces] **(84g:51014)**
Schließungsaussagen in fastaffinen Räumen. [Configurations in near-affine spaces] **(84g:51012)**
Algebraische Darstellung fastaffiner Ebenen. [Algebraic representation of near-affine planes] **(84g:51013)**

51C05 Ring geometry (Hjelmslev, Barbilian, etc.)

- Baker, Catharine Anne (with Lane, N. D.; Lorimer, J. W.) Order and topology in projective Hjelmslev planes. **84f:51014**
Drake, David A. (with Sane, Sharad S.) Auxiliary sets of matrices with new step parameter sequences. **84b:51016**
(with Sane, Sharad S.) Maximal intersecting families of finite sets and n -uniform Hjelmslev planes. **84b:51017**
The use of auxiliary sets of matrices in the construction of Hjelmslev and Klingenberg structures. **84g:51010**
Emel'chenkov, E. P. (II, I) collineations of AH-planes. (Russian) **84c:51012**
Lane, N. D. See Baker, Catharine Anne; et al., **84f:51014**
Lorimer, J. W. Locally compact Desarguesian Hjelmslev planes of level n . **84f:51015**
Dual numbers and topological Hjelmslev planes. **84m:51007**
See also Baker, Catharine Anne; et al., **84f:51014**
Salow, Edzard Verallgemeinerte Halbdrehungsebenen. [Generalized semirotational planes] **84c:51004**
Sane, Sharad S. On the theorems of Drake and Lenz. **84c:51004**
(with Singhi, Navin M.) On the structure of a finite projective Klingenberg plane. **84a:51005**
See also Drake, David A., **84b:51016** and **84b:51017**
Sedlář, Vladimír Incidence matrices of finite projective uniform Hjelmslev planes. (Czech. English summary) **84b:51018**
Singhi, Navin M. See Sane, Sharad S., **84a:51005**
Struve, Horst (with Struve, Rolf) Hjelmslevgruppen, in denen sich die Punkte gegen Geraden austauschen lassen. [Hjelmslev groups in which the points can be exchanged with lines] **84g:51011**
Struve, Rolf Algebraisierung singularer Hjelmslevgruppen. [Algebraization of singular Hjelmslev groups] **84f:51012**
See also Struve, Horst, **84g:51011**
Vasiu, Angela Group characterization of a certain class of Hjelmslev-Barbilian metric planes. (Romanian) **84h:51022**
secondary classifications:

- Bachmann, Friedrich Orthogonality in reflection geometry. **(84m:51011)**
Beth, Thomas (with Jungnickel, Dieter) On the codes generated by certain divisible designs. **(84i:05034)**

Jungnickel, Dieter See Beth, Thomas, (84i:05034)

Machala, František Über angeordnete affine Klingenberg'sche Ebenen, die sich in projektive Klingenberg'sche Ebenen einbetten lassen. (Russian and Czech summaries) [On ordered affine Klingenberg planes that can be embedded in projective Klingenberg planes] (84h:51036)

Werner, Michael Zu einer Aussage über die kettengeometrischen Erzeugenden. [On an assertion concerning chain-geometric generators] (84c:51009)

51Dxx Geometric closure systems

51D05 Abstract (Maeda) geometries

51D10 Abstract geometries with exchange axiom

secondary classifications:

Batten, Lynn Margaret A rank-associated notion of independence. (84i:05038)

Brünger, Thomas On certain linear congruence class geometries. (84i:51013)

Marchi, Mario (with Pianta, Silvia) Partial parallelism spaces and slit spaces. (84i:51014)

Pianta, Silvia See Marchi, Mario, (84i:51014)

51D15 Abstract geometries with parallelism

Brünger, Thomas On certain linear congruence class geometries. 84i:51013

Marchi, Mario (with Pianta, Silvia) Partial parallelism spaces and slit spaces. 84i:51014

Mazzocca, Francesco (with Olanda, Domenico) A graphic characterization of the lines of an affine space. 84f:51016

Olanda, Domenico See Mazzocca, Francesco, 84f:51016

Pianta, Silvia See Marchi, Mario, 84i:51014

Rugină, Andrei Foliations of almost affine spaces. 84m:51008

A geometrical almost affine model. 84h:51023

Tecklenburg, Helga Zur algebraischen Darstellung fastaffiner Räume. (English summary) [Algebraic representation of near-affine spaces] 84g:51014

Schließungsaussagen in fastaffinen Räumen. [Configurations in near-affine spaces] 84g:51012

Algebraische Darstellung fastaffiner Ebenen. [Algebraic representation of near-affine planes] 84g:51013

secondary classifications:

André, Johannes On possible orders of noncommutative tactical spaces. (84b:51006)

Beutelspacher, Albrecht Finite semisymmetric designs. (84h:51025)

Marchi, Mario (with Pianta, Silvia) On a class of weak affine spaces. (Italian. English summary) (84i:51004)

Pianta, Silvia See Marchi, Mario, (84i:51004)

51D20 Combinatorial geometries [See also 05B25.]

Crapo, Henry Concurrence geometries. 84k:51008

Grünbaum, Branko (with Shephard, G. C.) Tilings, patterns, fabrics and related topics in discrete geometry. 84g:51015

Shephard, G. C. See Grünbaum, Branko, 84g:51015

Zifber, B. I. Totally categorical structures and combinatorial geometry. (Russian) 84f:51017

secondary classifications:

Borwein, Peter B. The Desmic conjecture. (84i:51006)

Hoskins, J. A. (with Hoskins, W. D.; Street, Anne Penfold; Stanton, Ralph G.) Some elementary isomeric binary matrices. (84h:52018)

Hoskins, W. D. See Hoskins, J. A.; et al., (84h:52018)

Kahn, Jeff (with Kung, Joseph P. S.) Varieties of combinatorial geometries. (84j:05043)

Kung, Joseph P. S. See Kahn, Jeff, (84j:05043)

Sedlář, Vladimír Incidence matrices of finite projective uniform Hjelmslev planes. (Czech. English summary) (84h:51018)

Stanton, Ralph G. See Hoskins, J. A.; et al., (84h:52018)

Street, Anne Penfold See Hoskins, J. A.; et al., (84h:52018)

51D25 Lattices of subspaces [See also 05B35.]

Bennett, Mary Katherine Affine geometry: a lattice characterization. 84g:51016

Bhattarai, Hom Nath An orbit space representation of a geometry. 84k:51009

Gross, Herbert (with Keller, Hans A.) On the problem of classifying infinite chains in projective and orthogonal geometry. 84k:51010

Keller, Hans A. See Gross, Herbert, 84k:51010

secondary classifications:

Faigle, Ulrich On supermatroids with submodular rank function. (84h:05032)

Kung, Joseph P. S. A factorization theorem for comaps of geometric lattices. (84g:05044)

McAsey, Michael J. (with Muhly, Paul S.) On projective equivalence of invariant

subspace lattices. (84f:15004)

Muhly, Paul S. See McAsey, Michael J., (84f:15004)

51D30 Continuous geometries and related topics

secondary classifications:

Halperin, Israel von Neumann's coordinatization theorem. (84m:06016)

Mikhailichenko, G. G. Three-dimensional Lie algebras of the transformations plane. (Russian) (84m:22012)

51D99 None of the above, but in this section

Bhattarai, Hom Nath On certain sets in Pasch geometric modules of dimension three. 84h:51024

secondary classifications:

(Bednarczuk, Jerzy) See Szemielew, Wanda, (84i:51002)

Bhattarai, H. N. (with Fernandez, J. W.) Joins of double coset spaces. (84d:20079)

Richara, Alessandro (with Tallini, Giuseppe) On a characterization of Grassmann space representing the k -dimensional subspaces in a projective space. (84h:51013)

Day, Alan Equational theories of projective geometries. (84h:06008)

Fernandez, J. W. See Bhattarai, H. N., (84d:20079)

Gerla, Giangiacomo Geometry without points. (Italian) (84m:51015)

(Gupta, Haraguri N.) See Szemielew, Wanda, (84i:51002)

(Moszyńska, Maria) See Szemielew, Wanda, (84i:51002)

Shirokov, A. P. Geometry of symmetric polarity in a projective space over an algebra of dual numbers. (Russian) (84m:53027)

Sprague, Alan P. Dual-linear, linear diagrams. (84d:51006)

Szabó, László (with Szendrei, Ágnes) Szupecki-type criteria for quasilinear functions over a finite-dimensional vector space. (German and Russian summaries) (84f:15006)

Szendrei, Ágnes See Szabó, László, (84f:15006)

Szemielew, Wanda On n -ary equivalence relations and their application to geometry. (84i:51002)

Tallini, Giuseppe See Richara, Alessandro, (84h:51013)

51Exx Finite geometry

secondary classifications:

Wilbrink, Hendrikus Adrianus ★ Characterization theorems in finite geometry. (84i:51001)

51E05 General block designs [See also 05B05.]

Beutelspacher, Albrecht Finite semisymmetric designs. 84h:51025

Burton, Catherine T. (with Chakravarti, I. M.) On the commutant algebras corresponding to the permutation representations of the full collineation groups of $PG(k, s)$ and $EG(k, s)$, $s \neq p$, $k \geq 2$. 84i:51015

See also Chakravarti, I. M., 84d:51011 and 84i:51016

Chakravarti, I. M. (with Burton, Catherine T.) Symmetries (group of automorphisms) of Desarguesian finite projective and affine planes and their role in statistical model construction. 84d:51011

(with Burton, Catherine T.) On the algebras of symmetries (groups of collineations) of designs from finite Desarguesian planes with applications in statistics. 84i:51016

See also Burton, Catherine T., 84i:51015

Hine, Timothy C. (with Mavron, Vassili C.) Translations of symmetric and complete nets. 84j:51015

Kimberley, M. E. (with Piper, F. C.; Wild, Peter) The faithful orbit theorem for biplanes. 84c:51005

Mavron, Vassili C. See Hine, Timothy C., 84j:51015

Piper, F. C. See Kimberley, M. E.; et al., 84c:51005

Wild, Peter See Kimberley, M. E.; et al., 84c:51005

secondary classifications:

Beth, Thomas (with Jungnickel, Dieter) Mathieu groups, Witt designs, and Golay codes. (84a:05009)

Beutelspacher, Albrecht ★ Einführung in die endliche Geometrie. I. (German)

[Introduction to finite geometry. I] (84j:05015)

(with Lamberty, Ulf) Strongly resolvable (r, λ) -designs. (84m:05015)

Dehon, Michel On the existence of 2-designs $S_2(2, 3, v)$ without repeated blocks. (84d:05030)

Erdős, Paul (with Mullin, Ronald C.; Sós, Vera T.; Stinson, D. R.) Finite linear spaces and projective planes. (84k:05026)

Feng, Ke Qin (with Wu, Li Sheng; Zhu, Lie) Cycle index of $PGL_2(q)$ and 5-designs on the projective lines. (Chinese) (84a:05011)

Hartman, Alan A survey on resolvable quadruple systems. (See 84d:05039)

Hughes, Daniel R. On the nonexistence of a semisymmetric 3-design with 78 points. (84g:05023)

Semisymmetric 3-designs. (84c:05023)

Jungnickel, Dieter See Beth, Thomas, (84a:05009)

Lamberty, Ulf See Beutelspacher, Albrecht, (84m:05015)

Mullin, Ronald C. See Erdős, Paul; et al., (84k:05026)

Petrenjuk, A. Ja. See Petrenjuk, L. P., (See 84d:05039)

Petrenjuk, L. P. (with Petrenjuk, A. Ja.) An enumeration method for nonisomorphic combinatorial designs. (See 84d:05039)

Piper, F. C. On symmetric designs which admit axial automorphisms. (84j:05020)

de Resmini, Marihuisa J. On sets of type (m, n) in BIBDs with $\lambda \geq 2$. (84g:05026)

Smit-Ghinelli, Dina Automorphisms and generalized incidence matrices of point-divisible designs. (84j:05035)

Sós, Vera T. See Erdős, Paul; et al., (84k:05026)

Stinson, D. R. See Erdős, Paul; et al., (84k:05026)

Wu, Li Sheng See Feng, Ke Qin; et al., (84a:05011)

Zhu, Lie See Feng, Ke Qin; et al., (84a:05011)

51E10 Steiner systems

secondary classifications:

- Assmus, E. F., Jr. Applications of algebraic coding theory to finite geometric problems. (84d:05018)
- Babel, László Almost all Steiner triple systems are asymmetric. (See 84d:05039)
- Bénéteau, Lucien Hall triple systems and related topics. (84f:05021)
- Bergstrand, Deborah J. New uniqueness proofs for the $(5, 8, 24)$, $(5, 6, 12)$ and related Steiner systems. (84d:05029)
- Brouwer, A. E. The uniqueness of the near hexagon on 759 points. (84d:51021)
- Cameron, Peter J. Extremal results and configuration theorems for Steiner systems. (See 84d:05039)
- Colbourn, Marlene J. (with Mathon, Rudolf A.) On cyclic Steiner 2-designs. (See 84d:05039)
- Denniston, R. H. F. The problem of the higher values of t . (See 84d:05039)
- Nonisomorphic reverse Steiner triple systems of order 19. (See 84d:05039)
- Diener, Immo On cyclic Steiner systems $S(3, 4, 22)$. (See 84d:05039)
- Doyen, Jean (with Rosa, Alexander) An updated bibliography and survey of Steiner systems. (See 84d:05039)
- Ganter, Bernhard (with Werner, Heinrich) Co-ordinatizing Steiner systems. (See 84d:05039)
- Gionfriddo, Mario On the set $J(v)$ for Steiner quadruple systems of order $v = 2^n$ with $n > 4$. (84d:05031)
- Hilton, A. J. W. (with Teirlinck, Luc) Dimension in Steiner triple systems. (See 84d:05039)
- Kimberley, M. E. (with Piper, F. C.; Wild, Peter) The faithful orbit theorem for biplanes. (84c:51005)
- Lenz, Hanfried (with Zeidler, Herbert) Arcs and ovals in Steiner triple systems. (84d:05029)
- (Lindner, C. C.) See Topics on Steiner systems. (84d:05039)
- Lo Faro, Giovanni On the size of partial parallel classes in Steiner systems STS(19) and STS(27). (84m:05019)
- Mathon, Rudolf A. See Colbourn, Marlene J., (See 84d:05039)
- Mendelsohn, E. Perpendicular arrays of triple systems. (See 84d:05039)
- Mullin, Ronald C. (with Vanstone, S. A.) Steiner systems and Room squares. (See 84d:05039)
- Phelps, Kevin T. A survey of derived triple systems. (See 84d:05039)
- On cyclic Steiner systems $S(3, 4, 20)$. (See 84d:05039)
- Piper, F. C. See Kimberley, M. E.; et al., (84c:51005)
- Prince, Alan R. Steiner triple systems of order 19 constructed from the Steiner triple system of order 9. (84f:05022)
- Quackenbush, Robert W. Algebraic speculations about Steiner systems. (See 84d:05039)
- Rosa, Alexander Intersection properties of Steiner systems. (See 84d:05039)
- See also Doyen, Jean, (See 84d:05039) and Topics on Steiner systems, (84d:05039)
- Teirlinck, Luc See Hilton, A. J. W., (See 84d:05039)
- Vanstone, S. A. See Mullin, Ronald C., (See 84d:05039)
- Werner, Heinrich See Ganter, Bernhard, (See 84d:05039)
- Wild, Peter See Kimberley, M. E.; et al., (84c:51005)
- Woolbright, David E. On the size of partial parallel classes in Steiner systems. (See 84d:05039)
- Zeidler, Herbert See Lenz, Hanfried, (84g:05029)
- Bibliography:
Steiner systems See Doyen, Jean; et al., (See 84d:05039)
Steiner systems ★Topics on Steiner systems. (84d:05039)
Topics on Steiner systems ★Topics on Steiner systems. (84d:05039)

51E15 Affine and projective planes

- Bartolone, Claudio On some translation planes admitting a Frobenius group of collineations. 84f:51018
- Brown, Julia M. Nowlin Elations of order 3 in projective planes of order 12. 84f:51019
- Bruen, Aiden A. Intersection of Baer subgeometries. 84c:51006
- Bush, K. A. "Cyclic" solutions for finite projective planes. 84f:51020
- Delandtsheer, Anne Some characterizations of finite 3-dimensional projective spaces and affine-projective planes. 84f:51021
- Figueroa, Raúl A family of not (V, I) -transitive projective planes of order q^3 , $q \equiv 1 \pmod{3}$ and $q > 2$. 84f:51022
- Fink, J. B. A note on sharply flag-transitive projective planes. 84c:51007
- Hayden, John L. Association algebras for finite projective planes. 84f:51023
- Hering, Christoph (with Schaeffer, Hans-Jörg) On the new projective planes of R. Figueroa. 84f:51024
- On Beweglichkeit in affine planes. 84k:51011
- Janko, Zvonimir (with Tran Van Trung) The classification of projective planes of order 9 which possess an involution. 84c:51013
- (with Tran Van Trung) Two new semibiplanes. 84c:51014
- Jha, Vikram On spreads admitting large autotopism groups. 84f:51025
- Kantor, William M. On point-transitive affine planes. 84f:51026
- Kuppuswamy Rao, K. See Satyanarayana, K., 84d:51013
- Lemay, Fernand Le dodécaèdre et la géométrie projective d'ordre 5. [The dodecahedron and projective geometry of order 5] 84h:51026
- Lorimer, Peter On projective planes of type $(5, m)$. 84c:51006
- Corrigenda: "On projective planes of type $(6, m)$ " [Math. Proc. Cambridge Philos. Soc. 88 (1980), no. 2, 199-204; MR 81i:51005]. 84c:51008
- Narayana Rao, M. L. (with Satyanarayana, K.) A new class of square order planes. 84h:51027
- Rahilly, Alan On tangentially transitive projective planes. 84d:51012
- Satyanarayana, K. (with Kuppuswamy Rao, K.) Full collineation group of the second of Foulser's flag transitive planes of order 25. 84d:51013
- See also Narayana Rao, M. L., 84h:51027
- Schaeffer, Hans-Jörg See Hering, Christoph, 84f:51024
- Tran Van Trung See Janko, Zvonimir, 84c:51013 and 84c:51014
- Zeidler, Herbert Geometrische Charakterisierung endlicher (K, L) -Ebenen ungerader Ordnung. (English summary) [Geometric characterization of finite (K, L) -planes of odd order] 84c:51015
- secondary classifications:
- Assmus, E. F., Jr. Applications of algebraic coding theory to finite geometric problems. (84c:05018)
- Billotti, Mauro On inherited groups of derivable translation planes. (84h:51008)
- Boerner, Victoria (with Kallaher, Michael J.) Half-Bol quasifields. (84g:51004)
- Dempwolff, Ulrich Grosse Baer-Untergruppen auf Translationsebenen gerader Ordnung. (English summary) [Large Baer subgroups on translation planes of even order] (84h:51010)
- Evans, Anthony B. Metrics in finite affine planes. (84f:51039)
- Jha, Vikram On subgroups and factor groups of $GL(n, q)$ acting on spreads with the same characteristic. (84h:51011)
- Johnson, Norman Lloyd The translation planes of order 16 that admit $SL(2, 4)$. (84b:51009)
- Translation planes of characteristic p that admit $SL(2, p')$. (84f:51009)
- (with Ostrom, Theodore G.) Translation planes of dimension two and characteristic two. (84f:51010)
- Elations in translation planes of order 16. (84c:51007)
- Kallaher, Michael J. (with Kelly, Graham) Line-rank 3 affine planes. (84b:51010)
- (with Ostrom, Theodore G.) Translation planes admitting $SL(n, w)$ with $n \geq 3$. (84c:51008)
- See also Boerner, Victoria, (84g:51004)
- Kelly, Graham See Kallaher, Michael J., (84b:51010)
- Ko, Hai Ping (with Ray-Chaudhuri, Dijen K.) Multiplier theorems. (84f:05019)
- Ostrom, Theodore G. New developments in finite translation planes. (84g:51005)
- See also Kallaher, Michael J., (84c:51006) and Johnson, Norman Lloyd, (84f:51010)
- Pickert, Günter Free mobility in affine planes. (84f:51004)
- Ray-Chaudhuri, Dijen K. See Ko, Hai Ping, (84f:05019)
- Samaga, Hans-Joachim Zur Kennzeichnung von Lorentztransformationen in endlichen Ebenen. (English summary) [On the characterization of Lorentz transforms in finite planes] (84c:51010)
- Sherk, F. A. Translation planes of order 16. (84d:51020)
- Wagner, Ascher Some reflections on the history of the study of finite projective planes. (84h:51002)

51E20 Combinatorial structures in finite projective spaces [See also 05Bxx.]

- Abatangelo, L. Maria Complete arcs in $PG(2, q)$, q even. 84h:51028
- Amici, O. (with Casciaro, B.) The q -arcs of a projective plane over a finite field. (Italian. English summary) 84h:51029
- Biscarini, P. (with Conti, F.) On $(q+2)$ -sets in a non-Desarguesian projective plane of order q . 84a:51007
- Brouwer, A. E. (with Wilbrink, Hendrikus Adrianus) Blocking sets in translation planes. 84f:51027
- Bruen, Aiden A. (with Thas, Joseph Adolphe) Hyperplane coverings and blocking sets. 84c:51016
- Blocking sets and translation nets. 84d:51014
- Cameron, Peter J. Some aspects of "post-classification" geometry. 84g:51017
- Capursi, Mauro Chains of circles obtainable by means of pseudoregular points with respect to a conic in a Galois plane. (Italian. English summary) 84j:51016
- Casciaro, B. See Amici, O., 84h:51029
- Casse, L. R. A. (with Glynn, David G.) The solution to Beniamino Segre's problem $I_{r,q}$, $r=3$, $q=2^k$. 84c:51017
- Ceccherini, Pier Vittorio (with Tallini, Giuseppe) Codes, caps and linear spaces. 84c:51009
- Conti, F. See Biscarini, P., 84a:51007
- Crismale, Michele (q^2+q+1) -sets of type $(0, 1, 2, q+1)$ in translation planes of order q^2 . 84f:51028
- Faina, Giorgio (with Korchmáros, Gábor-Gabriele) A graphic characterization of Hermitian curves. 84m:51009
- de Finis, Massimo (with de Resmini, Marialuisa J.) On spreads of type (m, n) with respect to primes in $PG(4, q)$, q a square. (Italian summary) 84c:51018
- (with de Resmini, Marialuisa J.) On a characterization of subgeometries $PG(r, \sqrt{q})$ in $PG(r, q)$, q a square. 84d:51015
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- Groze-Chioresan, Ioana On the isometries of a Minkowski plane over a field of characteristic 2. (Romanian summary) (84j:51014)
- Hall, S. R. Seminvariant vectors for centred space groups. (84b:20058)
- Kock, Anders The algebraic theory of moving frames. (84f:58002)
- Qualls, Erhard Volle gruppentheoretische Darstellung metrisch-affiner Ebenen auf der Grundlage von Orthogonalspiegelungen. (English and Russian summaries) [Complete group-theoretic description of metrically affine planes on the basis of orthogonal reflections] (84i:51022)
- Schröder, Eberhard M. Eine gruppentheoretisch-geometrische Kennzeichnung der projektiv-metrischen Geometrien. (English summary) [A group-theoretic geometric characterization of the projective-metric geometries] (84a:51008)
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- Lane, N. D. See Baker, Catharine Anne; et al., (84f:51014)
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- Stoyanova, Rumyana (with Chobanov, Ivan) An application of reciprocal repères. (Bulgarian summary) (84m:15022)

51Hxx Topological geometry

51H05 General theory

51H10 Topological linear incidence structures

- Grimeisen, G. Remarks on the continuity of incidence relations in topological planes. 84h:51037a
- Continuous incidence relations of topological planes. 84h:51037b
- Groh, Hans-Joachim Isomorphism types of arc planes. 84i:51015
- Schmidt, Hans-Jürgen Concerning the projective plane. 84e:51015

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- Löwen, Rainer Stable planes with isotropic points. (84d:51023)

51H15 Topological nonlinear incidence structures

51H20 Topological geometries on manifolds [See also 57-XX.]

- Grindlinger, O. M. Interpretations of the exceptional simple Lie groups and their parabolic subgroups. (Russian) 84m:51014
- Löwen, Rainer Stable planes with isotropic points. 84d:51023

- Salzmann, Helmut R. Baer-Kollineationsgruppen der klassischen projektiven Ebenen. [Baer collineation groups of the classical projective planes] 84b:51027
- Compact 16-dimensional projective planes with large collineation groups. 84c:51025

51H25 Geometries with differentiable structure [See also 53Cxx, 53C70.]

51H30 Geometries with algebraic manifold structure [See also 14-XX.]

51H99 None of the above, but in this section

- Gerla, Giangiacomo Geometry without points. (Italian) 84m:51015
- Hoskins, J. A. Factoring binary matrices: a weaver's approach. 84a:51010
- secondary classifications:

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51Jxx Incidence groups

51J05 General theory

51J10 Projective incidence groups

- Faina, Giorgio (with Korchmáros, Gábor-Gabriele) A characterization of the linear group $PGL(2, K)$ and of abstract conics in the sense of Buekenhout. (Italian. English summary) 84h:51028
- Korchmáros, Gábor-Gabriele See Faina, Giorgio, 84h:51028

51J15 Kinematic spaces

- Werner, Michael Zur Darstellung der Automorphismengruppe einer kinematischen Kettengeometrie im Quadrikenmodell. (English summary) [Representation of the automorphism group of a kinematic chain geometry in the quadric model] 84h:51038
- Zur Krümmungskennzeichnung der kinematischen Laguerre-Ketten. (English summary) [On the characterization of curvature of kinematic Laguerre chains] 84h:51039

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- Karger, Adolf Grundlagen der räumlichen kinematischen Geometrie. II. (Czech summary) [Foundations of spatial kinematic geometry. II] (84d:53010)
- Werner, Michael Die klassisch-projektive Natur der Kettengeometrien endlicher Dimension. [The classic-projective nature of the chain geometries of finite dimension] (84f:51012)

51J20 Representation by near-fields and near-algebras [See also 12K05, 16A76.]

- Basile, Alessandro (with Bruti, Paolo) Fibrations of a class of regular near-fields of dimension $t+1$ over the kernel. (Italian) 84m:51016
- Biliotti, Mauro A Dembowski generalisation of the Hughes planes. (Italian. English summary) 84d:51024
- Bruti, Paolo See Basile, Alessandro, 84m:51016

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- Hartmann, Erich Minkowski-Ebenen mit Transitivitätseigenschaften. [Minkowski planes with the property of transitivity] (84d:51009)
- Tecklenburg, Helga Zur algebraischen Darstellung fastaffiner Räume. (English summary) [Algebraic representation of near-affine spaces] (84g:51014)
- Schließungsaussagen in fastaffinen Räumen. [Configurations in near-affine spaces] (84g:51012)
- Algebraische Darstellung fastaffiner Ebenen. [Algebraic representation of near-affine planes] (84g:51013)

51J99 None of the above, but in this section

51Kxx Distance geometry

51K05 General theory

- Andalafte, Edward Z. An intrinsic isosceles four point property which characterizes hyperbolic and Euclidean spaces. 84c:51026
- (with Freese, Raymond W.) An equilateral four point property which characterizes generalized Euclidean spaces. 84j:51026
- Evans, Anthony B. Metrics in finite affine planes. 84f:51039
- Freese, Raymond W. (with Murphy, Grattan) Strictly convex spheres in V -spaces. 84j:51027

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- Murphy, Grattan See Freese, Raymond W., 84j:51027
- Sibley, Thomas Q. Homomorphisms for equidistance relations. 84f:51040
- Yang, Lu (with Zhang, Jing Zhong) A necessary and sufficient condition for embedding a simplex with prescribed dihedral angles in E^n . (Chinese) 84g:51023
- Zhang, Jing Zhong See Yang, Lu, 84g:51023

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- (Blind, G.) See Problems: Discrete geometry, (84c:51003)
- Collings, S. N. Correspondence: "Minimum networks linking four points in a plane" [Bull. Inst. Math. Appl. 15 (1979), no. 8-9, 208-211] by K. Ollerenshaw. (84i:51025b)

Dragunov, V. K. An axiomatic definition of a nonconvex Minkowski metric. (Russian) (84h:51021)

Freese, Raymond W. (with Gähler, Siegfried) Remarks on semi-2-normed spaces. (84h:46008)

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(Wilker, J. B.) See Problems: Discrete geometry, (84c:51003)

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Discrete geometry ★Problems in discrete geometry, 1980. (84c:51003)

51K10 Synthetic differential geometry

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secondary classifications:

Bunge, Marta Synthetic aspects of C^∞ -mappings. (84h:58019)

Busemann, H. New developments in the theory of G-spaces. (See 84g:53003)

Rugini, Andrei Foliations of almost affine spaces. (84m:51008)

51K99 None of the above, but in this section

Assouad, Patrice (with Deza, Michel) ★Metric subspaces of L^1 . 84g:51024

Sous-espaces de L^1 et inégalités hypermétriques. (English summary) [L^1 subspaces and hypermetric inequalities] 84g:51025

Beer, Gerald In which metric spaces are parallel bodies of closed sets closed? 84g:51026

Benz, Walter On mappings preserving a single Lorentz-Minkowski-distance. I. 84i:51041

Crapo, Henry (with Whiteley, Walter) Statics of frameworks and motions of panel structures, a projective geometric introduction. 84b:51029

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Rogalski, Marc Sur la distance de deux espaces de dimension finie, d'après Gluskin. [On the distance of two finite-dimensional spaces in the sense of Gluskin] (84m:46022)

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Sharir, Micha See Schwartz, Jacob T., (84h:70005)

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51Lxx Geometric order structures [See also 53C75.]

51L05 Geometry of orders of nondifferentiable curves

51L10 Directly differentiable curves

Spoar, Gary Differentiable curves of cyclic order four. 84c:51027

51L15 n -vertex theorems via direct methods

51L20 Geometry of orders of surfaces

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Bisztriczky, Tibor C -nodal surfaces of order three. (84j:53079)

51L99 None of the above, but in this section

51Mxx Real and complex geometry

secondary classifications:

Faber, Richard L. ★Foundations of Euclidean and non-Euclidean geometry. (84j:51001)

Melzak, Z. A. ★Invitation to geometry. (84g:51002)

51M05 Euclidean geometries

Barbeau, E. J. Incommensurability proofs: a pattern that peters out. 84g:51027

Bockemüller, E. A. (with Kleinschmidt, W.) Bemerkungen zur Geometrie des Dreiecks.

[Remarks on the geometry of the triangle] 84i:51024

Bottema, O. (with Groenman, J. T.) On symmedians and exsymmedians. (Dutch) 84m:51017

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Jurjut, Ariana (with Văciurețu, Daniel) A generalization to S -triangles. (Romanian) 84g:51030

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Wohlhauser, Alfred Die Dreiecksungleichung für topologische Winkel. [The triangle inequality for topological angles] 84c:51028

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Hsu, Chên Jung Remarks on constructions of new systems of center circles. (84i:51011)

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51M10 Hyperbolic and elliptic geometries

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Jørgensen, Troels (with Näättänen, Marjatta) Surfaces of genus 2: generic fundamental polygons. 84c:51029

Kordos, Marek Elliptic plane as an algebra. (Russian summary) 84j:51032

Näättänen, Marjatta Regular n -gons and Fuchsian groups. 84i:51028

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- Passquali Coluzzi, Dario Cycles, horocycles, hypercycles and symmetries of the hyperbolic plane. (Italian. English summary) **84j:51033**
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- Andras, Nemethi On Euclidean and non-Euclidean plane geometries. (Romanian. German summary) **(84c:53012)**
 Bolinder, E. Folke Geometric network theory. (See **84f:94001**)
 Di Paola, Jane W. Tiling in the hyperbolic plane. **(84d:05062)**
 Dubikajtis, Lech (with Fryda, Jan) Some generalization of the Klein's model. **(84j:51006)**
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 Ewald, Günter Normal forms of isometries. **(84g:51021)**
 Fejes Tóth, László Solid packing of circles in the hyperbolic plane. **(84c:52019)**
 Fryda, Jan See Dubikajtis, Lech, **(84j:51006)**
 Giering, Oswald ★Vorlesungen über höhere Geometrie. (German) [Lectures on higher geometry] **(84c:51002)**
 (Hardt, Johann) See Giering, Oswald, **(84c:51002)**
 Hatcher, Allen Hyperbolic structures of arithmetic type on some link complements. **(84m:57005)**
 Johnson, Norman W. Absolute polarities and central inversions. **(84h:51017)**
 Kelly, Paul Joseph (with Matthews, Gordon) ★The non-Euclidean, hyperbolic plane. **(84h:51001)**
 Kordos, Marek On some union of two Klein models. (Russian summary) **(84j:51005b)**
 Matthews, Gordon See Kelly, Paul Joseph, **(84h:51001)**
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 Sah, Chih Han See Dupont, Johan L., **(84b:53062b)** and **(84m:53060)**
 Series, Caroline Non-Euclidean geometry, continued fractions, and ergodic theory. **(84h:58086)**
 Yamada, Akira On Marden's universal constant of Fuchsian groups. II. **(84h:30073)**

51M15 Geometric constructions

- Adler, Andrew On the bisection method for triangles. **84d:51028**
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 Chang, Geng Zhe (with Davis, Philip J.) Iterative processes in elementary geometry. **84i:51029**
 Davis, Philip J. See Chang, Geng Zhe, **84i:51029**
 Duncan, Donald (with Barnier, William) On trisection, quintisection, ..., etc. **84b:51032**
 Gorbachuk, O. L. (with Onishchuk, V. O.) Problems for construction and extension of fields. (Ukrainian. Russian summary) **84h:51040**
 Monson, B. R. A graphical method for dissecting simplexes. **84j:51034**
 Ochoński, Stanisław (with Szulc, Andrzej) Approximate construction projections of an equilateral triangle in sections of trihedral prisms and pyramids. (Polish. English and Spanish summaries) **84h:51041**
 Onishchuk, V. O. See Gorbachuk, O. L., **84h:51040**
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 Sieber, Helmut Zur Konstruktion des Krümmungskreises einer Ellipse in einem allgemeinen Ellipsenpunkt. [On the construction of the circle of curvature of an ellipse in a general ellipse point] **84j:51035**
 Szulc, Andrzej See Ochoński, Stanisław, **84h:51041**
 Sukhina, I. A. (with Shcheglova, N. I.) Graphic method of solution of certain problems with a hyperbola. (Russian) **84d:51029**
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- Apostolova, M. P. See Skopets, Z. A., **(84j:51039)**
 Bulanov, S. N. See Popova, T. G., **(84m:51024)**
 Burt, Michael The wandering vertex method. **(84f:51046)**
 Führer, Lutz Die Kreisberechnung als Brennspeigel der Schulmathematik. I. [The computation of the circle as a focus in school mathematics. I.] **(84i:51001a)**
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 Klislin, V. V. On the question of construction of a model of the geometry of an object in three-dimensional space. (Russian) **(84f:52005)**
 Lambert, Johann Heinrich ★Essai sur la perspective (août 1752). (French) [Essay on perspective (August 1752)] **(84c:01031)**
 (Laurent, Roger) See Lambert, Johann Heinrich, **(84c:01031)**
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 Popova, T. G. (with Bulanov, S. N.) Measurement of distances in the space \mathbb{R}^2 , interpretable by means of balls in the space \mathbb{R}^3 . (Russian) **(84m:51024)**
 Skopets, Z. A. (with Apostolova, M. P.) Representation of P_3 on a plane by means of a congruence of bisectors of the norm curve C^2 . (Bulgarian. English and Russian summaries) **(84j:51039)**
 (Taton, René) See Lambert, Johann Heinrich, **(84c:01031)**
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51M20 Polyhedra and polytopes; regular figures, division of spaces [See also 51F15.]

- Alexanderson, G. L. (with Wetzel, John E.) Erratum: "Arrangements of planes in space" [Discrete Math. **34** (1981), no. 3, 219–240; MR **82i:51028**]. **84c:51018**

- Burt, Michael The wandering vertex method. **84f:51046**
 Cassidy, Charles (with Lord, Graham) A square acutely triangulated. **84j:51036**
 Danzer, Ludwig (with Schulte, E.) Reguliäre Inzidenzkomplexe. I. (English summary) [Regular incidence complexes. I.] **84c:51042**
 Doyen, Jean (with Landuyt, M.) Dissections of polygons. (See **84c:05001**)
 Dress, Andreas W. M. A combinatorial theory of Grünbaum's new regular polyhedra. I. Grünbaum's new regular polyhedra and their automorphism group. **84j:51037**
 Fisher, J. C. (with Ruoff, D.; Shilleto, J.) Polygons and polynomials. **84c:51036**
 Hoggar, S. G. Two quaternionic 4-polytopes. **84h:51033**
 Hortic, Berndt (with Razen, Reinhard; Schöpf, Peter) n -Färbungen der Ebene, wobei jede Gerade k -färbig ist. [n -colorings in the plane where every straight line is k -colored] **84f:51047**
 Ignatenko, V. F. The general equation of an algebraic surface with the symmetry group of the polyhedron 2_{21} . (Russian) **84c:51036**
 Landuyt, M. See Doyen, Jean, (See **84c:05001**)
 Lord, Graham See Cassidy, Charles, **84j:51036**
 Mackay, Alan L. Six regular polygons at a four-connected vertex. **84d:51030**
 Razen, Reinhard See Hortic, Berndt; et al., **84f:51047**
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 Spanicciati, Renata Some classes of polyhedra that are regular under equiaffinity. (Italian. English summary) **84m:51020**
 Szepesvári, István On the number of uniform polyhedra. I, II. (Hungarian) **84c:51031**
 Tschampel, Lothar Über Symmetrien ebener n -Ecke. [On symmetries of plane n -gons] **84f:51048**
 Verardi, Libero An incidence structure associated with n lines in the real projective plane. (Italian. English summary) **84c:51016**
 Weissbach, Bernulf Durchmesser regulärer sphärischer Simplexe. [Diameter of regular spherical simplices] **84c:51017**
 Wetzel, John E. See Alexanderson, G. L., **84c:51018**
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 Gilbert, William J. An easy way to construct spacefillings. **(84j:52018)**
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 Golle, Jörg See Börner, Walter, **(84c:52009)**
 Greene, Curtis (with Zaslavsky, Thomas) On the interpretation of Whitney numbers through arrangements of hyperplanes, zonotopes, non-radon partitions, and orientations of graphs. **(84c:05032)**
 Hermeline, F. Triangulation automatique d'un polyèdre en dimension n . (English summary) [Automatic triangulation of an n -dimensional polyhedron] **(84c:52002)**
 Hilton, Peter J. (with Pedersen, Jean) Approximating any regular polygon by folding paper. **(84i:10012)**
 Hoggar, S. G. A complex polytope as generalized quadrangle. **(84c:51013)**
 Hoskins, J. A. Factoring binary matrices: a weaver's approach. **(84a:51010)**
 Kirkpatrick, David G. Optimal search in planar subdivisions. **(84b:68042)**
 Lambert, Timothy Drawing hyperbolic tilings. **(84i:52021)**
 Makeev, V. V. Universal coverings. II. (Russian) **(84d:52005)**

- Mansfield, Richard How many slopes in a polygon? (84j:03074)
 Markowsky, George See Wesley, M. A., (84i:52002)
 Miyazaki, Koji A model of the 120-cell and some spatial arrangements derived from four kinds of pentagons. (84j:52004)
 ★Katachi to kukan. (Japanese) [Shape and space] (84i:52006)
 Monson, B. R. A graphical method for dissecting simplexes. (84j:51034)
 Paz, A. Geometry versus topology in map grammars. (See 84i:68006)
 Pedersen, Jean Combinatorics, group theory and geometric models. (84i:51002)
 See also Hilton, Peter J., (84i:10012)
 Petrie, J. F. See Coxeter, Harold S. M.; et al., (84i:52010)
 Pokrovskii, V. G. Decompositions of n -dimensional parallelepipeds. (Russian) (84i:52014)
 Racult, B. See Farges, J.; et al., (84i:82053)
 Riblet, Gordon P. Linear eigenvalue-S-matrix element relations for the regular polyhedra. (84i:94025)
 Robertson, Jack M. See DeTemple, Duane W., (84g:52002)
 Sah, Chih Han Scissors congruences. I. The Gauss-Bonnet map. (84b:53062a)
 See also Dupont, Johan L., (84b:53062b)
 Sallee, John F. A triangulation of the n -cube. (84d:05065b)
 Schoenberg, Isaac J. The harmonic analysis of skew polygons as a source of outdoor sculptures. (84d:52011)
 Schwulow, Heiner See Böhm, Johannes, (84d:52008)
 Torchet, G. See Farges, J.; et al., (84i:82053)
 Toussaint, Godfried T. Decomposing a simple polygon with the relative neighborhood graph. (See 84b:94004)
 Wachs, Michelle L. Minimum cost partitions of a rectangle. (84c:05045)
 Wagon, Stanley Partitioning intervals, spheres and balls into congruent pieces. (84g:52025)
 Wesley, M. A. (with Markowsky, George) Fleshing out projections. (84i:52002)
 Wilker, J. B. The geometer as consultant. (84c:00021)
 Zamorzaeva, E. A. Regular Dirichlet partitioning for two-dimensional similarity symmetry groups. (Russian) (84i:51036)
 Zaslavsky, Thomas Bircular geometry and the lattice of forests of a graph. (84h:05050e)
 See also Greene, Curtis, (84i:05032)
 Zelinka, Bohdan Isomorphism and mononormality of woven fabrics. (Russian and Czech summaries) (84i:52017)

51M25 Length, area and volume [See also 26B15.]

- Carroll, C. E. Proof of Oppenheim's area inequalities for triangles and quadrilaterals. (84i:51021)
 Kharazishvili, A. B. On the general theory of volume. (Russian. English and Georgian summaries) (84i:51018)
 Meidman, S. I. See Soltan, V. P., 84i:51031
 Olson, A. T. The decomposition of polygons. (84i:51022)
 Popa, Emil C. Some geometric inequalities. (Romanian) (84g:51032)
 Soltan, V. P. (with Meidman, S. I.) ★Тождества и неравенства в треугольнике. (Russian) [Identities and inequalities in a triangle] (84i:51031)
 Tanno, Shōkichi Some functions on the set of triangles or quadrangles. (84i:51019)
 Yang, Lu See Zhang, Jing Zhong, 84j:51038
 Zhang, Jing Zhong (with Yang, Lu) A class of geometric inequalities concerning systems of mass points. (Chinese. English summary) (84j:51038)

secondary classifications:

- Fejes Tóth, László Remark on a theorem of Rényi and Sulanke. (Hungarian) (84j:52012)
 Some researches inspired by H. S. M. Coxeter. (84i:52017)
 Ihle, Wolfgang Eigenschaften gewisser Vierecke, die axialsymmetrischen Bereichen um- bzw. eingeschrieben sind. [Properties of certain quadrilaterals that are circumscribed around or inscribed within axially symmetric domains] (84i:52006)
 Linhart, Johann Über eine Ungleichung für die Oberfläche und den Umkugelradius eines konvexen Polyeders. [On an inequality for the surface and the circumspherical radius of a convex polyhedron] (84g:52018)
 Moran, P. A. P. The surface area of an ellipsoid. (84g:52004)
 Novotná, Jarmila A sharpening of discrete analogues of Wirtinger's inequality. (Russian summary) (84i:52019)
 Scott, P. R. Area, width and diameter of planar convex sets with lattice point constraints. (84j:52015)
 Seidenberg, Abraham Ratio of arc to chord. (84i:52009)
 Tarraro, Irena Division of a sphere into curvilinear triangles with equal surface area. (Polish) (84b:51036)
 Weissbach, Bernulf Durchmesser regulärer sphärischer Simplexe. [Diameter of regular spherical simplexes] (84i:51017)
 Yang, Lu (with Zhang, Jing Zhong) A generalisation to several dimensions of the Neuberger-Pedoe inequality, with applications. (84j:52016)
 Zhang, Jing Zhong See Yang, Lu, (84j:52016)

51M30 Line geometries and their generalizations

- Abdel, N. H. See Soliman, M. A., 84g:51035
 Adasiewicz, Henryk (with Robak, Czesław) Die polar-schiefe Transformation des Raumes W^3 in eine lineare Kongruenz von Geraden. [The polar-skew transformation of the space W^3 to a linear congruence of straight lines] (84g:51033)
 Apostolova, M. P. See Skopets, Z. A., 84j:51039
 (Gochwind, Peter) See Ziegler, Renatus, 84i:51032
 Koźniewski, Edwin Bipolar projection of three-dimensional space. (Polish. English and Spanish summaries) (84g:51034)
 Affine properties of bipolar projection. (Polish. English summary) (84h:51044)
 Robak, Czesław See Adasiewicz, Henryk, 84g:51033

- Skopets, Z. A. (with Apostolova, M. P.) Representation of P_3 on a plane by means of a congruence of bisecants of the norm curve C^3 . (Bulgarian. English and Russian summaries) (84j:51039)
 Soliman, M. A. (with Abdel, N. H.) Line complexes immersed in a projective space with ruled absolute. (84g:51035)
 Ziegler, Renatus ★Synthetische Liniengeometrie. (German) [Synthetic line geometry] (84i:51032)

secondary classifications:

- Adasiewicz, Henryk Die Transformation des Raumes der Geraden in eine Menge der ebenen Kurven vierten Grades mit einem Tripelpunkt. [The transformation of the space of lines into a set of plane curves of fourth degree having a triple point] (84i:51053)
 Bichara, Alessandro (with Mazzocca, Francesco) On a characterization of the Grassmann spaces associated with an affine space. (84j:51010)
 Jasiniak, Zbigniew (with Knitter, Konrad) Suite périodique de polarités symétriques gauches et de complexes linéaires associés à ces polarités. [Periodic sequences of skew-symmetric polarities and of linear complexes associated with these polarities] (84i:51049)
 Keller, Ott-Heinrich Supplements to my work: "The homology groups of the manifold which consists of the linear k -spaces on a nondegenerate $2k$ -quadric" [Beiträge Algebra Geom. No. 9 (1980), 161-169; MR 83e:14038]. (German) (84h:14064)
 Klass, Reinhold Über die Reflexion von Geradenbündeln an Flächen. (English summary) [On the reflection of bundles of straight lines through surfaces] (84j:53014)
 Knitter, Konrad See Jasiniak, Zbigniew, (84i:51049)
 Korczak, Eugeniusz On some transformation on the Plücker's quadric and its inverse image in the space of straight lines. (Spanish summary) (84i:51047)
 Mazzocca, Francesco See Bichara, Alessandro, (84j:51010)

51M35 Synthetic treatment of fundamental manifolds in projective geometries (Grassmannians, Veronesians and their generalizations) [See also 14M15.]

- Adasiewicz, Henryk (with Koźniewski, Edwin) Über eine Konstruktion der ebenen Kurve dritten Grades mit dem Doppelpunkt. [Construction of a third degree plane curve with a double point] (84i:51045)
 (with Koźniewski, Edwin) Über eine Konstruktion des Kegelschnittes, der mit einem gegebenen Kegelschnitt in der Ponceletschen Konfiguration ist. (Polish summary) [On a construction of the conic section that lies in the Poncelet configuration with given conic section] (84i:51046)
 Fedorov, A. K. See Obukhova, V. S., 84j:51040
 Herzer, Armin Die Schmieghyperbenen an die Veronese-Mannigfaltigkeit bei beliebiger Charakteristik. (English summary) [The osculating hyperplanes to the Veronese manifold in the case of arbitrary characteristic] (84g:51036)
 Korczak, Eugeniusz On some transformation on the Plücker's quadric and its inverse image in the space of straight lines. (Spanish summary) (84i:51047)
 Koźniewski, Edwin (with Zabowski, Jerzy) Die Menge der schieben Kurven dritter Ordnung als Modell der Räume von Geraden. [The set of skew curves of third order as model of the spaces of straight lines] (84g:51037)
 See also Adasiewicz, Henryk, 84i:51045 and 84h:51046
 Obukhova, V. S. (with Fedorov, A. K.) Construction of straight lines on a nonruled surface Ω^3 and automation of their search. (Russian) (84j:51040)
 Panella Martinelli, Luigia Circular Veronese manifolds. (Italian. English summary) (84i:51033)
 Zabowski, Jerzy See Koźniewski, Edwin, 84g:51037

secondary classifications:

- Bisztriczky, Tibor C -nodal surfaces of order three. (84j:53079)
 Burau, Werner Some considerations and examples of algebraic curves and surfaces treated synthetically using the Veronesean. (Italian) (84i:14034)
 Contiglozzi Penna, Anna Maria Some properties of Veronese surfaces. (Italian) (84i:14035)
 Di Fiore, Lora (with Freni Casale, Sveva) On the Grassmannians contained in a given Grassmannian. (Italian. English summary) (84i:14044)
 (with Freni Casale, Sveva) More on the Grassmannians contained in a given Grassmannian. (Italian. English summary) (84j:14053)
 Freni Casale, Sveva See Di Fiore, Lora, (84i:14044) and (84j:14053)
 Georgiev, G. Kh. (with Skopets, Z. A.) Cremona transformation of a plane on a plane by the norm-surface $V_2^3(2; 2)$ in P_3 . (Bulgarian. English and Russian summaries) (84g:51041)
 Jasiniak, Zbigniew On a certain closed chain of the twisted cubic curves C^3 received with help of involutorial cubic transformation of Cremona. (84h:14017)
 Menkova, D. I. Some properties and projections of a general norm-surface V_2^4 of the space P_3 . (Bulgarian. English and Russian summaries) (84g:51040)
 Skopets, Z. A. See Georgiev, G. Kh., (84g:51041)

51M99 None of the above, but in this section

- Kaplenko, E. F. On the question of triples and quadruples of subspaces of a finite-dimensional vector space. (Russian) (84j:51041)
 secondary classifications:
 Cowan, Thaddeus M. Turning a Penrose triangle inside out. (84h:92043)
 Crapo, Henry Concurrence geometries. (84i:51008)
 Hammesley, J. M. Oxford commemoration ball. (84g:53018)
 Schaal, Hermann Zur Bestimmung der Quadratwurzeln affiner Abbildungen im $A^2(\mathbb{R})$. [On determining the square roots of affine mappings in $A^2(\mathbb{R})$] (84f:51005)

- Wagon, Stanley The use of shears to construct paradoxes in \mathbb{R}^2 . (84d:28017)
 Zucco, Andrea Sur une des conjectures de B. Grünbaum concernant les familles continues de courbes. (Italian summary) [On one of B. Grünbaum's conjectures concerning continuous families of curves] (84d:52015)

51Nxx Analytic and descriptive geometry

51N05 Descriptive geometry

- von Baravalle, Hermann ★ Darstellende Geometrie nach dynamischer Methode. (German) [Descriptive geometry based on the dynamic method] 84b:51034
 Bohne, Erhart Beleuchtungsgeometrische Eigenschaften von Scharen algebraischer Kurven und Flächen 2. und 6. Ordnung. [Illumination-geometric properties of families of algebraic curves and surfaces of second and sixth order] 84a:51013
 Booss, B. Quantitative Analyse geometrischer Objekte-Digitalgeometrie aus der Sicht der "reinen Mathematik". (English summary) [Quantitative analysis of geometric object-digital geometry from the viewpoint of "pure mathematics"] (See 84c:00016)
 Borş, Maria On the axonometric orthogonal projections of a circle. (Romanian. French summary) 84b:51035
 Bugaer, V. I. A graph for representation of pencils of circles enveloped by second-order curves. (Russian) 84j:51042
 Bulanov, S. N. See Popova, T. G., 84m:51024
 Geise, Gerhard See Stammiller, Ludwig, 84a:51014
 Glogovskii, V. V. Group-theoretic representation of graphic mappings. (Russian) 84c:51033
 Kobzdej, Tadeusz Deformation in the skew mapping of a spherical system on a plane system. (Polish. English and Spanish summaries) 84m:51023
 Popova, T. G. (with Bulanov, S. N.) Measurement of distances in the space \mathbb{R}^4 , interpretable by means of balls in the space \mathbb{R}^3 . (Russian) 84m:51024
 Reutter, Fritz ★ Darstellende Geometrie. Band I. (German) [Descriptive geometry. Vol. I] 84b:51048
 Stammiller, Ludwig (with Geise, Gerhard) Hyperbelkonstruktionen bei Ausgleichsgeraden und ein verallgemeinerter Pohlke'scher Satz. [Constructions of hyperbolas with regression lines and a generalized Pohlke theorem] 84a:51014
 Sugihara, Kōichi A unifying approach to descriptive geometry and mechanisms. 84d:51031
 Vasilescu, Elisabeta Methods of descriptive geometry—applications. (Romanian. German summary) 84d:51032

secondary classifications:

- Adasiewicz, Henryk Skew-polar projection of three-dimensional space. (Polish. English and Spanish summaries) (84m:51026)
 Askarov, Yu. A. Construction of the lines of architectural ornaments on curved surfaces. (Russian) (84f:01009)
 Denisjuk, I. N. Nomogram-transparent. (Russian) (84f:65120)
 Gromov, Yu. S. See Kobko, V. P.; et al., (84h:51051)
 Khasanov, V. Kh. (with Osipov, V. A.) The theory of design and calculation of directrices. (Russian) (84c:53009)
 Khovanskii, G. S. Methods of construction of a scale nomogram from equidistant points for the form $w = p(u)q(v)$ with rectilinear uniform reciprocal scale of intersections of w . (Russian) (84f:65121)
 Kirichenko, A. F. (with Kutsenko, L. N.) Description of the tooth surface of three-dimensional gears by an equation in implicit form. (Russian) (84h:70004)
 Kobko, L. N. See Kobko, V. P.; et al., (84h:51051)
 Kobko, V. P. (with Gromov, Yu. S.; Kobko, L. N.) On the question of construction of an axonometry. (Russian) (84h:51051)
 Kutsenko, L. N. See Kirichenko, A. F., (84h:70004)
 Laatsch, Richard Pyramidal sections in taxicab geometry. (84b:51015)
 Loskiewicz, Genowefa Spatial interpretation of sets of projection lines of collinear sets of points (the TR model). (Polish. English and Spanish summaries) (84m:51027)
 Ochotski, Stanisław (with Szulc, Andrzej) Approximate construction projections of an equilateral triangle in sections of trihedral prisms and pyramids. (Polish. English and Spanish summaries) (84h:51041)
 Osipov, V. A. See Khasanov, V. Kh., (84c:53009)
 Pretki, Czesław Generalized foci of conic sections. (Polish. English summary) (84m:51029)
 Szulc, Andrzej See Ochotski, Stanisław, (84h:51041)
 Ulshöfer, Klaus Zur darstellenden Geometrie in der Sekundarstufe II. IV. Über die Zentralprojektion im Kupferstich "Der heilige Hieronymus im Gehäus" von Albrecht Dürer. [Descriptive geometry for the upper level of secondary schools. IV. On the central projection in the engraving "Saint Jerome in his cell" by Albrecht Dürer] (84d:01046)
 Weiss, Gunter Eine räumliche Deutung der Viereitseigenschaft von Bodenmiller. [A spatial interpretation of the quadrilateral property of Bodenmiller] (84d:51025)
 Záh, Stanislav Eutactic stars. (84d:51026)

51N10 Affine analytic geometry

- Arkhipenkova, I. F. See Filippov, P. V., 84c:51034
 Filippov, P. V. (with Arkhipenkova, I. F.) Graph-analytic description of certain hyperquadrics of E^4 . (Russian) 84c:51034
 Klix, Wolf-Dieter Ansätze für einen intervallmathematischen bzw. logisch dreiwertigen Aufbau der analytischen Geometrie. [Initial approaches to an analytic geometry based on interval-mathematics, respectively, on three-valued logic] 84m:51025

secondary classifications:

- Evdiokimova, R. I. The theory of curves in a generalized bilinear space. (Russian) (84b:53007a)
 The theory of surfaces in a generalized bilinear space. (Russian) (84b:53007b)

- Spanicciati, Renata Some classes of polyhedra that are regular under equiaffinity. (Italian. English summary) (84m:51020)
 Tölke, Jürgen Zu den affinen Zwangsläufen bei denen sich die Punkte eines Kegelschnitts auf Geraden bewegen. [On the affine forced motions in which the points of a conic move on straight lines] (84g:53017)

51N15 Projective analytic geometry

- Adasiewicz, Henryk Skew-polar projection of three-dimensional space. (Polish. English and Spanish summaries) 84m:51026
 Jasiniak, Zbigniew (with Knitter, Konrad) Suite périodique de polarités symétriques gauches et de complexes linéaires associés à ces polarités. [Periodic sequences of skew-symmetric polarities and of linear complexes associated with these polarities] 84h:51049
 Kaczmarek, Jerzy The cyclic correlations of the r th order in the n -dimensional projective space. 84c:51034a
 The cyclic anticorrelations of the r th order in the n -dimensional projective space. 84c:51034b
 On a certain conics system satisfying reciprocally the Poncelet's configuration. (Spanish summary) 84j:51043
 Knitter, Konrad Collineations cycliques d'Hermite. (Spanish summary) [Cyclic Hermite collineations] 84g:51038
 See also Jasiniak, Zbigniew, 84h:51049
 Loskiewicz, Genowefa Spatial interpretation of sets of projection lines of collinear sets of points (the TR model). (Polish. English and Spanish summaries) 84m:51027

secondary classifications:

- Arcliacono, Giuseppe The de Sitter-Castelnuovo universe in cosmology and microphysics. (Italian) (84c:83047)
 Kobzdej, Tadeusz Deformation in the skew mapping of a spherical system on a plane system. (Polish. English and Spanish summaries) (84m:51023)
 Kozniowski, Edwin Bipolar projection of three-dimensional space. (Polish. English and Spanish summaries) (84g:51034)
 Affine properties of bipolar projection. (Polish. English summary) (84h:51044)
 Yff, Peter A triangle property in trilinear coordinates. (84h:51052)

51N20 Euclidean analytic geometry

- Bektenov, A. S. Configurations in spatial nets. (Russian) 84c:51035
 Beyer, Gert Untersuchungen zur Krümmung von Kurven zweiter Ordnung in der Ebene und Kurven vierter Ordnung erster Art im Raum. [Investigations on the curvature of curves of second order in the plane and curves of fourth order of the first kind in space] 84c:51020
 Eine Variante zur Bestimmung der Schnittkurve zweier Flächen zweiter Ordnung. [A variant for the determination of the intersection curve of two surfaces of second order] 84c:51021
 Bulanov, S. N. See Popova, T. G., 84i:51037
 Cardoso, Jayme Machado See Coifman, M., 84d:51033
 Coifman, M. (with Cardoso, Jayme Machado) Cissoids as special cases of cycloids. (Portuguese) 84d:51033
 Ehrhart, Eugène Über eine Klasse von Eilinen und Eiflächen. [On a class of ovoids and convex surfaces] 84c:51022
 Geise, Gerhard Eine die Kegelschnitte charakterisierende Eigenschaft. [A property characterizing conics] 84h:51050
 Giblin, P. J. Parallels. 84c:51035
 Gromov, Yu. S. See Kobko, V. P.; et al., 84h:51051
 Jedryka, Halina J. A simple method of investigating the general equation of conics. (Polish. English summary) 84i:51036
 Karger, Adolf Euclidean space motions with affinely equivalent trajectories. (Czech summary) 84c:51036
 Kobko, L. N. See Kobko, V. P.; et al., 84h:51051
 Kobko, V. P. (with Gromov, Yu. S.; Kobko, L. N.) On the question of construction of an axonometry. (Russian) 84h:51051
 Kobzdej, Tadeusz A family of Perseus curves. (Polish. English summary) 84f:51049
 Navrotskii, A. F. (with Nikulin, N. A.) Vector-cissoidal transformation of a space. (Russian) 84c:51037
 Nikulin, N. A. See Navrotskii, A. F., 84c:51037
 Obukhova, V. S. (with Vorobkevich, R. I.) A parabolic torse. (Russian) 84c:51038
 Popova, T. G. (with Bulanov, S. N.) On the question of orthogonalization in \mathbb{R}^4 , interpretable by means of balls in \mathbb{R}^3 . (Russian) 84i:51037
 Pottmann, Helmut Über affine zykloloidale Radlinien. [On affine cycloidal cycloids] 84m:51028
 Pretki, Czesław Generalized foci of conic sections. (Polish. English summary) 84m:51029
 Sieber, Helmut Wie die Konstruktionen von Rytz und Jacobi miteinander zusammenhängen. [How the constructions of Rytz and Jacobi are connected] 84j:51044
 Stachel, H. Eine Ortsaufgabe und der Satz von Ivory. [A position problem and Ivory's theorem] 84j:51045
 Tarraro, Irena Division of a sphere into curvilinear triangles with equal surface area. (Polish) 84b:51036
 Toscano, Letterio Sur quelques propriétés des paraboles de Artzt. (English summary) [On some properties of Artzt parabolas] 84a:51015
 Vorobkevich, R. I. See Obukhova, V. S., 84c:51038
 Yff, Peter A triangle property in trilinear coordinates. 84h:51052
 Zenkin, O. V. Approximate analytical description of planar curves. (Russian) 84d:51034

secondary classifications:

- Berger, É. G. See Tabatskov, V. P., (84f:53008)
 Dubikajtis, Lech (with Guciora, Henryk) On affine transformations of Cartesian plane. (84f:51001)

- Glaser, Georg Die konoidalen Rotoidenstrahlflächen. [The conoidal rotoid ray surfaces] (84m:53006)
- Greub, W. H. A parametric representation of the sphere with p handles. (84j:53004)
- Góiciora, Henryk See Dubikajtis, Lech. (84f:51001)
- Hübner, Fritz Veranschaulichung von Gruppeneigenschaften an Sechsecken. [Display of group properties on hexagons] (84f:51043)
- Kiy, Gabriele Euklidische Räume beliebiger Dimension im Aufbau der Geometrie aus dem Spiegelungsbegriff. (English and Russian summaries) [The concept of reflections in the foundation of Euclidean spaces of arbitrary dimension] (84a:51014)
- Liu, Ding Yuan A theorem on the convexity of plane Bézier curves of degree n . (Chinese. English summary) (84a:41047)
- Meidman, S. I. See Soltan, V. P., (84f:51031)
- Milnor, John On the geometry of the Kepler problem. (84f:70008)
- Shcheglova, N. I. See Sukhina, I. A., (84d:51029)
- Sieber, Helmut Zur Konstruktion des Krümmungskreises einer Ellipse in einem allgemeinen Ellipsenpunkt. [On the construction of the circle of curvature of an ellipse in a general ellipse point] (84f:51035)
- Soltan, V. P. (with Meidman, S. I.) ★Тождества и неравенства в треугольнике. (Russian) [Identities and inequalities in a triangle] (84f:51031)
- Sukhina, I. A. (with Shcheglova, N. I.) Graphic method of solution of certain problems with a hyperbola. (Russian) (84d:51029)
- Tabatkov, V. P. (with Berger, E. G.) Formation of surfaces by the bending method. (Russian) (84f:53008)
- Tanno, Shikichi Some functions on the set of triangles or quadrangles. (84e:51019)
- Tölke, Jürgen See Zita de Carvalho Braga, M., (84b:53008)
- Vencelj, Marija Euler line and the incenter of a triangle. (Slovenian. English summary) (84j:51030)
- Xie, Zi Tian A closed space curve on which no five equipartition points lie on a sphere. (Chinese) (84g:53006)
- Zita de Carvalho Braga, M. (with Tölke, Jürgen) Kinematische Anwendungen der Kurvenapproximation durch zirkuläre Kurven dritter Ordnung. (English and Serbo-Croatian summaries) [Kinematic applications of curve approximation via circular curves of third order] (84b:53008)

51N25 Analytic geometry with other transformation groups

- Palman, Dominik Dupinsche Zykliden des einfach isotropen Raumes. [Dupin cyclides of the simply isotropic space] (84f:51050)
- Vetter, Wilhelm Das Gegenstück zur logarithmischen Spirale in der ebenen isotropen Geometrie. [The analogue of the logarithmic spiral in plane isotropic geometry] (84g:51039)

secondary classifications:

- Khovanskii, A. G. (with Khovanskii, G. S.) Transformation of nomograms from aligned points and with a parallel index into nomograms from equidistant points, and investigation of their adaptability. (Russian) (84m:65141)
- Khovanskii, G. S. See Khovanskii, A. G., (84m:65141)
- Kordos, Marek Elliptic plane as an algebra. (Russian summary) (84j:51032)
- Pasquali Coluzzi, Dario Cycles, horocycles, hypercycles and symmetries of the hyperbolic plane. (Italian. English summary) (84f:51033)
- Radzhabov, G. A. Three-dimensional metric spaces with vector support planes, admitting the group of motions G_4 . (Russian) (84j:53018a)
- Addendum: "Three-dimensional spaces with vector support planes, admitting a group of motions G_4 ." (Russian) (84j:53018b)
- Weiss, Asia Ivić On isoclinal sequences of spheres. (84h:51018)

51N30 Geometry of classical groups [See also 20Gxx, 14Lxx.]

- Kapustka, Emanuel On Klein's affine pseudo-Euclidean geometries. (Russian and Polish summaries) (84f:51019)
- Völklein, Helmut Transitivitätsfragen bei linearen Gruppen. [Transitivity problems in linear groups] (84j:51046)

secondary classifications:

- Đoković, Dragomir Ž. Products of positive reflections in real orthogonal groups. (84m:20054)

51N35 Questions of classical algebraic geometry [See also 14Nxx.]

- Adasiewicz, Henryk Die Transformation des Raumes der Geraden in eine Menge der ebenen Kurven vierten Grades mit einem Tripelpunkt. [The transformation of the space of lines into a set of plane curves of fourth degree having a triple point] (84h:51053)
- Dymitrow, Georgi A projective construction of ruled quadrics. (Polish. English summary) (84f:51038)
- Properties and application of a polar bicentral transformation. (Polish. English summary) (84j:51047)
- Fellmann, Jerzy A transformation with respect to a space curve of order three. (Polish. English summary) (84m:51030)
- Georgiev, G. Kh. (with Skopets, Z. A.) Cremona transformation of a plane on a plane by the norm-surface $V_2^2(2; 2)$ in P_3 . (Bulgarian. English and Russian summaries) (84g:51041)
- Godkov, D. A. (with Usachev, A. E.) Nonsingular curves of lower orders on a hyperboloid. (Russian) (84m:51031)
- (with Shustin, E. I.) Classification of nonsingular eighth-order curves on an ellipsoid. (Russian) (84m:51032)
- Knitter, Konrad Suites périodiques des involutions et des anti-involutions de la droite projective complexe. [Periodic sequences of involutions and anti-involutions of the projective line] (84m:51033)

(with Mańkowski, Czesław) Suites périodiques de polarités dans l'espace projectif complexe à n dimensions. [Periodic sequences of polarities in n -dimensional complex projective space] (84m:51034)

- Koźmiński, Edwin Über eine Eigenschaft des Büschels von ebenen Kurven n -ter Ordnung mit dem $(n-1)$ -fachen Punkt. [On a property of the pencil of plane curves of n th order with the $(n-1)$ -fold point] (84j:51048)
- Langov, A. S. An invariant of a pair of circular curves of degree m with a common $m(-1)$ -tuple point in the geometry of cubic birational transformations. (Bulgarian. English and Russian summaries) (84j:51049)
- Mankowski, Czesław Periodic sequences of polar hyperquadrics in an n -dimensional projective space. (Polish. English summary) (84m:51035)
- See also Knitter, Konrad, (84m:51034)
- Matla, Roman (with Żabowski, Jerzy) An involution in the space P^3 . (Polish. English summary) (84f:51039)
- Menichetti, Giampaolo Commutative division algebras. (84f:51051)
- Menkova, D. I. Some properties and projections of a general norm-surface V_2^4 of the space P_5 . (Bulgarian. English and Russian summaries) (84g:51040)
- Peklich, V. A. Dual stereographic projection of bisectants of a two-dimensional cubic norm-surface. (Russian) (84h:51037)
- Shustin, E. I. See Godkov, D. A., (84m:51032)
- Skopets, Z. A. See Georgiev, G. Kh., (84g:51041)
- Stanilova, L. R. Transformation of the rulings of a three-dimensional surface with a double plane. (Bulgarian. English and Russian summaries) (84h:51054)
- Syarova, A. B. An involutive space transformation $I_{3,4,3}$, associated with a hypernet $\Sigma(2, 4)$ of lines in P_4 . (Bulgarian. English and Russian summaries) (84h:51055)
- A group of quadratic Cremona transformations of a special type in the space P_5 . (Bulgarian. English and Russian summaries) (84h:51056)
- Usachev, A. E. See Godkov, D. A., (84m:51031)
- Żabowski, Jerzy See Matla, Roman, (84f:51039)

secondary classifications:

- Beyer, Gert Untersuchungen zur Krümmung von Kurven zweiter Ordnung in der Ebene und Kurven vierter Ordnung erster Art im Raum. [Investigations on the curvature of curves of second order in the plane and curves of fourth order of the first kind in space] (84e:51020)
- Eine Variante zur Bestimmung der Schnittkurve zweier Flächen zweiter Ordnung. [A variant for the determination of the intersection curve of two surfaces of second order] (84e:51021)
- Du Val, Patrick Crystallography and Cremona transformations. (84h:52013)
- Ignatenko, V. F. The general equation of an algebraic surface with the symmetry group of the polyhedron 2_{31} . (Russian) (84c:51030)
- Korczak, Eugeniusz On some transformation on the Plücker's quadric and its inverse image in the space of straight lines. (Spanish summary) (84h:51047)
- Vaccaro, Giuseppe Differential characteristics of algebraic entities. (Italian) (84j:53013)
- Waterhouse, William C. Real classification of complex quadrics. (84b:10028)

51N99 None of the above, but in this section

- Bottema, O. On conics which pass through two given points and touch three given lines. (Dutch) (84c:51020)

secondary classifications:

- Khovanskii, A. G. (with Khovanskii, G. S.) Methods of nomographing some relations, based on the use of two-parameter families of lines, circles and ellipses. (Russian) (84c:65137)
- Khovanskii, G. S. See Khovanskii, A. G., (84c:65137)
- Schwartz, Jacob T. (with Sharir, Micha) On the "piano movers" problem. I. The case of a two-dimensional rigid polygonal body moving amidst polygonal barriers. (84h:70005)
- Sharir, Micha See Schwartz, Jacob T., (84h:70005)

52-XX CONVEX SETS AND RELATED GEOMETRIC TOPICS

52-01 Elementary exposition, textbooks

- Bolyanskii, V. G. Combinatorial geometry. (Russian) (84a:52001)

secondary classifications:

- Brøndsted, Arne ★An introduction to convex polytopes. (84d:52009)
- (Hrusa, William J.) See Troutman, John L., (84f:49001)
- Troutman, John L. ★Variational calculus with elementary convexity. (84f:49001)

52-02 Advanced exposition (research surveys, monographs, etc.)

- Rogers, C. A. Some problems in the geometry of convex bodies. (84b:52001)

52-03 Historical (must also be assigned at least one classification number from Section 01)

- Gericke, Helmuth Zur Geschichte des isoperimetrischen Problems. [On the history of the isoperimetric problem] (84c:52001)

secondary classifications:

- (Descartes, René) See Federico, Pasquale Joseph, (84c:01024)
- Federico, Pasquale Joseph ★Descartes on polyhedra. (84c:01024)
- Yaglom, I. M. Elementary geometry, then and now. (84h:01059)

52-04 Explicit machine computation and programs (not the theory of computation or programming)

- Ald, Selim G. A constant-time parallel algorithm for computing convex hulls. **84c:52001**
- Avis, David (with Toussaint, Godfried T.) An optimal algorithm for determining the visibility of a polygon from an edge. **84a:52002**
- Bär, Gert Ein neuer Sichtbarkeitsalgorithmus zur graphischen Darstellung von Polyedern. [A new visibility algorithm for the graphic representation of polyhedra] **84b:68142b**
- Bhattacharya, Binay K. (with Toussaint, Godfried T.) Efficient algorithms for computing the maximum distance between two finite planar sets. **84c:52001**
- Engel, Peter On the enumeration of polyhedra. **84c:52001**
- Gram, Chr. See Johansen, Gunner Helweg. **84f:52001**
- Güting, Ralf Hartmut Stabbing C-oriented polygons. **84c:52002**
- Hermeline, F. Triangulation automatique d'un polyèdre en dimension n . (English summary) [Automatic triangulation of an n -dimensional polyhedron] **84c:52002**
- Highnam, P. T. The ears of a polygon. **84b:52002**
- Johansen, Gunner Helweg (with Gram, Chr.) A simple algorithm for building the 3D convex hull. **84f:52001**
- Kawai, Satoru Topology preserving parallel operations on hexagonal lattice points. **84b:52003**
- Lee, Yong Tsui (with Requicha, Aristides A. G.) Algorithms for computing the volume and other integral properties of solids. I. Known methods and open issues. **84a:52003a** (with Requicha, Aristides A. G.) Algorithms for computing the volume and other integral properties of solids. II. A family of algorithms based on representation conversion and cellular approximation. **84a:52003b**
- Lingas, Andrzej Heuristics for minimum edge length rectangular partitions of rectilinear figures. (See **84b:68003**)
- Markowsky, George See Wesley, M. A., **84i:52002**
- Nelson, David R. See Rubinstein, Michael. **84i:52001**
- Post, Mark J. A minimum spanning ellipse algorithm. (See **84a:68004**)
- Requicha, Aristides A. G. See Lee, Yong Tsui. **84a:52003**
- Rubinstein, Michael (with Nelson, David R.) Order and deterministic chaos in hard-disk arrays. **84i:52001**
- Schwartz, Jacob T. Finding the minimum distance between two convex polygons. **84a:52004**
- Soisalon-Soininen, Eljas On computing approximate convex hulls. **84g:52001**
- Soleev, A. An algorithm for calculating Newton polyhedra. (Russian) **84d:52001**
- Toussaint, Godfried T. See Avis, David. **84a:52002** and Bhattacharya, Binay K., **84c:52001**
- Wesley, M. A. (with Markowsky, George) Fleshing out projections. **84i:52002**
- Zamožik, Jozef (with Zatková, Viera) Testing of convex polyhedron visibility by means of graphs. (Russian and Slovak summaries) **84a:52005**
- Zatková, Viera See Zamožik, Jozef. **84a:52005**

secondary classifications:

- Avis, David On the complexity of finding the convex hull of a set of points. (**84g:68023**)
- Baker, Brenda S. (with Brown, Donna J.; Katseff, Howard P.) A $5/4$ algorithm for two-dimensional packing. (**84i:68057**)
See also Brown, Donna J.; et al., (**84i:68058**)
- Bengtsson, Bengt-Erik Packing rectangular pieces—a heuristic approach. (**84b:52019**)
- Brown, Donna J. (with Baker, Brenda S.; Katseff, Howard P.) Lower bounds for on-line two-dimensional packing algorithms. (**84i:68058**)
See also Baker, Brenda S.; et al., (**84i:68057**)
- Edelsbrunner, Herbert (with Welzl, Emmerich) On the number of equal-sized semispaces of a set of points in the plane. (See **84c:68004**)
- Feinberg, V. Z. See Landa, A. B.; et al., (**84f:65011**)
- Green, P. J. Peeling bivariate data. (See **84c:62005**)
- Hu, Te Chiang (with Shing, Man Tak) An $O(n)$ algorithm to find a near-optimum partition of a convex polygon. (**84a:68040**)
- Katseff, Howard P. See Baker, Brenda S.; et al., (**84i:68057**) and Brown, Donna J.; et al., (**84i:68058**)
- Kim, Chul E. (with Sklansky, Jack) Digital and cellular convexity. (**84c:68111**)
- Landa, A. B. (with Nosov, L. V.; Feinberg, V. Z.) A nonenumerative algorithm for constructing the boundary of a union of plane polygonal regions. (Russian. English summary) (**84f:65011**)
- Lozano-Pérez, Tomás Spatial planning: a configuration space approach. (**84c:68125**)
- Mäntylä, Martti Computational topology: a study of topological manipulations and interrogations in computer graphics and geometric modeling. (**84c:00031**)
- Nosov, L. V. See Landa, A. B.; et al., (**84f:65011**)
- Rubinstein, R. Y. Generating random vectors uniformly distributed inside and on the surface of different regions. (**84c:65018**)
- Shing, Man Tak See Hu, Te Chiang. (**84a:68040**)
- Sklansky, Jack See Kim, Chul E., (**84c:68111**)
- Welzl, Emmerich See Edelsbrunner, Herbert. (See **84c:68004**)
- Yao, Andrew Chi Chih A lower bound to finding convex hulls. (**84g:68032**)
On constructing minimum spanning trees in k -dimensional spaces and related problems. (**84g:68033**)

52-06 Proceedings, conferences, etc.

- (Gruber, Peter M.) See Convexity and its applications. **84m:52001**
- (Wills, Jörg M.) See Convexity and its applications. **84m:52001**
- Convexity and its applications ★Convexity and its applications. **84m:52001**

secondary classifications:

- (Shashkin, Yu. A.) See Combinatorial properties of convex sets and graphs. (**84g:05004**)
- (Ustinov, G. M.) See Combinatorial properties of convex sets and graphs. (**84g:05004**)

Combinatorial properties of convex sets and graphs ★Комбинаторные свойства выпуклых множеств и графов. (Russian) [Combinatorial properties of convex sets and graphs] (**84g:05004**)

52A01 Axiomatic and generalized convexity

- Bennett, Mary Katherine Lattices arising in convexity. **84c:52003**
- Degreef, Eric On the Carathéodory number of a gluing of two convexity structures with finite intersection. **84f:52002**
Glued convexity spaces, frames and graphs. **84f:52003**
- Fourné, René Le collage d'enveloppes est une amalgamation. (English summary) [The gluing of hulls is an amalgamation] **84b:52002**
- Jamison-Waldner, Robert E. On convexity and the geometry of hyperplane complements. **84i:52003**
- Janos, Ludvik (with Rosenfeld, Azriel) Some results on fuzzy (digital) convexity. **84b:52004**
- Jongmans, F. Cris et chuchotements des cônes. [Cries and whispers of cones] **84c:52003**
- Lassak, Marek Carathéodory's and Helly's dimensions of products of convexity structures. **84c:52004**
Superior estimation of Carathéodory's dimension for n -cell convexity. **84c:52005**
- Rosenfeld, Azriel See Janos, Ludvik. **84b:52004**
- Sierksma, Gerard A cone condition for convexity spaces. **84b:52005a**
See also Valette, Guy. **84b:52005b**
- Soltan, V. P. Some questions of the axiomatic theory of convex sets. (Russian) **84b:52003**
- Valette, Guy Addendum to: "A cone condition for convexity spaces" [Bull. Soc. Math. Belg. Sér. B 34 (1982), no. 1, 41–48; MR 84b:52005a] by G. Sierksma. **84b:52005b**
- van de Vel, M. Two-dimensional convexities are join-hull commutative. **84m:52002**
secondary classifications:
- De Smet, H. J. P. See van Maaren, H., (**84m:08003b**)
- van Maaren, H. A degree theorem and decision methods for algebras of affine forms. (**84m:08002**)
(with De Smet, H. J. P.) Extremal points, separation and Carathéodory, Helly and Radon numbers in nonreal linear spaces. (**84m:08003b**)
- Mädler, Jürgen See Teschke, Lothar. (**84b:20049**)
- Sierksma, Gerard Generalized Radon partitions in convexity spaces. (**84f:52007**)
- Sizer, Walter S. Convex polytopes and retractions of abelian groups. (**84c:20027**)
- Skornyakov, L. A. Convexors. (**84j:68003**)
- Soltan, V. P. Elements of convex programming in the axiomatic theory of convexity. (Russian) (**84d:90085**)
- Sontag, Eduardo D. Remarks on piecewise-linear algebra. (**84b:52015**)
- Teschke, Lothar (with Mädler, Jürgen) Groups and join spaces. (**84b:20049**)
- van de Vel, M. Finite-dimensional convex structures. II. The invariants. (**84m:52015**)

52A05 Convex sets without dimension restrictions

- Bair, Jacques Strict separation of several convex sets. **84b:52006**
(with Jongmans, F.) Du bon usage des cônes dans l'aménagement de la Tour de Babel. (English summary) [Cones put to good use in the layout of the Tower of Babel] **84c:52006**
- Dubois, C. (with Jongmans, F.) Invitation à la gestion des stocks de cônes. (English summary) [Invitation to the inventory control of cones] **84b:52004**
- Jongmans, F. See Bair, Jacques. **84c:52006** and Dubois, C., **84b:52004**
secondary classifications:
- Bertraneu, A. (with Fichtel, B.) Étude de la frontière de l'ensemble des formes quadratiques positives, sur un espace vectoriel de dimension finie. [Study of the boundary of the set of positive quadratic forms on a finite-dimensional vector space] (**84f:15032**)
- Brooks, J. N. A note on a counterexample of Delgado. (**84i:53073**)
- Fichtel, B. See Bertraneu, A., (**84f:15032**)
- Freese, Raymond W. (with Murphy, Gratian) Strictly convex spheres in V -spaces. (**84j:51027**)
- Gajda, Z. On H -smooth and H -convex sets in linear spaces. (Serbo-Croatian summary) (**84d:46016**)
- Jamison-Waldner, Robert E. On convexity and the geometry of hyperplane complements. (**84i:52003**)
- Murphy, Gratian See Freese, Raymond W., (**84j:51027**)
- Narang, Tulsi Das Best approximation and strict convexity of metric spaces. (**84f:41037**)
- Thron, Reinhard Nonlinear vector optimization and isolated elements. (**84c:49016**)
- White, Albert G., Jr. A new characterization of strict 2-convexity. (**84g:46036**)

52A07 Convex sets in topological vector spaces [See also 46A55.]

- Engl, Heinz W. (with Kirsch, Andreas) On the continuity of the metric projection onto a convex set subject to an additional constraint. (Italian summary) **84c:52007**
- Kirsch, Andreas See Engl, Heinz W., **84c:52007**
- Liu, Liang Shen A theorem of extreme boundary. **84a:52006**
- Tomova, A. V. A set of line segments in the space c_0 . (Bulgarian. English and Russian summaries) **84m:52003**

secondary classifications:

- Bakhtina, A. A. (with Bogachev, B. M.) Inclusion of the class of almost minihedral cones in the class of pseudominihedral cones. (Russian) (**84j:46006**)
- Bogachev, B. M. See Bakhtina, A. A., (**84j:46006**)
- Fonf, V. P. Polyhedral Banach spaces. (Russian) (**84j:46018**)
- Fourné, René Automorphism groups of lattices of closed convex sets. (**84a:46021**)

- Kadets', M. I. The connection between several convexity properties of the unit sphere of a Banach space. (Russian) (84c:46014)
- Klee, Victor Dispersed Chebyshev sets and coverings by balls. (84c:41036)
- Lotz, H. P. (with Porta, Horacio) On extreme points. (84c:46033)
- Naidu, S. V. R. See Sastry, K. P. R., (84c:46003)
- Polonskii, Yu. A. See Zabotin, V. I., (84d:90089)
- Porta, Horacio See Lotz, H. P., (84c:46033)
- Robert, Alain Michel Meilleure approximation linéaire et espaces euclidiens. [Best linear approximation and Euclidean spaces] (84c:46020)
- Rogalski, Marc Sur le quotient volumique d'un espace de dimension finie. [The volume quotient of a finite-dimensional space] (84j:46032)
- Sastry, K. P. R. (with Naidu, S. V. R.) Uniform convexity and strict convexity in metric linear spaces. (84c:46003)
- Schlott, Carsten On the volume of unit balls in Banach spaces. (84c:46040)
- Szapiel, Maria (with Szapiel, Wojciech) Extreme points of convex sets. IV. Bounded typically real functions. (Russian summary) (84c:30017c)
- Szapiel, Wojciech Extreme points of convex sets. II. Influence of normalization on integral representations. (Russian summary) (84c:30017a)
- Extreme points of convex sets. III. Montel's normalization. (Russian summary) (84c:30017b)
- See also Szapiel, Maria, (84c:30017c)
- Zabotin, V. I. (with Polonskii, Yu. A.) Preconvex sets and mappings, and their applications to extremal problems. (84d:90089)

52A10 Convex sets in 2 dimensions

- Beck, József On a problem of L. Fejes Tóth concerning "nontransparent" directions. (84c:52005)
- Blind, G. Zerlegung eines konvexen Gebiets in konvexe Gebiete. [Decomposition of a convex domain into convex domains] (84c:52002)
- Breen, Marilyn A Krasnosel'skii-type theorem for nonclosed sets in the plane. (84c:52007)
- DeTemple, Duane W. (with Robertson, Jack M.) A billiard path characterization of regular polygons. (84c:52002)
- Edelsbrunner, Herbert (with Kirkpatrick, David G.; Seidel, Raimund) The shape of a set of points in the plane. (See 84f:68004)
- Eggleston, H. G. Vector sums of Valentine convex sets. (84j:52001)
- The maximal inradius of the convex cover of a plane connected set of given length. (84c:52004)
- Falconer, K. J. On the equireciprocal point problem. (84c:52004)
- Fejes Tóth, László Approximation of convex domains by polygons. (84c:52002)
- Hle, Wolfgang Eigenschaften gewisser Vierecke, die axialsymmetrischen Bereichen um- bzw. eingeschrieben sind. [Properties of certain quadrilaterals that are circumscribed around or inscribed within axially symmetric domains] (84c:52006)
- Kenderov, Pet' r S. Polygonal approximation of plane convex compacta. (84c:52005)
- Kirkpatrick, David G. See Edelsbrunner, Herbert; et al., (See 84f:68004)
- Matte, Udo See Stammler, Ludwig, (84c:52008)
- Prisakaru, K. F. (with Soltan, P. S.) Partition of a planar domain into d -convex parts and its application. (Russian) (84c:52006)
- Robertson, Jack M. See DeTemple, Duane W., (84c:52002)
- Seidel, Raimund See Edelsbrunner, Herbert; et al., (See 84f:68004)
- Soltan, P. S. See Prisakaru, K. F., (84c:52006)
- Stammler, Ludwig (with Matte, Udo) Zerlegung eines Ovals in zwei kongruente Gebiete. [Decomposition of an oval into two congruent domains] (84c:52008)
- Strang, Gilbert The width of a chair. (84c:52005)
- Wang, Kai Ning An elementary proof of the problem of Fermat points in a convex n -gon. (Chinese) (84j:52002)
- Weissbach, Bernulf Über (m/n) -Orbiformen und ihre Durchmesser. [On (m/n) -orbiforms and their diameters] (84c:52009)
- Zhivkov, Nikolai V. Plane polygonal approximation of bounded convex sets. (84c:52003)

secondary classifications:

- Akl, Selim G. A constant-time parallel algorithm for computing convex hulls. (84c:52001)
- Barnette, David Nonconvex vertices of polyhedral 2-manifolds. (84c:52008)
- Florian, A. Über die Durchlässigkeit einer Schicht konvexer Scheiben. [On the permeability of a layer of convex discs] (84h:52020)
- Gardner, R. J. (with Kwapien, S.; Laurie, D. P.) Some inequalities related to planar convex sets. (84c:52018)
- Goodey, P. R. (with Woodcock, M. M.) Intersections of convex bodies with their translates. (84c:52014)
- Mean square inequalities for chords of convex sets. (84f:52009)
- Hu, Te Chiang (with Shing, Man Tak) An $O(n)$ algorithm to find a near-optimum partition of a convex polygon. (84c:68040)
- Kwapien, S. See Gardner, R. J.; et al., (84c:52018)
- Laurie, D. P. See Gardner, R. J.; et al., (84c:52018)
- Luh, Jiang (with Putcha, Mohan S.) When do two regions commute? (84m:28010)
- Pach, János (with Rogers, C. A.) Partly convex Peano curves. (84m:54036)
- Pucci, Carlo A maximum property of the ellipse. (Italian) (84h:52021)
- Putcha, Mohan S. See Luh, Jiang, (84m:28010)
- Rogers, C. A. See Pach, János, (84m:54036)
- Scott, P. R. Area, width and diameter of planar convex sets with lattice point constraints. (84j:52015)
- Shing, Man Tak See Hu, Te Chiang, (84c:68040)
- Soisalon-Soininen, Eija On computing approximate convex hulls. (84c:52001)
- Tasmuratur, S. S. Different ways of converting a nonconvex polygonal line into a convex one. (Russian) (84m:51019)
- Wegner, Gerd Zu einem ebenen Überdeckungsproblem. [On a plane covering problem] (84c:52029)
- Woodcock, M. M. See Goodey, P. R., (84c:52014)
- Yao, Andrew Chi Chih A lower bound to finding convex hulls. (84g:68032)

52A15 Convex sets in 3 dimensions

- Chazelle, Bernard A decision procedure for optimal polyhedron partitioning. (84m:52004)
- Chen, Han Lin (with Kuang, Zhi Quan) Criteria for convexity of a surface. I. (Chinese. English summary) (84c:52007a)
- (with Kuang, Zhi Quan) Criteria for convexity of a surface. II. (Chinese. English summary) (84c:52007b)
- (with Kuang, Zhi Quan) Criteria for convexity of a surface. III. (Chinese) (84c:52007c)
- Kuang, Zhi Quan See Chen, Han Lin, (84c:52007)
- Moran, P. A. P. The surface area of an ellipsoid. (84c:52004)
- Pamfilos, P. On the shadow lines of a convex surface. (84c:52007)

secondary classifications:

- Goodey, P. R. (with Woodcock, M. M.) Intersections of convex bodies with their translates. (84c:52014)
- Gram, Chr. See Johansen, Gunner Helweg, (84f:52001)
- Gurin, A. M. Estimation of the number of closed convex polyhedra with equiangular vertices. (Russian) (84c:52013)
- Johansen, Gunner Helweg (with Gram, Chr.) A simple algorithm for building the 3D convex hull. (84f:52001)
- Kočandrlová, Milada Isoperimetrische Ungleichung für geschlossene Raumsechsecke. (English, Russian and Czech summaries) [Isoperimetric inequality for closed spatial hexagons] (84c:52010)
- Strang, Gilbert The width of a chair. (84c:52005)
- Woodcock, M. M. See Goodey, P. R., (84c:52014)

52A20 Convex sets in n dimensions

- Barmish, B. Ross (with Sankaran, Jaishankar) On a class of polytope intersection problems. (See 84c:94001)
- Betke, U. (with McMullen, P.) Estimating the sizes of convex bodies from projections. (84c:52005)
- Breen, Marilyn LNC points for m -convex sets. (84c:52008)
- A decomposition theorem for N_1 -convex sets. (84c:52008)
- Fedorov, V. P. Polar representation of a convex compactum. (Russian) (84c:52009)
- Gainanov, D. N. Partition of a space by convex cones. (Russian) (84c:52010)
- Goffin, Jean-Louis (with Hoffman, Alan J.) On the relationship between the Hausdorff distance and matrix distances of ellipsoids. (84h:52007)
- Golubiatnikov, V. P. On the determination of the form of a body from its projections. (Russian) (84c:52003)
- Goodey, P. R. Connectivity and freely rolling convex bodies. (84c:52007)
- Homothetic ellipsoids. (84c:52006)
- Groemer, H. Extremal convex sets. (84c:52003)
- Gruber, Peter M. (with Tichy, Robert Franz) Isometries of spaces of compact or compact convex subsets of metric manifolds. (84c:52008)
- (with Kenderov, Pet' r S.) Approximation of convex bodies by polytopes. (84d:52004)
- Hoffman, Alan J. See Goffin, Jean-Louis, (84h:52007)
- Katchalski, Meir (with Liu, Andy C. F.) Intersection patterns of families of convex sets. (84c:52011)
- Kenderov, Pet' r S. See Gruber, Peter M., (84d:52004)
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- Lynch, Terence The geometric body in Dürer's engraving *Melencholia I*. (84g:01024)
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- Pedersen, Jean Combinatorics, group theory and geometric models. (84b:51002)
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- Sizer, Walter S. Convex polytopes and retractions of abelian groups. (84c:20027)
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- Szepevári, István On the number of uniform polyhedra. I, II. (Hungarian) (84c:51031)
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- Zaslavsky, Thomas See Greene, Curtis, (84c:05032)
- 52A30 Invariants of convex sets (star-shaped, (m, n) -convex, etc.)
- Breen, Marilyn Points of local nonconvexity and sets which are almost starshaped. (84c:52012)
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- Assouad, Patrice Plongements isométriques dans L^1 : aspect analytique. [Isometric embeddings in L^1 : analytic aspect] (84c:52017a)
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- Cheban, Ya. I. See Soltan, V. P., (84j:52010)
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Böhm, Johannes (with Schwulow, Heiner) Eine Zerlegung von vierdimensionalen euklidischen und nichteuklidischen Simplex in Orthoscheme. (English and Russian summaries) [A decomposition of four-dimensional Euclidean and non-Euclidean simplexes into orthoschemes] (84d:52008)

Brown, Donna J. See Baker, Brenda S.; et al., (84i:60057)

Brun, Viggo On some problems in solid geometry inspired by virology. (84g:52009)

Burt, Michael The wandering vertex method. (84f:51046)

Calderbank, Robert On uniformly packed $[n, n-k, 4]$ codes over $GF(q)$ and a class of caps in $PG(k-1, q)$. (84f:51012)

Cartier, Pierre Les arrangements d'hyperplans: un chapitre de géométrie combinatoire. [Arrangements of hyperplanes: a chapter of combinatorial geometry] (84d:32017)

Cleaver, C. See Giel, C., (84j:46019)

Conway, John Horton (with Sloane, N. J. A.) Leech roots and Vinberg groups. (84b:10048)

(with Sloane, N. J. A.) The Coxeter-Todd lattice, the Mitchell group, and related sphere packings. (84i:10032)

Di Paola, Jane W. Tiling in the hyperbolic plane. (84d:05062)

Ebbinghaus, H.-D. Undecidability of some domino connectivity problems. (84c:03083)

Fried, David (with Goldman, William M.) Three-dimensional affine crystallographic groups. (84d:20047)

Giel, C. (with Cleaver, C.) Packing spheres in C_p spaces. (84j:46019)

Goldberg, Michael On the space-filling decahedra. (84j:52003)

Goldman, William M. See Fried, David, (84d:20047)

Grünbaum, Branko (with Shephard, G. C.) Tilings, patterns, fabrics and related topics in discrete geometry. (84g:51015)

Harman, Glyn Sums of distances between points of a sphere. (84b:52016)

Katseff, Howard P. See Baker, Brenda S.; et al., (84i:60057)

Kennedy, John W. (with Quintas, Louis V.) Extremal f -trees and embedding spaces for molecular graphs. (84a:05023)

Kriksin, Yu. A. The porosity of densely packed powder consisting of spherical particles. (Russian) (84a:76040)

Lassak, Marek An estimate concerning Borsuk partition problem. (Russian summary) (84j:52014)

van Leeuwen, Jan See Wijnhoff, H. A. G., (See 84b:68003)

Lin, Chong Keang Mathematical designs. I. Tessellations of plane. (84i:05043)

Mannion, David Sequential random displacements of points in an interval. (84g:60021)

McLarnan, T. J. The numbers of polytypes in close-packings and related structures. (84c:05010)

Näätänen, Marjatta Regular n -gons and Fuchsian groups. (84i:51028)

Nelson, David R. See Rubinstein, Michael, (84i:52001)

Odlyzko, Andrew M. (with Sloane, N. J. A.) A theta-function identity for nonlattice packings. (84e:10039)

Pokrovskii, V. G. Decompositions of n -dimensional parallelepipeds. (Russian) (84d:52014)

Quintas, Louis V. See Kennedy, John W., (84a:05023)

Rubinstein, Michael (with Nelson, David R.) Order and deterministic chaos in hard-disk arrays. (84i:52001)

Schwulow, Heiner See Böhm, Johannes, (84d:52008)

Shephard, G. C. See Grünbaum, Branko, (84g:51015)

Sloane, N. J. A. See Conway, John Horton, (84b:10048); Odlyzko, Andrew M., (84e:10039) and Conway, John Horton, (84i:10032)

Szabó, Sándor Rational tilings by n -dimensional crosses. (84c:05034)

Toussaint, Godfried T. See Avis, David, (84a:52002)

Wieting, Thomas W. ★ The mathematical theory of chromatic plane ornaments. (84b:51043)

Wijnhoff, H. A. G. (with van Leeuwen, Jan) Periodic versus arbitrary tessellations of the plane using polyominoes of a single type (extended abstract). (See 84b:68003)

Ye, Yi Ning Packing spheres in Orlicz sequence spaces. (Chinese. English summary) (84a:46020)

Zamorzeva, E. A. Regular Dirichlet partitioning for two-dimensional similarity symmetry groups. (Russian) (84f:51036)

52A50 Hilbert geometry [See also 51Kxx.]

Yang, Lu (with Zhang, Jing Zhong) The concept of the rank of an abstract distance geometry. (Chinese) 84j:52019

Zhang, Jing Zhong See Yang, Lu, 84j:52019

secondary classifications:

Andalafte, Edward Z. An intrinsic isosceles four point property which characterizes hyperbolic and Euclidean spaces. (84c:51026)

Guggenheimer, Heinrich The Hilbert model of hyperbolic geometry. (84b:51031)

Yang, Lu (with Zhang, Jing Zhong) A note on a simplex with odd integral edge lengths. (Chinese. English summary) (84b:52009)

(with Zhang, Jing Zhong) A necessary and sufficient condition for embedding a simplex with prescribed dihedral angles in E^n . (Chinese) (84g:51023)

Yao, Andrew Chi Chih On constructing minimum spanning trees in k -dimensional spaces and related problems. (84g:60033)

Zhang, Jing Zhong See Yang, Lu, (84b:52009) and (84g:51023)

52A55 Spherical and hyperbolic convexity

secondary classifications:

Bezdek, A. Solid packing of circles in the hyperbolic plane. (84c:52017)

Fejes Tóth, László Some researches inspired by H. S. M. Coxeter. (84c:52017)

52A99 Miscellaneous topics

secondary classifications:

Barnette, David Generating the triangulations of the projective plane. (84f:57009)

All triangulations of the projective plane are geometrically realizable in E^4 . (84f:57010)

Crippen, Gordon M. See Havel, Timothy F.; et al., (84c:92037)

Havel, Timothy F. (with Kuntz, Irwin D.; Crippen, Gordon M.) The theory and practice of distance geometry. (84c:92037)

Kuntz, Irwin D. See Havel, Timothy F.; et al., (84c:92037)

Meyerson, Mark D. Balancing acts. (84d:52015)

53-XX DIFFERENTIAL GEOMETRY (For differential topology, see 57Rxx. For foundational questions of differentiable manifolds, see 58Axx.)

53-01 Elementary exposition, textbooks

Bel'ko, I. (with Fedenko, A.; Gusak, A. A.; Nakhimovskaya, A. I.; Ryabushko, A. P.; Tutaev, L. K.; Vedernikov, V. I.; Vodnev, V.) ★ Recueil d'exercices de géométrie différentielle. (French) [A collection of problems in differential geometry] 84m:53001

do Carmo, Manfredo Perdigão ★ Geometria riemanniana. (Portuguese) [Riemannian geometry] 84b:53001

Dubrovin, B. A. (with Novikov, S. P.; Fomenko, A. T.) ★ Géométrie contemporaine. Méthodes et applications. I. (French) [Modern geometry. Methods and applications. I]

84m:53002a (with Novikov, S. P.; Fomenko, A. T.) ★ Géométrie contemporaine. Méthodes et applications. II. (French) [Modern geometry. Methods and applications. II]

84m:53002b (Embarek, Djilali) See Bel'ko, I.; et al., 84m:53001

Faber, Richard L. ★ Differential geometry and relativity theory. 84c:53001

Fedenko, A. See Bel'ko, I.; et al., 84m:53001

Fomenko, A. T. See Dubrovin, B. A.; et al., 84m:53002

Gdowski, Bogusław ★ Elementy geometrii różniczkowej z zadaniami. (Polish) [Elements of differential geometry with exercises] 84c:53002

Gusak, A. A. See Bel'ko, I.; et al., 84m:53001

Klotz, Benno ★ Einführung in die Differentialgeometrie. I. (German) [Introduction to differential geometry. I] 84d:53001

Kobayashi, Shoshichi (with Nomizu, Katsumi) ★ Основы дифференциальной геометрии. Том I. (Russian) [Foundations of differential geometry. Vol. I] 84b:53002

(with Nomizu, Katsumi) ★ Основы дифференциальной геометрии. Том II. (Russian) [Foundations of differential geometry. Vol. II] 84c:53001

Kocharovskii, V. G. See Kovantsov, M. I.; et al., 84i:53001

(Kotliar, Vladimir) See Dubrovin, B. A.; et al., 84m:53002

Kovantsov, M. I. (with Zrazhevskaya, G. M.; Kocharovskii, V. G.; Mikhailovskii, V. I.) ★ Дифференциальная геометрия, топология, тензорный анализ. (Russian) [Differential geometry, topology, tensor analysis] 84i:53001

Kozhamskulov, T. A. (with Murzagaliev, G. D.) ★ Элементы тензорного исчисления в евклидовом пространстве. (Russian) [Elements of tensor calculus in Euclidean space] 84c:53003

Mikhailovskii, V. I. See Kovantsov, M. I.; et al., 84i:53001

Murzagaliev, G. D. See Kozhamskulov, T. A., 84c:53003

Nakhimovskaya, A. I. See Bel'ko, I.; et al., 84m:53001

Nomizu, Katsumi See Kobayashi, Shoshichi, 84b:53002 and 84c:53001

Novikov, S. P. See Dubrovin, B. A.; et al., 84m:53002a and 84m:53002b

Ryabushko, A. P. See Bel'ko, I.; et al., 84m:53001

(Sabirin, L. V.) See Kobayashi, Shoshichi; et al., 84b:53002 and 84c:53001

(Sabitov, I. Kh.) See Thorpe, John A., 84b:53001

Simmonds, James G. ★ A brief on tensor analysis. 84b:53002

Tenenblat, Ketil ★ Transformações de superfícies e aplicações. (Portuguese) [Transformations of surfaces and applications] 84b:53001

Thorpe, John A. ★ Начальные главы дифференциальной геометрии. (Russian) [Beginning chapters in differential geometry] 84b:53001

Tutaev, L. K. See Bel'ko, I.; et al., 84m:53001

Vaisman, Izu ★ A first course in differential geometry. 84b:53002

Vedernikov, V. I. See Bel'ko, I.; et al., 84m:53001

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Zrazhevskaya, G. M. See Kovantsov, M. I.; et al., 84i:53001

secondary classifications:

- Ahlfor, Lars Valerian ★ Möbius transformations in several dimensions. (84m:30028)
 Asperti, Antonio Carlos (with Mercuri, Francesco) ★ Topologia e geometria das curvas planas (ou $\pi_1(S^1) \cong \mathbb{Z}$). (Portuguese) [Topology and geometry of plane curves (or $\pi_1(S^1) = \mathbb{Z}$)] (84m:55002)
 Banchoff, Thomas (with Gaffney, Terence; McCrory, Clint) ★ Cusps of Gauss mappings. (84a:50001)
 de Boer, Reint ★ Vektor- und Tensorrechnung für Ingenieure. (German) [Vector and tensor calculus for engineers] (84c:00002)
 Gaffney, Terence See Banchoff, Thomas; et al. (84a:50001)
 Hrusa, William J. See Troutman, John L. (84f:49001)
 Kawaguchi, Akitsugu On the development of the notion of length. (84h:01003)
 McCrory, Clint See Banchoff, Thomas; et al. (84a:50001)
 Mercuri, Francesco See Asperti, Antonio Carlos. (84m:55002)
 Troutman, John L. ★ Variational calculus with elementary convexity. (84f:49001)
 Warner, Frank W. ★ Foundations of differentiable manifolds and Lie groups. (84c:58001)

53-02 Advanced exposition (research surveys, monographs, etc.)

- Hildebrandt, Stefan Partielle Differentialgleichungen und Differentialgeometrie. [Partial differential equations and differential geometry] 84g:53001
 Ionescu, Steve ★ Geometrie diferențială cu aplicații în teoria relativității. (Romanian) [Differential geometry with applications to the theory of relativity] 84d:53003
 Klingenberg, Wilhelm ★ Riemannian geometry. 84j:53001
 Teodorescu, Ion D. Recent results in the geometry seminar of G. Vrănceanu at the Faculty of Mathematics in Bucharest. (Romanian) 84m:53003

secondary classifications:

- Aminov, Yu. A. Imbedding problems: geometric and topological aspects. (Russian) (84c:53072)
 Bérard-Bergery, Lionel La courbure scalaire des variétés riemanniennes. [Scalar curvature of Riemannian manifolds] (84m:53049)
 Berger, Marcel Recent trends in Riemannian geometry. (84d:53047)
 (Burago, Yu. D.) See Wolf, Joseph A., (84h:53056)
 Chern, S. S. (with Wolfson, Jon Gordon) Minimal surfaces by moving frames. (84c:53056)
 Drinfel'd, V. G. (with Krichever, Ios. M.; Manin, Yu. I.; Novikov, S. P.) Methods of algebraic geometry in contemporary mathematical physics. (84h:14001)
 Filipescu, Dumitru See Vrănceanu, Gheorghe. (84g:53099)
 Krichever, Ios. M. See Drinfel'd, V. G.; et al. (84h:14001)
 Manin, Yu. I. See Drinfel'd, V. G.; et al. (84h:14001)
 Meeks, William H., III A survey of the geometric results in the classical theory of minimal surfaces. (84d:53007)
 Morvan, Jean-Marie Differential geometry of Riemannian submanifolds: recent results. (84j:53066)
 Novikov, S. P. See Drinfel'd, V. G.; et al. (84h:14001)
 Shiokawa, Katsuhiko Convexity in Riemannian geometry. (84c:53044)
 Vrănceanu, Gheorghe (with Filipescu, Dumitru) ★ Elemente de geometrie integrală. (Romanian) [Elements of integral geometry] (84g:53099)
 Willmore, Thomas J. ★ Total curvature in Riemannian geometry. (84f:53034)
 Wolf, Joseph A. ★ Пространства постоянной кривизны. (Russian) [Spaces of constant curvature] (84h:53056)
 Wolfson, Jon Gordon See Chern, S. S., (84i:53056)

53-03 Historical (must also be assigned at least one classification number from Section 01)

- Kawaguchi, Akitsugu The notion of geometry. (See 84j:01001a)

secondary classifications:

- Bergmann, Peter G. Unitary field theory: yesterday, today, tomorrow. (German summary) (See 84j:01001a)
 Calapso, Renato See Decuyper, Marcel, (84h:01076) and Roșca, Radu, (84h:01078)
 Capelo, António Cláudio (with Ferrari, Mario) Beltrami's "bonnet": history and description. (Italian) (84g:01033)
 Cartan, Élie On a generalization of the notion of Riemann curvature and spaces with torsion. (84i:01124a)
 See also Trautman, Andrzej, (84i:01124b)
 (Čech, Eduard) See Kolář, Ivan, (84j:01067a)
 (Chern, S. S.) See Yano, Kentaro, (84f:01120)
 Decuyper, Marcel L'œuvre scientifique de Renato Calapso. [The scientific work of Renato Calapso] (84h:01076)
 Ferrari, Mario See Capelo, António Cláudio, (84g:01033)
 Firey, Wm. J. Subsequent work on Christoffel's problem about determining a surface from local measurements. (84d:01030)
 Gericke, Helmuth Zur Vorgeschichte und Entwicklung des Krümmungsbegriffs. [On the prehistory and evolution of the concept of curvature] (84d:01018)
 Grafarend, Erik W. Kommentar eines Geodäten zu einer Arbeit E. B. Christoffels [J. Reine Angew. Math. 64 (1865), 193-209] (English and Greek summaries) [Commentary of a geodesist on a work by E. B. Christoffel] (84i:01061)
 (Kerlick, G. D.) See Cartan, Élie, (84i:01124a)
 Kolář, Ivan Thoughts on Eduard Čech's work in differential geometry. (Czech) (84j:01067a)
 (Obata, Morio) See Yano, Kentaro, (84f:01120)
 Predvoditelev, A. S. Riemannian manifolds and the equations of mathematical physics. (Russian. English summary) (84h:01030)

- Reich, Karin Geodäsie und Differentialgeometrie. [Geodesy and differential geometry] (84c:01039)

- Roșca, Radu Quelques aspects de l'œuvre mathématique de Renato Calapso. [Some aspects of the mathematical work of Renato Calapso] (84h:01078)
 Teodorescu, Ion D. Recent results in the geometry seminar of G. Vrănceanu at the Faculty of Mathematics in Bucharest. (Romanian) (84m:53003)
 Trautman, Andrzej Comments on the paper by Élie Cartan: "On a generalization of the notion of Riemann curvature and spaces with torsion" [C. R. Acad. Sci. Paris 174 (1922), 593-595; Jbuch 48, 854]. (84i:01124b)
 Yano, Kentaro ★ Selected papers of Kentaro Yano. (84f:01120)

Bibliography:

- Calapso, Renato See Decuyper, Marcel, (84h:01076)
 Yano, Kentaro See Yano, Kentaro, (84f:01120)

Biography:

- Yano, Kentaro See Yano, Kentaro, (84f:01120)

Birthday:

- Yano, Kentaro See Yano, Kentaro, (84f:01120)

- Selected papers of Kentaro Yano See Yano, Kentaro, (84f:01120)

53-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- (Barnhill, Robert E.) See Surfaces in computer aided geometric design, (84g:65014)
 (Böhm, Wolfgang) See Surfaces in computer aided geometric design, (84g:65014)
 Gregory, John A. C^1 rectangular and nonrectangular surface patches. (See 84g:65014)
 Hoschek, Josef Dual Bézier curves and surfaces. (84m:65030)
 Wu, Wen Jun On the mechanization of theorem-proving in elementary differential geometry. (Chinese. English summary) (84h:03031)
 Conference:
 Surfaces in Computer Aided Geometric Design ★ Surfaces in computer aided geometric design. (84g:65014)
 Oberwolfach ★ Surfaces in computer aided geometric design. (84g:65014)
 Surfaces in computer aided geometric design ★ Surfaces in computer aided geometric design. (84g:65014)

53-06 Proceedings, conferences, etc.

- (Atanasiu, Gheorghe) See Proceedings: National seminar on finler spaces, 84i:53003
 (Brooks, Robert) See Differential geometry, 84d:53002
 (Cahen, Michel) See Differential geometry and mathematical physics, 84d:53003
 (De Wilde, Marc) See Differential geometry and mathematical physics, 84d:53003
 (Gherardelli, Francesco) See Monge-Ampère equations and related topics, 84c:53004
 (Gokhman, A. V.) See Differential geometry, 84g:53002
 (Gray, Alfred) See Differential geometry, 84d:53002
 (Lemaire, Luc) See Differential geometry and mathematical physics, 84d:53003
 (Pitts, Gheorghe) See Proceedings: National seminar on finler spaces, 84i:53003
 (Reinhart, Bruce L.) See Differential geometry, 84d:53002
 (Soós, Gy.) See Differential geometry, 84g:53003
 (Stoica, E.) See Proceedings: National seminar on finler spaces, 84i:53003
 (Szenthe, J.) See Differential geometry, 84g:53003
 (Teodorescu, Ion D.) See Proceedings: National Colloquium on Geometry and Topology, 84f:53001
 (Vanhecke, Lieven) See Differential geometry and mathematical physics, 84d:53003
 (Verner, A. L.) See Modern geometry, 84g:53004
 Braşov ★ The Proceedings of the National Seminar on Finler Spaces. 84i:53003
 Budapest ★ Differential geometry. 84g:53003
 Buzeni ★ Lucrările Colocviului Național de Geometrie și Topologie. (Romanian) [Proceedings of the National Colloquium on Geometry and Topology] 84f:53001
 College Park, Md. ★ Differential geometry. 84d:53002
 Colloquia Mathematica Societatis János Bolyai ★ Differential geometry. 84g:53003
 Colloquium:
 Differential Geometry ★ Differential geometry. 84g:53003
 Geometry and Topology ★ Lucrările Colocviului Național de Geometrie și Topologie. (Romanian) [Proceedings of the National Colloquium on Geometry and Topology] 84f:53001
 Conference:
 Differential geometry ★ Differential geometry. 84d:53002
 Differential geometry ★ Géométrie différentielle. (French) [Differential geometry] 84a:53001
 ★ Дифференциальная геометрия. (Russian) [Differential geometry] 84g:53002
 ★ Differential geometry. 84g:53003
 ★ Differential geometry. 84d:53002
 Differential geometry and mathematical physics ★ Differential geometry and mathematical physics. 84d:53003
 Differential geometry of submanifolds ★ Differential geometry of submanifolds. 84i:53002
 Florence ★ Monge-Ampère equations and related topics. 84c:53004
 Géométrie différentielle ★ Géométrie différentielle. (French) [Differential geometry] 84a:53001
 Leuven ★ Differential geometry and mathematical physics. 84d:53003
 Liège ★ Differential geometry and mathematical physics. 84d:53003
 Meeting:
 Differential Geometry ★ Differential geometry and mathematical physics. 84d:53003
 Modern geometry ★ Современная геометрия. (Russian) [Modern geometry] 84g:53004
 Monge-Ampère equations and related topics ★ Monge-Ampère equations and related topics. 84c:53004
 Paris ★ Géométrie différentielle. (French) [Differential geometry] 84a:53001

Proceedings:

National Colloquium on Geometry and Topology ★Lucrările Colocviului Național de Geometrie și Topologie. (Romanian) [Proceedings of the National Colloquium on Geometry and Topology] 84f:53001

National seminar on finler spaces ★The Proceedings of the National Seminar on Finsler Spaces. 84i:53003

Seminar:

Differential Geometry ★Géométrie différentielle. (French) [Differential geometry] 84a:53001

★Séminaire de Géométrie Différentielle, 1981-1982. (French) [Seminar on Differential Geometry, 1981-1982] 84a:53002

Finsler spaces ★The Proceedings of the National Seminar on Finsler Spaces. 84i:53003

Monge-Ampère Equations and Related Topics ★Monge-Ampère equations and related topics. 84e:53004

Symposium:

Differential geometry of submanifolds ★Differential geometry of submanifolds. 84i:53002

secondary classifications:

(Calapso, Renato) See Proceedings: Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso. (84f:00012)

(Chern, S. S.) See Proceedings: Beijing symposium on differential geometry and differential equations. (84i:00020)

(Crumeyrolle, Albert) See Symplectic geometry. (84h:58003)

(Gamskrelidze, R. V.) See Problems in geometry. (84e:58001)

(Grifone, Joseph) See Symplectic geometry. (84h:58003)

(Ostianu, N. M.) See Problems in geometry. (84e:58001)

(Wu, Wen Jun) See Proceedings: Beijing symposium on differential geometry and differential equations. (84i:00020)

Anniversary:

Birth of Calapso, Renato ★Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)

Beijing ★Proceedings of the 1980 Beijing Symposium on Differential Geometry and Differential Equations. Vol. 1, 2, 3. (84i:00020)

Colloquium:

Symplectic Geometry ★Symplectic geometry. (84h:58003)

Conference:

Algebra and Geometry ★Proceedings of the Conference on Algebra and Geometry. (84e:00006)

Calapso, Renato ★Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)

Kuwait ★Proceedings of the Conference on Algebra and Geometry. (84e:00006)

Messina ★Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)

Novosibirsk ★Симпозиум по Геометрии в целом и Основаниям Теории Относительности. (Russian) [Symposium on Geometry in the Large and Foundations of the Theory of Relativity] (84d:53025)

Problems in geometry ★Проблемы геометрии. Том 14. (Russian) [Problems in geometry. Vol. 14] (84e:58001)

Proceedings:

Beijing symposium on differential geometry and differential equations ★Proceedings of the 1980 Beijing Symposium on Differential Geometry and Differential Equations. Vol. 1, 2, 3. (84i:00020)

Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso ★Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)

Conference on Algebra and Geometry ★Proceedings of the Conference on Algebra and Geometry. (84e:00006)

Symplectic geometry ★Symplectic geometry. (84h:58003)

Symposium:

Beijing, differential geometry and differential equations ★Proceedings of the 1980 Beijing Symposium on Differential Geometry and Differential Equations. Vol. 1, 2, 3. (84i:00020)

Geometry in the Large and Foundations of the Theory of Relativity ★Симпозиум по Геометрии в целом и Основаниям Теории Относительности. (Russian) [Symposium on Geometry in the Large and Foundations of the Theory of Relativity] (84d:53025)

Taormina ★Atti del Convegno Celebrativo dell' 80° Anniversario della Nascita di Renato Calapso. (Italian) [Proceedings of the Conference held in Honor of the 80th Anniversary of the Birth of Renato Calapso] (84f:00012)

Toulouse ★Symplectic geometry. (84h:58003)

53Axx Classical differential geometry

53A04 Curves in Euclidean space

Boček, Leo Isoperimetrische Ungleichungen für räumliche Kurven und Polygone. (Czech summary) [Isoperimetric inequalities for spatial curves and polygons] 84b:53003

Fudali, Stanisław Divided differences of type $r \geq 2$. (Russian) 84e:53005
Some osculating k -plane of a curve in an n -dimensional Euclidean space. 84j:53002

Golubtsova, T. V. Closed curves with a given integral curvature. (Russian) 84h:53003

Hartl, Johann Über direkt integrierbare Kurven und strenge Böschungskurven im \mathbb{R}^n sowie geschlossene verallgemeinerte Hyperkreise. (English summary) [On directly

integrable curves and strict generalized helices in the \mathbb{R}^n and closed generalized hypercircles] 84m:53004

Hering, Leonhard Sätze vom Höltditch-Typ für ebene Kurven. [Theorems of Höltditch type for plane curves] 84g:53005

Knutsen, Finn F. On the classical theory of curves and surfaces in space, and applications to an engineering problem. (Norwegian. English summary) 84i:53004

Matsuyuk, R. Ya. Infinitesimal symmetries of helical lines in a flat space. (Russian) 84i:53005

Mescherskaya, M. B. Dependence of a set of line elements on the parametrization of a curve. (Russian) 84d:53004

Mond, David On the tangent developable of a space curve. 84g:53006

Saban, Giacomo Barbier's theorem through self-mated closed Bertrand curves. 84g:53007

Xie, Zi Tian A closed space curve on which no five equipartition points lie on a sphere. (Chinese) 84g:53008

secondary classifications:

Adams, John Q. Frenet's theorem and method of moving frames. (Italian summary) (84g:53023)

Ball, Robin Christopher See des Cloizeaux, J. (84j:53076)

Berg, I. D. An estimate on the total curvature of a geodesic in Euclidean 3-space-with-boundary. (84d:53049)

Bruce, J. W. (with Giblin, P. J.) Generic geometry. (84m:58017)

des Cloizeaux, J. (with Ball, Robin Christopher) Rigid curves at random positions and linking numbers. (84j:53076)

Duncan, J. L. See Duncan, J. P. (84g:53009)

Duncan, J. P. (with Duncan, J. L.) Folded developables. (84g:53009)

Gaffney, Terence (with du Plessis, Andrew) More on the determinacy of smooth map-germs. (84e:58022)

Geise, Gerhard Eine die Kegelschnitte charakterisierende Eigenschaft. [A property characterizing conics] (84e:51050)

Giblin, P. J. See Bruce, J. W. (84m:58017)

Milnor, John On the geometry of the Kepler problem. (84i:70008)

du Plessis, Andrew See Gaffney, Terence. (84e:58022)

Pohl, William F. (with Roberts, George W.) Topological considerations in the theory of replication of DNA. (84e:92029)

Pottmann, Helmut Über affine zyklische Radlinien. [On affine cycloidal cycloids] (84m:51028)

Roberts, George W. See Pohl, William F. (84e:92029)

53A05 Surfaces in Euclidean space

Aminov, Yu. A. Determination of a surface in a four-dimensional Euclidean space from its image in a Grassmannian. (Russian) 84a:53003

Andreichin, Ekaterina R. Sufficient conditions for rigidity of certain classes of surfaces. (Bulgarian. English summary) 84e:53004

Beskorovainaya, L. L. Infinitesimal areal deformations of oval surfaces. (Russian) 84m:53005

Charlar, V. R. Ruled Weingarten surfaces. 84e:53004

Dudkin, A. A. Closed nonconvex surfaces with a bijective spherical mapping, imbedded in E^3 . (Russian) 84j:53003

Duncan, J. L. See Duncan, J. P. 84g:53009

Duncan, J. P. (with Duncan, J. L.) Folded developables. 84g:53009

Fomenko, V. T. On \mathbb{Z} -realizations of metrics of positive curvature. (Russian) 84b:53004

Glaeser, Georg Die konoidalen Rotoidenstrahlflächen. [The conoidal rotoid ray surfaces] 84m:53006

Greub, W. H. A parametric representation of the sphere with p handles. 84j:53004

Khakimov, A. Kh. A geometric problem connected with the generalized Christoffel problem in a singular case. (Russian. Tajiki summary) 84h:53004

The Christoffel problem on an unbounded conditional sphere. (Russian. Tajiki summary) 84j:53005

Koch, Richard Diagonale Tschebyscheff-Netze. [Diagonal Chebyshev nets] 84i:53006

Leko, M. D. The condition of existence of two-dimensional spaces geodesics of which may be represented by a linear equation. 84g:53010

Marcus, Froim On a result of S. S. Chern concerning contact invariants between a pair of surfaces. (Italian summary) 84h:53005

Mekhtiev, M. G. A problem of the theory of infinitesimal bendings. (Russian) 84e:53006

Mozharskii, V. V. Surfaces of nonpositive curvature with a cuspidal edge of the first kind. (Russian) 84e:53007

Naldysh, V. M. Construction of surfaces passing through their special lines. 84g:53011

Nikolova, Z. Z. Mapping of two-dimensional surfaces in E_3 . (Russian) 84h:53006

Piccioli, Lia Fioravanti On the normals to a hyperspatial surface and related questions. (Italian) 84e:53008

Pöschl, Thomas Begleitstrahlflächen windschiefer Flächen. [Developable surfaces associated with nondevelopable ruled surfaces] 84c:53002

Veselova, G. V. A conformal mapping of the surfaces of Euclidean spaces and vector \mathbb{R}^n -fields. (Russian) 84e:53003

Walden, Rainer Closed surfaces in four-spaces with nonvanishing normal curvature. 84c:53004

secondary classifications:

Banchoff, Thomas (with Gaffney, Terence; McCrory, Clint) ★Cusps of Gauss mappings. (84e:58001)

Brehm, Ulrich (with Kühnel, Wolfgang) Smooth approximation of polyhedral surfaces regarding curvatures. (84c:53056)

Brickell, F. Mapping problems in geometrical optics. (See 84g:53003)

Bruce, J. W. (with Giblin, P. J.) Generic curves and surfaces. II. (84f:58019)

Castoldi, Luigi The metric tensor of V_2 "immersed in S_3 ". (Italian. English summary) (84f:53015)

- Chen, Han Lin (with Kuang, Zhi Quan) Criteria for convexity of a surface. I. (Chinese. English summary) (84b:52007a)
(with Kuang, Zhi Quan) Criteria for convexity of a surface. II. (Chinese. English summary) (84b:52007b)
(with Kuang, Zhi Quan) Criteria for convexity of a surface. III. (Chinese) (84b:52007c)
- Dudkin, A. A. See Verner, A. L. (84j:53070)
- Frank-Kamenetskii, M. D. (with Vologodskii, A. V.) Topological aspects of the physics of polymers: the theory and its biophysical applications. (84a:92038)
- Gaffney, Terence See Banchoff, Thomas; et al., (84a:58001)
- Giblin, P. J. See Bruce, J. W., (84f:58019)
- Hasanis, Thomas Characterizations of the sphere by the curvature of the second fundamental form. (84a:53064)
- Knudsen, Finn F. On the classical theory of curves and surfaces in space, and applications to an engineering problem. (Norwegian. English summary) (84i:53004)
- Kuang, Zhi Quan See Chen, Han Lin, (84b:52007a); (84b:52007b) and (84b:52007c)
- Kühnel, Wolfgang See Brehm, Ulrich, (84c:53056)
- Meissner, P. Der Lagrange-Formalismus für diskrete elektromechanische Systeme in anholonomen Koordinaten und seine Anwendung in der Theorie elektrischer Maschinen. [The Lagrange formalism for discrete electromechanical systems in nonholonomic coordinates and its application in the theory of electric machines] (84b:73045)
- McCrory, Clint See Banchoff, Thomas; et al., (84a:58001)
- Pereyaslavskaya, L. B. Canonical form of parabolic Monge-Ampère equations and sufficient conditions for the existence of their solutions, regular on the entire plane. (Russian) (84b:35086)
- Popov, L. G. The surface of deformation. (Russian) (84g:73033)
- Rozendorn, E. R. Bounded complete weakly nonregular surfaces with negative curvature bounded away from zero. (Russian) (84c:53059)
- (Schmehl, H.) See Zagrebin, D. V., (84i:86010)
- Svoboda, Karel Remark on one theorem of R. Schneider. (84a:53065)
- Sym, Antoni Soliton surfaces. (84g:35157)
- Verner, A. L. (with Dudkin, A. A.) Double-connection of a hyperbolic domain on a closed convex surface with a bijective spherical mapping. (Russian) (84j:53070)
- Vologodskii, A. V. See Frank-Kamenetskii, M. D., (84a:92038)
- Wintgen, Peter Totale Absolutkrümmung von Hyperflächen. [Total absolute curvature of hypersurfaces] (84g:53087)
- Wunderlich, Walter Gewindelflächen festen Dralls. [Surfaces of linear complexes of rays with fixed twist] (84c:53016)
Ruled surfaces with osculating striction scroll. (84m:53016)
Die Netzflächen konstanten Dralls. [Net surfaces with constant parameter of distribution] (84c:53017)
- Zagrebin, D. V. ★ Основы геометрии геодезической реконструкции. (Russian) [Foundations of geometric geodesy] (84i:86010)
- 53A07 Higher-dimension and -codimension surfaces in Euclidean n -space
- Borisenko, A. A. Multidimensional parabolic surfaces in Euclidean space. (Russian) 84j:53006
- Chen, Bang-yen Classification of surfaces with planar normal sections. 84j:53007
- Janyška, Josef A remark on linear functions on the sphere. 84c:53005
- Khabardzaniya, R. T. Three-dimensional nets in an extended Euclidean space E_3 . (Russian. English and Georgian summaries) 84m:53007a
On nets in an extended Euclidean space E_3 . (Russian. English and Georgian summaries) 84m:53007b
- Krawczyk, Jerzy Relatively parallel vector fields on 2-surfaces in E_4 . 84i:53007
- Kryachkov, Yu. G. Order of saddleness and the index of a regular point of a smooth surface in E^4 . (Russian) 84b:53007
- Lokotkov, N. N. Special fibering of a p -surface in a Euclidean n -space. (Russian) 84c:53006
- Markov, P. E. Infinitesimal bendings of a class of multidimensional surfaces with a boundary. (Russian) 84j:53008
- Matsuyama, Yoshio Hypersurfaces with $RS=0$ in a Euclidean space. 84a:53005
- Nurpeisov, Zh. On the geometry of integrable distributions in E_4 . (Russian) 84m:53008
- Silae, E. V. Scalar curvature of a surface lying on a hypersphere in Euclidean space. (Russian) 84m:53009
- Vetter, Wilhelm ★ Verallgemeinerte Kreisflächen im n -dimensionalen euklidischen Raum. (German) [Generalized circular surfaces in an n -dimensional Euclidean space] 84g:53012
- Zhang, Wei Tao Necessary and sufficient conditions for a closed hypersurface in R^n to have nonnegative curvature. (Chinese) 84f:53002
- secondary classifications:
- Aminov, Yu. A. A multidimensional analogue of the "sine-Gordon" equation and the motion of a rigid body. (Russian) (84j:58010a)
Correction: "A multidimensional analogue of the 'sine-Gordon' equation and the motion of a rigid body". (Russian) (84j:58010b)
- Garibé, T. Two-dimensional surfaces with a constant extrinsic geometry in E^3 . (Russian) (84i:53059)
- Kuznetsov, V. A. The Kronecker-Morse formula for three-dimensional hypersurfaces. (Russian) (84j:57026)
- Popescu, Paul Sur une généralisation de la connexion de Tzitzeica. [On a generalization of the Tzitzeica connection] (84g:53030)
- Sampson, J. H. On Pizzetti's formula. (Italian summary) (84c:26014)
- 53A10 Minimal surfaces, surfaces with prescribed mean curvature [See also 49F10, 53C42.]
- Anderson, Michael T. Complete minimal varieties in hyperbolic space. 84c:53005
- Antropov, S. N. Some particular solutions of an equation of relativistic membranes. (Russian) 84m:53010
- Beeson, Michael J. Some results on finiteness in Plateau's problem. II. 84c:53006
- Borisenko, A. A. Explicitly represented minimal surfaces. (Russian) 84i:53008
- do Carmo, Manfredo Perdigão (with Dajczer, Marcos) Helicoidal surfaces with constant mean curvature. 84f:53003
- Chen, Chi Cheng Total curvature and topological structure of complete minimal surfaces. 84c:53008
(with Gackstatter, Fritz) Elliptische und hyperelliptische Funktionen und vollständige Minimalflächen vom Enneper'schen Typ. [Elliptic and hyperelliptic functions and complete minimal surfaces of Enneper type] 84d:53005
On the image of the generalized Gauss map of a complete minimal surface in R^4 . 84g:53013
- Dajczer, Marcos See do Carmo, Manfredo Perdigão, 84f:53003
- Fediv, I. Ya. Construction of parametrizable families of surfaces with composite positional conditions. (Russian) 84c:53009
- Finn, Robert Global size and shape estimates for symmetric sessile drops. 84c:53007
Existence criteria for capillary free surfaces without gravity. 84g:53014
- Fujimoto, Hirotaka On the Gauss map of a complete minimal surface in R^n . 84g:53015
- Gackstatter, Fritz See Chen, Chi Cheng, 84d:53005
- Hoffman, David A. (with Osserman, Robert; Schoen, Richard M.) On the Gauss map of complete surfaces of constant mean curvature in R^3 and R^4 . 84f:53004
(with Osserman, Robert) The area of the generalized Gaussian image and the stability of minimal surfaces in S^n and R^n . 84a:53006
- Hsiang, Wu Yi On generalization of theorems of A. D. Alexandrov and C. Delaunay on hypersurfaces of constant mean curvature. 84c:53007
Generalized rotational hypersurfaces of constant mean curvature in the Euclidean spaces. I. 84c:53009
- Jorge, L. P. de M. (with Xavier, Frederico) Minimal immersions in cones. (Portuguese) (See 84b:00011)
- (with Meeks, William H., III) The topology of complete minimal surfaces of finite total Gaussian curvature. 84d:53006
- Korevaar, Nicholas J. Capillary surface continuity above irregular domains. 84f:53005
- Meeks, William H., III A survey of the geometric results in the classical theory of minimal surfaces. 84d:53007
(with Yau, Shing Tung) The classical Plateau problem and the topology of three-dimensional manifolds. The embedding of the solution given by Douglas-Morrey and an analytic proof of Dehn's lemma. 84g:53016
See also Jorge, L. P. de M., 84d:53006
- Mikhailov, P. N. Surfaces of constant mean curvature. (Russian) 84m:53011
- Miranda, Mario Minimal manifolds of codimension 1 in a Euclidean sphere. (Portuguese) (See 84b:00011)
- Nitsche, Johannes C. C. Minimal surfaces and partial differential equations. 84j:53009
- Osserman, Robert See Hoffman, David A., 84a:53006 and 84f:53004
- Ōtsuki, Tomisuke On minimal surfaces. (Japanese) 84c:53010
- Royturd, V. On singularities of capillary surfaces in the absence of gravity. 84c:53011
- Schoen, Richard M. See Hoffman, David A.; et al., 84f:53004
- Shikin, E. V. On the equations of isometric immersions of two-dimensional manifolds of negative curvature in a three-dimensional Euclidean space. (Russian) 84b:53005
- Simon, Leon Boundary behaviour of solutions of the nonparametric least area problem. 84f:53006
- Talenti, Giorgio A note on the Gauss curvature of harmonic and minimal surfaces. 84c:53008
- Ural'tseva, N. N. Estimates of the maximum moduli of gradients for solutions of capillarity problems. (Russian) 84d:53008
- Vogel, Thomas I. Symmetric unbounded liquid bridges. 84f:53007
- Xavier, Frederico See Jorge, L. P. de M., (See 84b:00011)
- Yau, Shing Tung See Meeks, William H., III, 84g:53016
- secondary classifications:
- Almgren, F. J., Jr. Q valued functions minimizing Dirichlet's integral and the regularity of area minimizing rectifiable currents up to codimension two. (84b:49052)
- Ambraserius, A. A problem on finding the form of the surface of a fluid in a conical vessel with a given volume of fluid. I. (Russian. English and Lithuanian summaries) (84b:35157)
- Barbashov, B. M. (with Nesterenko, V. V.; Chervyakov, A. M.) General solutions of nonlinear equations in the theory of minimal surfaces. (Russian. English summary) (84d:53059)
- Barbosa, João Lucas Marques (with Mori, Hiroshi) Stability of constant mean curvature surfaces in Riemannian 3-space form. (84d:53060)
- Bartnik, Robert (with Simon, Leon) Spacelike hypersurfaces with prescribed boundary values and mean curvature. (84j:58126)
- Böhme, Reinhold New results on the classical problem of Plateau. On the existence of many solutions. (84c:58021)
- Brézis, Haim (with Coron, Jean-Michel) Sur la conjecture de Rellich pour les surfaces à courbure moyenne prescrite. (English summary) [On Rellich's conjecture for surfaces with prescribed mean curvature] (84i:58034)
Solutions positives d'équations elliptiques non linéaires avec exposant de Sobolev critique et conjecture de Rellich pour les surfaces à courbure moyenne prescrite. [Positive solutions of nonlinear elliptic equations with critical Sobolev exponent and Rellich's conjecture for surfaces with assigned mean curvature] (See 84i:53006)
- Chen, Jin Tzu (with Huang, Wu Hsiung) Convexity of capillary surfaces in the outer space. (84i:53066)
- Chern, S. S. (with Wolfson, Jon Gordon) Minimal surfaces by moving frames. (84i:53056)
- Chervyakov, A. M. See Barbashov, B. M.; et al., (84d:53059)
- Coron, Jean-Michel See Brézis, Haim, (84i:58034)
- Dacorogna, Bernard Minimal hypersurfaces problems in parametric form with nonconvex integrands. (84j:49038)
- Ecker, Klaus Estimates for evolutionary surfaces of prescribed mean curvature. (84j:34069)

- Fomenko, A. T. Minimal volumes of topological globally minimal surfaces in cobordisms. (Russian) (84c:49057)
 Multidimensional variational methods in the topology of extremals. (Russian) (84c:58022)
- Gheysens, Luc (with Verheyen, Paul; Verstraeten, Leopold) Characterization and examples of Chen submanifolds. (84j:53029)
- Hass, Joel The geometry of the slice-ribbon problem. (84h:57002)
- Hildebrandt, Stefan Partielle Differentialgleichungen und Differentialgeometrie. [Partial differential equations and differential geometry] (84g:53001)
- Hsiang, Wu Yi (with Teng, Zhen Huan; Yu, Wen Ci) New examples of constant mean curvature immersions of $(2k-1)$ -spheres into Euclidean $2k$ -space. (84i:53057)
- Huang, Wu Hsiung See Chen, Jin Zhu, (84b:53066)
- Kawai, Shigeo On the instability of a minimal surface in a 4-manifold whose curvature lies in the interval $(\frac{1}{4}, 1)$. (84c:53075)
- Korevaar, Nicholas J. Capillary surface convexity above convex domains. (84b:35054)
- Louie, A. H. (with Somorjai, R. L.) Differential geometry of proteins: a structural and dynamical representation of patterns. (84g:92013)
- Massari, Umberto (with Miranda, Mario) A remark on minimal cones. (Italian summary) (84c:49090)
- Meeks, William H., III (with Simon, Leon; Yau, Shing Tung) Embedded minimal surfaces, exotic spheres, and manifolds with positive Ricci curvature. (84i:53053)
- Miranda, Mario See Massari, Umberto, (84c:49090)
- Morgan, Frank On the singular structure of three-dimensional, area-minimizing surfaces. (84b:49053)
- Mori, Hiroshi See Barbosa, João Lucas Marques, (84d:53060)
- Nagano, Tadashi (with Smyth, B.) Periodic minimal surfaces and Weyl groups. (84c:53054)
- Nesterenko, V. V. See Barbashev, B. M.; et al., (84d:53059)
- Oshikiri, Gen-ichi Jacobi fields and the stability of leaves of codimension-one minimal foliations. (84c:53033)
- Pan, Yang Lian Submanifolds with parallel mean curvature and Gauss maps. (84i:53054)
- Parks, Harold Elliptic isoperimetric problems. (84b:49088)
- Schüffler, Karl-Heinz Isoliertheit und Stabilität von Flächen konstanter mittlerer Krümmung. (English summary) [Isolation and stability of surfaces of constant mean curvature] (84b:58032)
 (with Tomi, Friedrich) Ein Indexsatz für Flächen konstanter mittlerer Krümmung. [An index theorem for surfaces of constant mean curvature] (84b:53085)
- Simon, Leon See Meeks, William H., III; et al., (84f:53053) and Bartnik, Robert, (84j:58126)
- Smyth, B. Minimal surface and Weyl groups. (See 84d:53003)
 See also Nagano, Tadashi, (84c:53054)
- Sofronie, Ramiro The V-shaped cable-stayed bridges. (84b:73038)
- Somorjai, R. L. See Louie, A. H., (84g:92013)
- Teng, Zhen Huan See Hsiang, Wu Yi; et al., (84i:53057)
- Tomi, Friedrich See Schüffler, Karl-Heinz, (84b:53085)
- Verheyen, Paul See Gheysens, Luc; et al., (84j:53029)
- Verstraeten, Leopold See Gheysens, Luc; et al., (84j:53029)
- Walden, Rainer Closed surfaces in four-spaces with nonvanishing normal curvature. (84c:53004)
- Wolfson, Jon Gordon See Chern, S. S., (84i:53056)
- Yau, Shing Tung See Meeks, William H., III; et al., (84f:53053)
- Yu, Wen Ci See Hsiang, Wu Yi; et al., (84i:53057)

53A15 Affine differential geometry

- Barthel, Woldemar (with Volkmer, Reinhard) Die Bedeutung Christoffelscher Zusammenhänge in der affinen Differentialgeometrie. (English summary) [The importance of Christoffel connections in affine differential geometry] (84b:53006)
- Evdokimova, R. I. The theory of curves in a generalized biaffine space. (Russian) (84b:53007a)
- The theory of surfaces in a generalized biaffine space. (Russian) (84b:53007b)
- Khabardzaniya, R. T. Conjugate nets in an extended space. (Russian) (84c:53008)
- Kolde, R. Distributions on manifolds of straight lines in A_4 and focal classification of pseudocongruences. (Russian. English summary) (84c:53009)
- Platonova, V. I. On the theory of nonruled surfaces of elliptic type in three-dimensional affine space. (Russian. English summary) (84m:53012)
- Ryzhkov, V. V. (p, q) -planar mappings. (Russian) (84a:53007)
- Sergienko, L. N. A geometric property of the characteristic curves of the Monge equation in E_n . (Russian) (84d:53009)
- Stepanov, S. E. Realization of Chebyshev connections on surfaces of an affine space. (Russian) (84j:53010)
- Tölke, Jürgen Zu den affinen Zwangsläufen bei denen sich die Punkte eines Kegelschnitts auf Geraden bewegen. [On the affine forced motions in which the points of a conic move on straight lines] (84g:53017)
- Volkmer, Reinhard See Barthel, Woldemar, (84b:53006)

secondary classifications:

- Balazs, N. L. Weyl's association, Wigner's function and affine geometry. (84b:58038)
- Ivančin, N. A. The spaces $A_4(x, \dot{x})$ with solvable groups of motions. (Russian) (84b:53027)
- Kulkarni, Ravi S. Surface-symmetries, holomorphic maps, and tessellations. (See 84d:53002)
- Neuman, František Global theory of linear differential equations of the n th order. (84b:34014)
- Rimer, David La géométrie différentielle des complexes de quadriques dans l'espace euclidien à trois dimensions. [The differential geometry of complexes of quadrics in three-dimensional Euclidean space] (84c:53012)

- Sharma, Ramesh A relation between an affine Killing vector and the strain tensor of a pseudo-Riemannian manifold. (84a:53066)
- Sosov, E. N. A remark on a relative ruled geometry. (Russian) (84j:53015)

53A17 Kinematics

- Berger, É. G. See Tabatkov, V. P., (84f:53008)
- Hammersley, J. M. Oxford commemoration ball. (84g:53018)
- Hering, Leonhard Holditch-Sätze für Regelflächen bzw. sphärische Kurven. (English summary) [Holditch theorems for ruled surfaces or spherical curves, respectively] (84m:53013)
- Karper, Adolf Grundlagen der räumlichen kinematischen Geometrie. II. (Czech summary) [Foundations of spatial kinematic geometry. II] (84d:53010)
- Khasanov, V. Kh. (with Osipov, V. A.) The theory of design and calculation of directrices. (Russian) (84c:53009)
- Meyer zur Capellen, W. Die Wendekurven der sphärischen Kinematik und die elliptischen Integrale. [The inflection curves of spherical kinematics and elliptic integrals] (84c:53008)
- Mukhiddinov, S. R. Differential relations in inverse kinematic problems. (Russian) (84c:53012)
- Müller, Hans Robert Gewindekurven und ebene Kinematik. [Curves whose tangents belong to a linear complex, and plane kinematics] (84c:53009)
- Osipov, V. A. See Khasanov, V. Kh., (84c:53009)
- Tabatkov, V. P. (with Berger, É. G.) Formation of surfaces by the bending method. (Russian) (84f:53008)
- Tölke, Jürgen See Zita de Carvalho Braga, M., (84b:53008)
- Zita de Carvalho Braga, M. (with Tölke, Jürgen) Kinematische Anwendungen der Kurvenapproximation durch zirkuläre Kurven dritter Ordnung. (English and Serbo-Croatian summaries) [Kinematic applications of curve approximation via circular curves of third order] (84b:53008)

secondary classifications:

- Bekyarov, B. See Lilov, L., (84a:70003) and (84b:70005)
- Hering, Leonhard Sätze vom Holditch-Typ für ebene Kurven. [Theorems of Holditch type for plane curves] (84g:53005)
- Kichenassamy, S. The relativistically rigid motion of a surface. (84g:83006)
- Lilov, L. (with Bekyarov, B.) Qualitative geometric parameters of manipulation systems functional capacities. (Russian and Bulgarian summaries) (84c:70003)
 (with Bekyarov, B.) Qualitative kinematic characteristics of the functional capacities of manipulation systems. (Bulgarian. English and Russian summaries) (84b:70005)
- Meirer, K. Doppelverhältnisscharen, insbesondere Kongruenzscharen ebener Kurven oder Kegellinien auf windschiefen Flächen. [Cross ratio families, particularly congruence families of plane curves or conic lines on skew surfaces] (84f:53010)
- Tölke, Jürgen Zu den affinen Zwangsläufen bei denen sich die Punkte eines Kegelschnitts auf Geraden bewegen. [On the affine forced motions in which the points of a conic move on straight lines] (84g:53017)

53A20 Projective differential geometry

- Baimuratov, Kh. A. A four-web generated by asymptotic distributions on a three-dimensional surface in P_3 . (Russian) (84b:53009)
- Bolodurin, V. S. On the invariant theory of point correspondences of three projective spaces. (Russian) (84b:53010)
- Bordoni, Mantio Homology of the manifold V_4 of second-order differential elements of $P_3(R)$. (Italian. English summary) (84c:53010)
- Bukharina, E. V. (with Skrydlova, E. V.) Degenerate congruences generated by a quadric and a plane. (Russian) (84j:53011)
- Deryagina, V. G. Mapping curves of the complex centro-affine space A_1 onto two-dimensional surfaces X_2 of a biplanar space B_3 . (Russian) (84c:53013)
- Izmailova, T. S. Projective-differential properties of pairs in P_n . (Russian) (84i:53010)
- Korsakova, L. G. Congruence of pairs of conics incident to a one-dimensional manifold of quadrics. (Russian) (84i:53011)
- Kozhukharova, R. T. Surfaces in a generalized biaxial space. (84b:53010)
- Krejčík, Jaroslav Contribution to the theory of pseudocongruences with projective connection. (84i:53012)
- Marcus, Froim On the converse of Luigi Bianchi's permutability theorem. (Italian) (84c:53013)
- Mekerov, D. (with Stefanova, S.) Congruence of ruled surfaces in the generalized biaxial space $P_1^{1,2}$. (Bulgarian. German and Russian summaries) (84b:53011)
 On the differential geometry of one-parameter families of lines in a generalized biaxial space. (84b:53011)
- Read-Derchain, Colette Complexes satellites des congruences d'un couple θ . (English summary) [Satellite complexes of the congruences of a θ -pair] (84c:53009)
 (with Rouxel, B.) Sur les complexes de Waelch des congruences d'un couple T . (English and Serbo-Croatian summaries) [The Waelch complexes of the congruences of a T pair] (84c:53014)
- Rouxel, B. See Read-Derchain, Colette, (84c:53014)
- Sheidova, N. M. On the theory of one-dimensional regular hyperbands of a projective space. (Russian) (84m:53014)
- Shevchenko, Yu. I. Normalization of a band. (Russian) (84j:53012)
- Skrydlova, E. V. See Bukharina, E. V., (84j:53011)
- Stefanova, S. See Mekerov, D., (84b:53011)
- Vaccaro, Giuseppe Differential characteristics of algebraic entities. (Italian) (84j:53013)
 Differential characterizations of algebraic entities. (Italian) (84c:53010)

secondary classifications:

- Abdel, N. H. See Soliman, M. A., (84g:51035)
- Borisov, Adriyan V. (with Mitov, Dechko B.) Invariant connections on homogeneous biaxial spaces. (Russian) (84d:53053)
- Integral geometry of sets of points in a biplanar space of hyperbolic type. (Russian) (84c:53063)
- See also Mitov, Dechko B., (84d:53052)
- Dragunov, V. K. A coordinate three-web on a surface in the space of a cubic metric. (Russian) (84c:53014)
- Gunning, Robert C. On projective covariant differentiation. (84b:53020)
- Leiko, S. G. p -geodesic mappings of spaces with affine connection. (Russian) (84m:53026)
- Meirer, K. Doppelverhältnisscharen, insbesondere Kongruenzscharen ebener Kurven oder Kegellinien auf windschiefen Flächen. [Cross ratio families, particularly congruence families of plane curves or conic lines on skew surfaces] (84f:53010)
- Mekerov, D. Two-parameter systems of straight lines and ruled surfaces on them in the generalized biaxial space $P_4^{1,2}$. (Bulgarian. German and Russian summaries) (84i:53015)
- Mitov, Dechko B. (with Borisov, Adriyan V.) Invariant connections in a biaxial space of elliptic type. (Russian) (84d:53052)
- See also Borisov, Adriyan V., (84d:53053)
- Piccoletta, Lia Fioravanti New differential characterizations of Veronese varieties. (Italian. English summary) (84i:14044)
- Ryzhikov, V. V. (p, q) -planar mappings. (Russian) (84c:53007)
- Shirokov, A. P. Geometry of symmetric polarity in a projective space over an algebra of dual numbers. (Russian) (84m:53027)
- Soliman, M. A. (with Abdel, N. H.) Line complexes immersed in a projective space with ruled absolute. (84g:51035)
- Stolyarova, L. P. Geometry of the distribution of straight lines in P_2 . (Russian) (84j:53016)

53A25 Differential line geometry

- Abdel-All, N. H. See Soliman, M. A., 84g:53021
- Antonova, L. V. See Rozenfel'd, B. A.; et al., 84c:53011
- Balabanova, R. The common Chebyshev net of two-dimensional Riemannian spaces. (Bulgarian. English and Russian summaries) 84f:53009
- Hessien, S. A. See Soliman, M. A., 84g:53020
- Kamenarović, I. On line complexes in the isotropic space $I_3^{(1)}$. (Serbo-Croatian summary) 84c:53014
- Klass, Reinhold Über die Reflexion von Geradenbündeln an Flächen. (English summary) [On the reflection of bundles of straight lines through surfaces] 84j:53014
- Kozhukharova, R. T. See Mekerov, D., 84b:53012
- Kruglyakov, L. Z. Some complexes of multidimensional planes in projective space. (Russian) 84c:53010
- Meirer, K. Doppelverhältnisscharen, insbesondere Kongruenzscharen ebener Kurven oder Kegellinien auf windschiefen Flächen. [Cross ratio families, particularly congruence families of plane curves or conic lines on skew surfaces] 84f:53010
- Mekerov, D. (with Kozhukharova, R. T.) Parabolic congruences of lines in a degenerate biaxial space. (Bulgarian. German and Russian summaries) 84b:53012
- Two-parameter systems of straight lines and ruled surfaces on them in the generalized biaxial space $P_4^{1,2}$. (Bulgarian. German and Russian summaries) 84i:53015
- Papantoniou, B. See Tsagas, Gr., 84c:53011
- Rozenfel'd, B. A. (with Antonova, L. V.; Vol'kovskaya, A. T.) Line complexes in quasisymplectic, quasielliptic and quasihyperbolic 3-spaces. (Russian) 84g:53011
- Sachs, Hans Metrische Geometrie in elliptischen Komplexbüscheln des Flaggenraumes. [Metric geometry in elliptic pencils of complexes of the flag space] 84g:53019
- Soliman, M. A. (with Hessien, S. A.) Stratification of a line complex into special kinds of normal congruences in H_3 . 84g:53020
- (with Abdel-All, N. H.) A classification of line complexes immersed in quasihyperbolic space " S_3 " that is based on the mobility of a repère. 84g:53021
- Sosov, E. N. A remark on a relative ruled geometry. (Russian) 84j:53015
- Stamov, Georg Strahlensysteme im einfach isotropen Raum. (English summary) [Line systems in simply isotropic space] 84m:53015
- Lokale und globale Eigenschaften von Geradenkongruenzen und Kongruenzflächen im einfach isotropen Raum. [Local and global properties of line congruences and congruence surfaces in the simply isotropic space] 84c:53015
- Stolyarova, L. P. Geometry of the distribution of straight lines in P_2 . (Russian) 84j:53016
- Tsagas, Gr. (with Papantoniou, B.) On the rectilinear congruences establishing a mapping between its focal surfaces which preserves the Gauss curvature. 84c:53011
- Vol'kovskaya, A. T. See Rozenfel'd, B. A.; et al., 84i:53011
- Wunderlich, Walter Gewindeflächen festen Dralls. [Surfaces of linear complexes of rays with fixed twist] 84c:53016
- Ruled surfaces with osculating striction scroll. 84m:53016
- Die Netzflächen konstanten Dralls. [Net surfaces with constant parameter of distribution] 84c:53017

secondary classifications:

- Bukharina, E. V. (with Skrydlova, E. V.) Degenerate congruences generated by a quadric and a plane. (Russian) (84j:53011)
- Hering, Leonhard Holditch-Sätze für Regelflächen bzw. sphärische Kurven. (English summary) [Holditch theorems for ruled surfaces or spherical curves, respectively] (84m:53013)
- Kharisova, N. Kh. See Norden, A. P., (84c:53022)
- Mekerov, D. On the differential geometry of one-parameter families of lines in a generalized biaxial space. (84h:53011)
- Müller, Hans Robert Gewindekurven und ebene Kinematik. [Curves whose tangents belong to a linear complex, and plane kinematics] (84i:53009)

- Norden, A. P. (with Kharisova, N. Kh.) Scalar field on a sphere. (Russian) (84c:53022)
- Pöschl, Thomas Begleitstrahlflächen windschiefer Flächen. [Developable surfaces associated with nondevelopable ruled surfaces] (84c:53002)
- Read-Derchain, Colette Complexes satellites des congruences d'un couple θ . (English summary) [Satellite complexes of the congruences of a θ -pair] (84a:53009)
- (with Rouxel, B.) Sur les complexes de Waelch des congruences d'un couple T . (English and Serbo-Croatian summaries) [The Waelch complexes of the congruences of a T pair] (84i:53014)
- Rouxel, B. See Read-Derchain, Colette, (84i:53014)
- Skrydlova, E. V. See Bukharina, E. V., (84j:53011)

53A30 Conformal differential geometry

- Aktivis, M. A. Completely isotropic submanifolds of a four-dimensional pseudoconformal structure. (Russian) 84c:53016
- Bronstein, R. F. A class of multidimensional distributions in conformal space. (Russian) 84b:53013
- secondary classifications:
- Boyerski, Bogdan (with Iwaniec, Tadeusz) Another approach to Liouville theorem. (84c:30024)
- Chern, S. S. (with Moser, J. K.) Real hypersurfaces in complex manifolds. (Russian) (84g:32031)
- Friedrich, Th. (with Kurke, Herbert) Compact four-dimensional self-dual Einstein manifolds with positive scalar curvature. (84b:53043)
- Iwaniec, Tadeusz See Boyarski, Bogdan, (84c:30024)
- Kurke, Herbert See Friedrich, Th., (84b:53043)
- Liu, Chung Ting (with Weng, Ching Fen) Isometry of Riemannian manifolds admitting a conformal transformation. (84c:53039)
- Matei, A. (with Smaranda, D.) On a certain type of conformally Euclidean Riemannian manifold, subprojective of order $n-m-1$. (Romanian) (84j:53027)
- Matsuyuk, R. Ya. Infinitesimal symmetries of helical lines in a flat space. (Russian) (84i:53005)
- Moser, J. K. See Chern, S. S., (84g:32031)
- Nicolescu, Liviu Un théorème sur les métriques pseudoriemannniennes conformes. [A theorem on conformal pseudo-Riemannian metrics] (84k:53026)
- Schimming, R. Konstruktion einer Folge von Konforminvarianten eines Eichfeldes. [Construction of a sequence of conformal invariants of a gauge field] (84i:58134)
- (Shcherbak, I. G.) See Chern, S. S.; et al., (84g:32031)
- (Shcherbak, O. P.) See Chern, S. S.; et al., (84g:32031)
- Shirokov, A. P. Invariant torsion-free connections in tangent bundles of conformal Möbius planes. (Russian) (84a:53019)
- Smaranda, D. See Matei, A., (84j:53027)
- Venzi, Paolo The metric $ds^2 = F(u)du^2 + G(u)dv^2$ and an application to concircular mappings. (84g:53037)
- Weng, Ching Fen See Liu, Chung Ting, (84c:53039)
- Yang, Sheng Fang The invariance of the sectional curvature under conformal transformations. (Chinese) (84g:53038)

53A35 Non-Euclidean differential geometry

- Abdel-All, N. H. See Soliman, M. A., 84c:53018
- Abdel-Aziz, M. M. See Soliman, M. A., 84c:53019
- Andras, Nemethi On Euclidean and non-Euclidean plane geometries. (Romanian. German summary) 84k:53012
- Borisov, Adriyan V. The density of systems of linearly dependent points in a generalized biaxial space of elliptic type. (Bulgarian. English summary) 84c:53013
- Charyev, A. On the theory of m -dimensional surfaces in n -dimensional spaces S_n of constant curvature. (Russian. English summary) 84m:53017
- Chernysheva, N. G. Condition for the existence of a limit cone of a saddle horn consisting of one straight line. (Russian) 84k:53014
- Fomenko, V. T. (with Zubkov, A. N.) Infinitesimal bendings of multidimensional Darboux surfaces in a Riemann space V_n , $n \geq 2$. (Russian) 84m:53022
- Ivanov, V. P. Some conditions for enveloping of an obstacle by a surface. (Russian) 84j:53017
- Existence of the smallest supersolution for the equation of a hypersurface with a given mean curvature in a Lobachevskii space. (Russian) 84m:53018
- Kaplanovich, G. Ya. On the question of reconstruction of a regular convex surface with a given integral extrinsic curvature in an elliptic space. (Russian) 84h:53012
- Existence of a convex surface with a given density of integral extrinsic curvature in an elliptic space. (Russian) 84m:53019
- Kosarenko, M. F. Fields of geometric objects of a regular hyperband $H, C/S_N$. (Russian) 84m:53020
- Makeev, N. N. Stability of permanent motions of a gyrost in a Lobachevskii space. (Russian) 84c:53015
- Montag, Michael Integralinvarianten von Geradenkongruenzen im elliptischen Raum. [Integral invariants of line congruences in elliptic space] 84h:53013
- Soliman, M. A. (with Abdel-All, N. H.) Another class of complexes of lines in elliptic space S_3 with one of the principal surfaces coincident with the coordinate surfaces. (Arabic summary) 84c:53018
- (with Abdel-Aziz, M. M.) Complexes in elliptic space S_3 [which has] one of the centres of its ray coincident with a double centre of inflection. (Arabic summary) 84c:53019
- Sovertkov, P. I. The generalized Christoffel problem in a pseudo-Euclidean space $E_{n-1,1}$. (Russian) 84k:53016
- Ten, L. V. Investigation of the rigidity of noncompact domains of a hyperbolic paraboloid. (Russian) 84g:53022

Zahkov, A. N. Determination of solutions of a system of equations of infinitesimal bendings of a class of multidimensional Darboux surfaces in a Riemannian space V_{3n} , $n \geq 2$. (Russian) **84m:53021**
See also Fomenko, V. T., **84m:53022**

secondary classifications:

- Abdel-All, N. H. See Soliman, M. A., (**84g:53021**)
Antonova, L. V. See Rozenfel'd, B. A.; et al., (**84c:53011**)
Deryagina, V. G. Mapping curves of the complex centro-affine space A_3 onto two-dimensional surfaces X_2 of a biplanar space B_3 . (Russian) (**84c:53013**)
Dupont, Johan L. (with Sah, Chih Han) Scissors congruences. II. (**84b:53062b**)
(with Poulsen, Ebbe Thue) Generation of $C(x)$ by a restricted set of operators. (**84b:53062c**)
Fedorova, V. I. An interpretation of a six-dimensional Bol three-web in three-dimensional projective space. (Russian) (**84a:53015**)
Galeeva, R. F. (with Pelipenko, V. V.; Sokolov, D. D.) Infinitesimal bendings of surfaces in pseudo-Euclidean space. (Russian) (**84c:53087**)
Hessien, S. A. See Soliman, M. A., (**84g:53020**)
Hodgkin, Luke Soliton equations and hyperbolic maps. (French summary) (**84j:58062**)
Kamenarović, I. On line complexes in the isotropic space $H_1^{(1)}$. (Serbo-Croatian summary) (**84c:53014**)
Maskit, Bernard Panelled web groups. (**84f:30056**)
Pelipenko, V. V. See Galeeva, R. F.; et al., (**84c:53087**)
Poulsen, Ebbe Thue See Dupont, Johan L., (**84b:53062c**)
Rozenfel'd, B. A. (with Antonova, L. V.; Vol'kovskaya, A. T.) Line complexes in quasisymplectic, quasielliptic and quasihyperbolic 3-spaces. (Russian) (**84c:53011**)
Sah, Chih Han Scissors congruences. I. The Gauss-Bonnet map. (**84b:53062a**)
See also Dupont, Johan L., (**84b:53062b**)
Sokolov, D. D. See Galeeva, R. F.; et al., (**84c:53087**)
Soliman, M. A. (with Hessien, S. A.) Stratification of a line complex into special kinds of normal congruences in H_3 . (**84g:53020**)
(with Abdel-All, N. H.) A classification of line complexes immersed in quasihyperbolic space " S_3 " that is based on the mobility of a repère. (**84g:53021**)
Vol'kovskaya, A. T. See Rozenfel'd, B. A.; et al., (**84c:53011**)

53A40 Other special differential geometries

- Navoyan, V. Kh. Moduli of certain families of curves lying on nonorientable three-dimensional manifolds. **84c:53017**
Radzhabov, G. A. Three-dimensional metric spaces with vector support planes, admitting the group of motions G_4 . (Russian) **84j:53018a**
Addendum: "Three-dimensional spaces with vector support planes, admitting a group of motions G_4 ". (Russian) **84j:53018b**
Rimer, David La géométrie différentielle des complexes de quadriques dans l'espace euclidien à trois dimensions. [The differential geometry of complexes of quadrics in three-dimensional Euclidean space] **84c:53012**
Sachs, Hans On the geometry of ruled surfaces in flag space. **84m:53023**

secondary classifications:

- Amari, Shun-ichi (with Kumon, Masayuki) Differential geometry of Edgeworth expansions in curved exponential family. (**84j:62028**)
Epstein, D. B. A. Geometric structures on manifolds. (**84b:57013**)
Kozhukharova, R. T. Surfaces in a generalized biaxial space. (**84c:53010**)
Kumon, Masayuki See Amari, Shun-ichi, (**84j:62028**)
Stamou, Georg Lokale und globale Eigenschaften von Geradenkongruenzen und Kongruenzflächen im einfach isotropen Raum. [Local and global properties of line congruences and congruence surfaces in the simply isotropic space] (**84c:53015**)

53A45 Vector and tensor analysis

- Hess, Siegfried ★Vektor- und Tensor-Rechnung. (German) [Vector and tensor calculus] **84a:53011**
Jakubowicz, A. On a certain construction of algebraic vector, covector and scalar concomitants of a given tensor field. (See **84g:53003**)
Kunin, I. A. An algebra of tensor operators and its applications to elasticity. **84b:53014**
Morey, P. S., Jr. A Lie derivative of a weighted tensor. **84b:53015**
Morgado, A. Passos (with Morgado, C. M. Passos) Some considerations about differential operators. **84c:53020**
Morgado, C. M. Passos See Morgado, A. Passos, **84c:53020**
Vekua, I. N. ★Тензорная анализа да ковариант'а 'e'oris sap' uzvlebi. (Georgian) [Foundations of tensor analysis and the theory of covariants] **84c:53012**

secondary classifications:

- Appelquist, Jon Cartesian polytensors. (**84j:15027**)
Ashtekar, Abhay (with Horowitz, Gary T.; Magnon-Ashtekar, Anne) A generalization of tensor calculus and its applications to physics. (**84c:53099**)
Bakker, G. Some computational aspects of the mapping problem in three-dimensional geodesy. (Greek summary) (**84d:86006**)
Betten, Josef Zur Aufstellung einer Integritätsbasis für Tensoren zweiter und vierter Stufe. [On establishing an integrity basis for tensors of second and fourth ranks] (**84g:15032**)
Bieszk, Leon On some classification of the linear connection in the small-dimensional space L_n . (**84c:53023**)
Boja, N. (with Brăiloiu, G.) On the conjugation of K -spaces by means of sesquilinear forms. (Romanian. English summary) (**84g:15002**)
Brăiloiu, G. See Boja, N., (**84g:15002**)
Castoldi, Luigi The metric tensor of V_2 "immersed in S_3 ". (Italian. English summary) (**84f:53015**)

- Chebotaev, K. S. See Vulpe, N. I., (**84c:34051**)
Crade, R. F. (with Hall, G. S.) Second order symmetric tensors and quadric surfaces in general relativity. (**84d:83029**)
González-Gascón, F. On the reduction of vector fields by means of invariant structures. (**84c:58031**)
Hall, G. S. See Crade, R. F., (**84d:83029**)
Hollingsworth, C. A. See Russ, Muchere C., (**84c:81043a**); (**84c:81043b**) and (**84c:81043c**)
Horowitz, Gary T. See Ashtekar, Abhay; et al., (**84c:53099**)
Kerrighan, Barney The Huggins term in general relativity. (**84c:83021**)
Kozhankulov, T. A. (with Murzagaliev, G. D.) ★Элементы тензорного исчисления в евклидовом пространстве. (Russian) [Elements of tensor calculus in Euclidean space] (**84c:53003**)
Krawczyk, Jerzy Relatively parallel vector fields on 2-surfaces in E_4 . (**84i:53007**)
Magnon-Ashtekar, Anne See Ashtekar, Abhay; et al., (**84c:53099**)
Mispic, M. Momentum correspondences and connections for a momentum mechanics. (**84c:70011**)
Murzagaliev, G. D. See Kozhankulov, T. A., (**84c:53003**)
Normand, Jean-Marie (with Raynal, Jacques) Relations between Cartesian and spherical components of irreducible Cartesian tensors. (**84g:81021**)
Pop, Julian J. (with Wang, Chao Chen) Acceleration waves in isotropic elastic membranes. (**84d:73048**)
Prediger, H. Das äußere Tensorprodukt in der Mechanik. [The exterior tensor product in mechanics] (**84h:73008**)
Ramires Inostrosa, R. O. A mathematical model and its value in mechanics. (Russian) (See **84c:34002**)
Raynal, Jacques See Normand, Jean-Marie, (**84g:81021**)
Russ, Muchere C. (with Hollingsworth, C. A.) Properties of three-dimensional Cartesian tensors. I. Some properties of irreducible tensors. (**84i:81043a**)
(with Hollingsworth, C. A.) Properties of three-dimensional Cartesian tensors. II. Arbitrarily oriented tensors expressed in generalized spherical functions. Ranks through 4. (**84i:81043b**)
(with Hollingsworth, C. A.) Properties of three-dimensional Cartesian tensors. III. Concerning tensor averages. (**84i:81043c**)
Tabachnikov, S. L. Invariant differential operators of general type. (Russian) (**84i:58135**)
Vulpe, N. I. (with Chebotaev, K. S.) An algorithm for finding the number of linearly independent comitants of a system of differential equations. (Russian) (**84c:34051**)
Wang, Chao Chen See Pop, Julian J., (**84d:73048**)

53A50 Spinor analysis

- Budinich, Paolo (with Furlan, P.) C_{2n} spinor geometry. (See **84m:81012**)
(Bulinskii, A. V.) See Casanova, Gaston, **84c:53013**
Casanova, Gaston ★Векторная алгебра. (Russian) [Vector algebra] **84c:53013**
Furlan, P. See Budinich, Paolo, (See **84m:81012**)
Hussin, V. A remark on invariant symmetric second rank spinors and electromagnetic tensors. **84b:53016**
Takahashi, Yasushi The Fierz identities—a passage between spinors and tensors. **84c:53017**

secondary classifications:

- Albu, I. D. (with Opris, D.) Géométrie des spineurs de Finsler. [Geometry of Finsler spinors] (**84g:53097**)
Finley, J. D., III See Sonnleitner, Stephanie A., (**84c:83018**)
Friedrich, Th. Zur Existenz paralleler Spinorfelder über Riemannschen Mannigfaltigkeiten. [On the existence of parallel spinor fields on Riemannian manifolds] (**84b:53050**)
Hellsten, Hans On the visual geometry of spinors and twistors. (**84j:81041**)
Janković, Z. Spinors and the generalized Dirac operators. (See **84c:53003**)
Obata, Tsunehiro (with Oshima, Hiroshi) Schouten manifold with a spinor structure. (**84g:53102**)
Opris, D. See Albu, I. D., (**84g:53097**)
Oshima, Hiroshi See Obata, Tsunehiro, (**84g:53102**)
Sonnleitner, Stephanie A. (with Finley, J. D., III) The form of Killing vectors in expanding $3C$ spaces. (**84c:83018**)
Torres del Castillo, G. F. Null strings and Bianchi identities. (**84c:83024**)
Wetterich, C. Massless spinors in more than four dimensions. (**84f:81051**)
Wünsch, Volkmar Cauchy-Problem und Huygensches Prinzip bei einigen Klassen spinorieller Feldgleichungen. I. [Cauchy problem and Huygens principle in some classes of spinorial field equations. I] (**84f:58118a**)
Cauchy-Problem und Huygensches Prinzip bei einigen Klassen spinorieller Feldgleichungen. II. [Cauchy problem and Huygens principle in some classes of spinorial field equations. II] (**84f:58118b**)

53A55 Differential invariants (local theory), geometric objects

- Adams, John Q. Frenet's theorem and method of moving frames. (Italian summary) **84g:53023**
Papa, M. N. Affine classification of a differential system with quadratic nonlinearities. (Russian) (See **84c:34002**)
secondary classifications:
Balabanova, R. The common Chebyshev net of two-dimensional Riemannian spaces. (Bulgarian. English and Russian summaries) (**84f:53009**)
Betten, Josef Integrity basis for a second-order and a fourth-order tensor. (**84g:73007**)
Bilchev, S. I. Generalized stream functions for the asymmetric case of systems of two first-order partial differential equations. (Russian) (See **84c:34002**)
Blair, David E. On the relation between pseudoconformal and Kähler geometry. (**84m:53065**)

- Dombrovskii, R. F. See Ostianu, N. M.; et al., (84c:53040a)
- Driss, Bularus Centroaffine invariants of a three-dimensional system with homogeneous quadratic right-hand sides. (Russian) (84j:34031)
- Ferraris, Marco (with Francaviglia, Mauro; Reina, Cesare) A constructive approach to bundles of geometric objects on a differentiable manifold. (84c:58006)
- Francaviglia, Mauro See Ferraris, Marco; et al., (84c:58006)
- Kamenarović, I. On line complexes in the isotropic space I_1^3 . (Serbo-Croatian summary) (84c:53014)
- Kosarenko, M. F. Fields of geometric objects of a regular hyperband H, C^1S_N . (Russian) (84c:53020)
- Li, An Ming A class of new curvature invariants of submanifolds and the kinematic formula. (Chinese) (84c:53065)
- Marcus, Proim On a result of S. S. Chern concerning contact invariants between a pair of surfaces. (Italian summary) (84c:53005)
- Ostianu, N. M. (with Dombrovskii, R. F.; Polyakov, N. D.) Submanifolds in differentiable manifolds provided with differential geometric structures. II. Submanifolds of codimension 2 in contact and almost contact manifolds. (Russian) (84c:53040a)
- Polyakov, N. D. Submanifolds in differentiable manifolds provided with differential geometric structures. III. $N(\sigma)$ -anti-invariant submanifolds in manifolds with an almost contact structure. (Russian) (84c:53040b)
- See also Ostianu, N. M.; et al., (84c:58006)
- Reina, Cesare See Ferraris, Marco; et al., (84c:58006)
- Stolyarova, L. P. Geometry of the distribution of straight lines in P_3 . (Russian) (84j:53016)
- Salanke, Rolf (with Švec, Alois) Zur Differentialgeometrie der Untermannigfaltigkeiten eines Kleinschen Raumes. [On the differential geometry of submanifolds of a Klein space] (84b:53063)
- Švec, Alois See Salanke, Rolf. (84b:53063)
- Vulpe, N. I. Construction of a minimal complete system of orthogonal invariants of a two-dimensional system of differential equations. (Russian) (84b:34025)

53A60 Geometry of webs [See also 14C21, 20N05.]

- Akivis, M. A. Webs and almost Grassmannian structures. 84m:53024
(with Gerasimenko, S. A.) Some closure figures on manifolds with symmetry. (Russian) 84b:53017
- Webs and almost-Grassmann structures. (Russian) 84b:53018
- Bel'skii, Z. I. Equidirected and banded characteristic nets of Hesse nets of three-webs. (Russian. English summary) 84m:53025
- Chern, S. S. Web geometry. 84g:53024
- Dragunov, V. K. A coordinate three-web on a surface in the space of a cubic metric. (Russian) 84c:53014
- Fedorova, V. I. An interpretation of a six-dimensional Bol three-web in three-dimensional projective space. (Russian) 84c:53015
- Gerasimenko, S. A. See Akivis, M. A., 84b:53017
- Lazareva, V. B. Darboux three-webs on a surface in triaxial space. (Russian) 84c:53016
- Shelekhov, A. M. An algebraic eight-dimensional three-web on the manifold of pencils of second-order curves. (Russian) 84c:53021
- Stoev, G. S. The geometry of two classes of webs of curves of mixed type. (Bulgarian. German and Russian summaries) 84g:53025
- Tobitkhina, G. A. Invariant transversal distributions of four-dimensional three-webs W_3 . (Russian) 84c:53017

secondary classifications:

- Akivis, M. A. Completely isotropic submanifolds of a four-dimensional pseudoconformal structure. (Russian) (84b:53016)
- Balmurator, Kh. A. A four-web generated by asymptotic distributions on a three-dimensional surface in P_3 . (Russian) (84b:53009)
- Bohodurin, V. S. On the invariant theory of point correspondences of three projective spaces. (Russian) (84b:53010)
- Ivanov, V. G. Doubly fibred generalized parallelisms. (Russian) (84i:53026)
- Jean, P. Homomorphisms de lois de composition différentiables. [Homomorphisms of differentiable composition laws] (84g:58015)
- Khabardzaniya, R. T. Conjugate nets in an extended space. (Russian) (84b:53008)
- Koch, Richard Diagonale Tscheytscheff-Netze. [Diagonal Chebyshev nets] (84i:53006)
- Pomaskina, L. A. Idempotent quasigroups, defined on a multidimensional three-web. (Russian) (84d:20075)

53A99 None of the above, but in this section

secondary classifications:

- Geise, Gerhard See Stammler, Ludwig, (84a:51014)
- Stammler, Ludwig (with Geise, Gerhard) Hyperbelkonstruktionen bei Ausgleichsgeraden und ein verallgemeinerter Pohlkescher Satz. [Constructions of hyperbolas with regression lines and a generalized Pohlke theorem] (84a:51014)

53Bxx Local differential geometry

53B05 Linear and affine connections

- Agarwal, A. K. See Upadhyay, M. D., 84c:53020
- Barua, B. (with Ray, Ashok Kumar) Bianchi and Veblen identities for the projective curvature tensor of a semisymmetric affine connection in an affinely connected space. 84c:53022
- Bieszk, Leon On some classification of the linear connection in the small-dimensional space L_n . 84c:53023

- Bucki, Andrzej Curvature tensors of conjugate connections on a manifold. (Russian and Polish summaries) 84c:53024

On the existence of a linear connection so as a given tensor field of the type (1,1) is parallel with respect to this connection. (Russian and Polish summaries) 84c:53025

Bury, T. (with Jakubowicz, A.) On existence of a linear connection determined by a recurrently tensor field of type (1,1). 84f:53011

- Capursi, Mauro Differentiations of order m , of kind (h,k) and of type (r,s) . (Italian. English summary) 84c:53014

- Catto, D. (with Francaviglia, Mauro) On certain decompositions of tensorfields of order four. 84b:53019

- Chaki, M. C. (with Konar, Arabinda) On a type of semisymmetric connection on a Riemannian manifold. 84g:53026

- Dumitres, V. Invariant differential forms in spaces with connections. (Romanian. English summary) 84c:53015

- Egorov, A. I. Motions in spaces of hyperplane elements of general affine connection. (Russian) 84j:53019

- Automorphisms in spaces of tensor support elements. (Russian) 84c:53018

- Engliš, P. On the T -recurrence of certain spaces A_3 and A_4 with affine connection. (Romanian. French summary) 84d:53011

- Semisymmetric E -connections. (Romanian) 84j:53020

- Francaviglia, Mauro See Catto, D., 84b:53019

- Jakubowicz, A. See Bury, T., 84f:53011

- Konar, Arabinda See Chaki, M. C., 84g:53026

- Leiko, S. G. Special p -geodesic mappings of spaces with affine connection. (Russian) 84c:53018

- p -geodesic mappings of spaces with affine connection. (Russian) 84m:53026

- Liu, Shu Lin On Einstein's λ -transformation and the invariance of Einstein's tensor. 84c:53016

- Some new classifications of affine connections. (Chinese) 84f:53012

- Mikesh, I. (with Sinyukov, N. S.) Quasiparallel mappings of spaces with affine connection. (Russian) 84f:53013

- Mikheev, P. O. See Sabinin, L. V., 84c:53027

- Moór, Arthur Weylsche Übertragungstheorie bezüglich der Räume mit verallgemeinerten Linienelementen. [Weyl's theory of transformation laws with respect to spaces having generalized line elements] 84g:53027

- Ouyang, Chong Zhen (with Wang, Zhong Cai) Riemannian spaces with constant connection of the second kind. (Chinese. English summary) 84b:53017

- Popescu, Paul A new generalisation of the connection of Tzitzeica. (See 84f:53001)

- Prvanović, Mileva Conjugate connections on manifolds with complex or product structure. 84i:53018

- Putinar, Mihai One generalisation of the Tzitzeica-invariant. 84c:53026

- Ray, Ashok Kumar See Barua, B., 84c:53022

- Sabinin, L. V. (with Mikheev, P. O.) A symmetric connection in the space of an analytic Moufang loop. (Russian) 84c:53027

- Sharma, Kamal Kant On affinely connected generalised 2-recurrent spaces. II. 84c:53019

- Sharma, Ramesh Certain characteristics of the curvature tensor of an affinely connected manifold. 84j:53021

- Shirokov, A. P. Invariant torsion-free connections in tangent bundles of conformal Möbius planes. (Russian) 84c:53019

- Geometry of symmetric polarity in a projective space over an algebra of dual numbers. (Russian) 84m:53027

- Sinyukov, N. S. See Mikesh, I., 84f:53013

- Upadhyay, M. D. (with Agarwal, A. K.) On affine connection in an almost hyperbolic Hermitian manifold. 84c:53020

- Wang, Zhong Cai See Ouyang, Chong Zhen, 84b:53017

secondary classifications:

- Bieszk, Leon (with Stasiak, Irena) Classification of the four-dimensional projectively Euclidean space D_4 . (84j:53024)
- Nadj, Djerdji F. On affine transformations of Ötsuki and Weyl-Ötsuki spaces. (84j:53040)
- Nurpeisov, Zh. On the geometry of integrable distributions in E_n . (Russian) (84m:53008)
- Rakhula, M. O. Morphism of fiberings with connections. (Russian) (84c:53034)
- Shapukov, B. N. Automorphisms of fiber spaces. (Russian) (84c:53035)
- Stasiak, Irena See Bieszk, Leon, (84j:53024)
- Stepanov, S. E. Realization of Chebyshev connections on surfaces of an affine space. (Russian) (84j:53010)
- Trümper, Manfred Lagrangian mechanics and the geometry of configuration spacetime. (84j:70019)

53B10 Projective connections

- Gunning, Robert C. On projective covariant differentiation. 84b:53020
- Sultanov, A. Ya. Nonsolvable groups of motions of spaces with projective connection. (Russian) 84g:53028

secondary classifications:

- Aminova, A. V. A class of projectively moving spaces. I. (Russian) (84g:53031)
- Kondo, Kazuo An epistemological construction of the Einstein-Cartan space-time. (Japanese summary) (84b:83042)
- Krejčík, Jaroslav Contribution to the theory of pseudocongruences with projective connection. (84i:53012)
- Shevchenko, Yu. I. Normalization of a band. (Russian) (84j:53012)

53B15 Other connections

- Bácsó, S. Mappings that preserve quasiparallel curves. (Russian) 84b:53021
- The relation between quasiparallel curves and autoparallel surfaces. (Russian) 84c:53028

- Zu Ötsukischen Räumen mit rekurrenter Metrik. [On Ötsuki spaces with recurrent metric] **84m:53028**
- Djuras, Jan Connexions in f -manifolds. (Serbo-Croatian summary) **84k:53020**
- Donnini, S. (with Mangione, Vittorio) A theorem of Schur type on a Riemannian manifold equipped with a parallel vector field. (Italian. English summary) **84g:53029**
- Guo, Han Ying See Lu, Qi Keng; et al., **84j:53022**
- Hö, Tal Yun On an expression for conformal curvature tensors in metric connection spaces. (Korean. English summary) **84c:53029**
- Kolář, Ivan Connections in 2-fibered manifolds. **84c:53014**
On generalized connections. **84c:53013**
(with Lelovský, Vladimír) Structure equations of generalized connections. (Czech summary) **84c:53015**
- Lelovský, Vladimír See Kolář, Ivan, **84c:53015**
- Lu, Qi Keng (with Guo, Han Ying; Wu, Ke) A formulation of nonlinear gauge theory and its applications. **84j:53022**
- Mangione, Vittorio See Donnini, S., **84g:53029**
- Mitor, Dechko B. Linear connections with zero torsion, recurrent curvature and plane axiom. (See **84g:53003**)
- Mozgawa, Witold On the nonexistence of parabolic Podkovyrin quasiconnections. (Russian and Polish summaries) **84d:53012**
- Popescu, Paul Sur une généralisation de la connexion de Tzitzeica. [On a generalization of the Tzitzeica connection] **84g:53030**
- Prvanović, Mileva Weyl-Ötsuki spaces of the second and third kind. (Serbo-Croatian summary) **84f:53014**
- Singh, U. P. (with Srivastava, R. J.) Semisymmetric connection parameters in Randers space. **84d:53013**
- Smaranda, D. On projective transformations of symmetric connections with a recurrent projective tensor field. **84j:53023**
- Srivastava, R. J. See Singh, U. P., **84d:53013**
- Stavre, P. On some special connections on differentiable manifolds. (Romanian) (See **84f:53001**)
- Urbanas, A. P. Maximally moving spaces of vector elements. (Russian. French and Lithuanian summaries) **84d:53014**
- Wu, Ke See Lu, Qi Keng; et al., **84j:53022**
- secondary classifications:
- Edelen, Dominic G. B. Horizontal distributions on spaces of fibers. (**84m:58008**)
- Kolář, Ivan Fiber parallelism and connections. (**84i:53028**)
- Markowitz, Michael J. (with Schlafly, Roger) Rigidity of pseudoconformal connections. (**84c:32019**)
- Moór, Arthur Über Transformationsgruppen in Weyl-Ötsukischen Räumen. [On transformation groups in Weyl-Ötsuki spaces] (**84c:53023**)
- Nishioka, Michio A remark on coefficients of connection with two gauge fields. (**84m:83051**)
- Schlaflly, Roger See Markowitz, Michael J., (**84c:32019**)
- 53B20 Local Riemannian geometry
- Agarwal, A. K. See Upadhyay, M. D., **84c:53031**
- Aminova, A. V. A class of projectively moving spaces. I. (Russian) **84g:53031**
A moving skew-orthogonal frame and one type of projective motion of Riemannian manifolds. (Russian) **84c:53030**
- Bieszk, Leon (with Stasiak, Irena) Classification of the four-dimensional projectively Euclidean space D_4 . **84j:53024**
- Boju, V. Local characterizations of a Riemannian space by means of the function "sectional curvature". (See **84g:53003**)
(with Funar, L. L.) QC properties of certain classes of Riemannian spaces. (Romanian) (See **84f:53001**)
- Castoldi, Luigi The metric tensor of V_2 "immersed in S_3 ". (Italian. English summary) **84f:53015**
Homogeneous functions—an explicit representation and applications. (Italian. English summary) **84g:53032**
Why "isotropic tensors"? (Italian. English summary) **84g:53033**
- Doukakis, E. On the geodesic holonomy in space-time geodesy. (Greek. English summary) **84b:53022**
- Egorov, A. I. A property of a symmetric recurrence tensor. (Russian) **84g:53034**
- Funar, L. L. See Boju, V., (See **84f:53001**)
- Gromov, N. A. Passages to the limit in sets of groups of motions and Lie algebras of spaces of constant curvature. (Russian) **84d:53015**
- Grycak, Wiesław Some remarks on null geodesic collineations in 2-recurrent Riemannian manifolds. **84c:53021**
- Hartman, Philip Remarks on geodesics. **84j:53025**
- Ikawa, Toshihiko On some curves in Riemannian geometry. **84j:53026**
- Kalnins, E. G. (with Miller, Willard, Jr.) Conformal Killing tensors and variable separation for Hamilton-Jacobi equations. **84f:53016**
- Kharisova, N. Kh. See Norden, A. P., **84c:53022**
- Kim, Hae Yong Geometric interpretations of Killing tensor fields and conformal Killing tensor fields. (Korean. English summary) **84d:53016**
- Kirichenko, V. F. The geometry of T -recurrent manifolds. (Russian) **84j:53019**
- Kowalski, Oldřich Some curvature identities for commutative spaces. **84c:53021**
- Liu, Ding Yuan See Yang, Wen Mao. **84c:53017**
- Marchiafava, Stefano Variétés riemanniennes dont le tenseur de courbure est celui d'un espace symétrique de rang un. (English summary) [Riemannian manifolds whose curvature tensor is that of a symmetric space of rank one] **84c:53016**
- Matei, A. (with Smaranda, D.) On a certain type of conformally Euclidean Riemannian manifold, subprojective of order $n-m-1$. (Romanian) **84j:53027**
- Miller, Willard, Jr. See Kalnins, E. G., **84f:53016**
- Muramori, Takao (with Seino, Masaru) On irreducible conformally recurrent Riemannian manifolds. **84c:53022**
- Nedjic, Nicolae I. See Teodorescu, Ion D., **84j:53028**
- Norden, A. P. (with Kharisova, N. Kh.) Scalar field on a sphere. (Russian) **84c:53022**
- Ogawa, Yôsuke Orthogonal decomposition of curvature type tensors. **84c:53023**
- Podolskii, V. G. Infinitesimal transformations in the spaces (TV_2, g^c) and (TV_2, g^s) . (Russian) **84c:53018a**
The relation between infinitesimal transformations and tensor fields on the base (V_2, g) and infinitesimal transformations in the space (TV_2, g^c) . (Russian) **84c:53018b**
- Pugachev, Ya. I. Weyl's tensor as a criterion for a conformal mapping. (Russian) **84c:53019**
- Seino, Masaru See Muramori, Takao, **84c:53022**
- Slaghek, Luigi Curvature of the three-dimensional orientations at a point of a four-dimensional space S_4 . (Italian. English and French summaries) **84g:53035**
- Smaranda, D. See Matei, A., **84j:53027**
- Sobchuk, V. S. Ricci-generalized-symmetric Riemannian spaces admit nontrivial geodesic mappings. (Russian) **84g:53036**
- Stasiak, Irena See Bieszk, Leon, **84j:53024**
- Teodorescu, Ion D. (with Nedjic, Nicolae I.) On Riemannian spaces V_2 with a linear metric. (Romanian) **84j:53028**
- Upadhyay, M. D. (with Agarwal, A. K.) Properties of Riemannian space with projective curvature tensor. **84c:53031**
- Venzi, Paolo The metric $ds^2 = F(u)du^2 + G(u)d\sigma^2$ and an application to concircular mappings. **84g:53037**
- Vishnevskii, V. V. On the origin of concomitant bivectors. (Russian) **84c:53024**
- Yang, Sheng Fang The invariance of the sectional curvature under conformal transformations. (Chinese) **84g:53038**
- Yang, Wen Mao (with Liu, Ding Yuan) Riemann spaces with recurrent projective curvature tensor. (Chinese) **84c:53017a**
(with Liu, Ding Yuan) Classification of decomposable conformally recurrent Riemannian spaces. (Chinese. English summary) **84c:53017b**
- secondary classifications:
- Aso, Kazutoshi Notes on some properties of the sectional curvature of the tangent bundle. (**84h:53020**)
- Barua, B. (with Ray, Ashok Kumar) Bianchi and Veblen identities for the projective curvature tensor of a semisymmetric affine connection in an affinely connected space. (**84c:53022**)
- Beals, Richard William Erratum: "Partial-range completeness and existence of solutions to two-way diffusion equations" [J. Math. Phys. 22 (1981), no. 5, 954-960; MR 83j:35030]. (**84c:35030**)
- Bernardini, Adele Riemannian manifolds with quasicontant curvature. (Italian. English summary) (**84j:53050**)
- Bucki, Andrzej Curvature tensors of conjugate connections on a manifold. (Russian and Polish summaries) (**84c:53024**)
- Chaki, M. C. (with Konar, Arabinda) On a type of semisymmetric connection on a Riemannian manifold. (**84g:53026**)
- Charyev, A. On the theory of m -dimensional surfaces in n -dimensional spaces S_n of constant curvature. (Russian. English summary) (**84m:53017**)
- Egorov, A. I. Motions in spaces of hyperplane elements of general affine connection. (Russian) (**84j:53019**)
- Fomenko, V. T. On \mathbb{Z} -realizations of metrics of positive curvature. (Russian) (**84b:53004**)
- Gupta, V. C. See Upadhyay, M. D., (**84m:53048**)
- Hineva, S. T. Infinitesimal affine deformations of submanifolds of a Riemannian manifold. (**84c:53019**)
- Hö, Tal Yun On an expression for conformal curvature tensors in metric connection spaces. (Korean. English summary) (**84c:53029**)
- Kalnins, E. G. (with Miller, Willard, Jr.) Intrinsic characterisation of orthogonal R separation for Laplace equations. (**84c:53036**)
(with Manocha, H. L.; Miller, Willard, Jr.) Harmonic analysis and expansion formulas for two-variable hypergeometric functions. (**84c:58091**)
- Kashiwada, Toyoko (with Sato, Shizuko) On harmonic forms in compact locally conformal Kähler manifolds with the parallel Lee form. (**84c:53026**)
- Konar, Arabinda See Chaki, M. C., (**84g:53026**)
- Kowalski, Oldřich A comparison theorem for spherical mean-value operators in Riemannian manifolds. (**84g:53069**)
- Kushwaha, R. D. S. Note on the eigenvalues of " F " for π -structure and almost tangent structure. (**84j:53047**)
- Manocha, H. L. See Kalnins, E. G.; et al., (**84c:58091**)
- Matsumoto, Koji Infinitesimal variations of hypersurfaces of locally product Riemannian manifolds. (**84f:53030**)
- Miller, Willard, Jr. See Kalnins, E. G., (**84c:53036**) and (**84c:58091**)
- Niculescu, Liviu On pseudo-Riemannian spaces in geodesic correspondence. (Romanian) (**84c:53026**)
- Nôno, Takayuki See Sato, Ryuzo, (**84m:90023**)
- Pinsky, Mark A. Moyenne stochastique sur une variété riemannienne. (English summary) [Stochastic mean value on a Riemannian manifold] (**84f:58117**)
- Predvoditelev, A. S. Riemannian manifolds and the equations of mathematical physics. (Russian. English summary) (**84b:01030**)
- Ray, Ashok Kumar See Barua, B., (**84c:53022**)
- Sato, Ryuzo (with Nôno, Takayuki) Invariance principle and " G -neutral" types of technical change. (**84m:90023**)
- Sato, Shizuko See Kashiwada, Toyoko, (**84c:53026**)
- Sharma, Ramesh Certain characteristics of the curvature tensor of an affinely connected manifold. (**84j:53021**)
- Stanilov, Grozö Relation between Weyl's and Bochner's curvature tensors. (**84f:53018**)
- Sultanov, A. Ya. Unsolvability groups of motions of spaces with projective connection. (Russian) (**84c:53028**)
- Upadhyay, M. D. (with Gupta, V. C.) Integrability conditions of a $\xi(K-(K-2))$ -structure satisfying $\xi^4 - \xi^{3-2} = 0$. ($\xi \neq 0, I$). (**84m:53048**)
- Vanhecke, Lieven Differential geometry of tubes and geodesic spheres. (**84i:53045**)

- Watanabe, Yoshiyuki The sectional curvature of a 5-dimensional harmonic Riemannian manifold. (84f:53033)
 White, James Enrico ★ The method of iterated tangents with applications in local Riemannian geometry. (84f:58007)

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- Aso, Kazutoshi Notes on some properties of the sectional curvature of the tangent bundle. (84f:53020)
 Kalnins, E. G. (with Miller, Willard, Jr.) The general theory of R -separation for Helmholtz equations. (84f:53020)
 Mikolajová, Věra On the functional independence of scalar invariants of curvature for dimensions $n=2, 3, 4$. (Russian summary) (84f:53029)
 Miller, Willard, Jr. See Kalnins, E. G., (84f:53020)
 Minčič, Svetislav M. Integrability conditions of derivational formulas of a subspace of a generalized Riemannian space. (84f:53021)
 Moor, Arthur Über Transformationsgruppen in Weyl-Otsukischen Räumen. [On transformation groups in Weyl-Otsuki spaces] (84f:53023)
 Ślósarska, Wanda On conformal Killing tensors of type $2/2$ in the Riemannian space. (84f:53018)

secondary classifications:

- Gubatenko, V. P. (with Svetov, B. S.) Separable systems of coordinates for scalar equations of an electromagnetic field in an inhomogeneous isotropic medium. (Russian) (84f:78011)
 Matsumoto, Koji On submanifolds of locally product Riemannian manifolds. (84f:53017)
 Podolskij, V. G. Infinitesimal transformations in the spaces (TV_n, g^c) and (TV_n, g^e) . (Russian) (84f:53018a)
 The relation between infinitesimal transformations and tensor fields on the base (V_n, g) and infinitesimal transformations in the space (TV_n, g^c) . (Russian) (84f:53018b)
 Svetov, B. S. See Gubatenko, V. P., (84f:78011)

53B25 Local submanifolds [See also 53C40.]

- Arca, Giuseppe Variétés anti-invariantes à forme commutative distinguée d'un espace euclidien muni d'une structure sasakienne. [Anti-invariant manifolds with distinguished commutative form of a Euclidean space having Sasakian structure] (84f:53039)
 Bejancu, Aurel Anti-holomorphic submanifolds of almost Hermitian manifolds. (84f:53025)
 Chen, Bang-yen Submanifolds with planar normal sections. (84f:53040)
 Dubey, Renu See Gupta, V. C., (84f:53022)
 Gheysens, Luc (with Verheyen, Paul; Verstraeten, Leopold) Characterization and examples of Chen submanifolds. (84f:53029)
 Gupta, V. C. (with Dubey, Renu) Invariant submanifolds of f_1 -manifold. (84f:53022)
 Hineva, S. T. Infinitesimal affine deformations of submanifolds of a Riemannian manifold. (84f:53019)
 Kim, In Bae See Tashiro, Yoshihiro, (84f:53017)
 Lal, H. C. See Sinha, R. S., (84f:53024)
 Lee, Yong-Wan A note on generic submanifolds of quaternionic projective space. (84f:53059)
 Matsumoto, Koji On submanifolds of locally product Riemannian manifolds. (84f:53017)
 Matsuyama, Yoshio Complete hypersurfaces with $RS=0$ in E^{n+1} . (84f:53023)
 Nadj, Djerdji F. On subspaces of Riemann-Otsuki space. (84f:53024)
 On the orthogonal spaces of the subspaces of a Riemann-Otsuki space. (Serbo-Croatian summary) (84f:53020)
 Polyakov, N. D. $N(\sigma)$ -anti-invariant surfaces in an almost contact manifold. (Russian) (84f:53021)
 Sinha, R. S. (with Lal, H. C.) Totally real submanifolds of a Kaehlerian manifold with semisymmetric metric F -connections. (84f:53024)
 Suh, Young Jin A note on generic submanifolds of quaternionic projective space. (84f:53059)
 Tashiro, Yoshihiro (with Kim, In Bae) On almost contact metric compound structure. (84f:53017)
 Thas, Charles Gauss maps on submanifolds of Riemannian spaces. (84f:53025)
 On special submanifolds in spaces of constant curvature. (84f:53030)
 On n -dimensional submanifolds with flat normal connection in a $2n$ -dimensional elliptic space E^{2n} . (84f:53030)
 Verheyen, Paul See Gheysens, Luc; et al., (84f:53029)
 Verstraeten, Leopold See Gheysens, Luc; et al., (84f:53029)

secondary classifications:

- Ben Salem, Moncef Variété hyperbolique ayant la propriété de Killing isotrope. [Hyperbolic manifold with the isotropic Killing property] (84f:53031)
 Camu, Giovanni Coisotropic hypersurfaces of a type D space-time. (Italian. French summary) (84f:53032)
 do Carmo, M. (with Dajczer, Marcos) Necessary and sufficient conditions for existence of minimal hypersurfaces in spaces of constant curvature. (84f:53061)
 Chen, Bang-yen CR-submanifolds of a Kaehler manifold. I. (84f:53062a)
 CR-submanifolds of a Kaehler manifold. II. (84f:53062b)
 (with Yamaguchi, Seiichi) Classification of surfaces with totally geodesic Gauss image. (84f:53055)
 Chen, Wei Huan Some integral formulas on submanifolds in Euclidean space. (84f:53062)
 Dajczer, Marcos See do Carmo, M., (84f:53061)
 Gray, Alfred (with Vanhecke, Lieven) The volumes of tubes in a Riemannian manifold. (84f:53053)

- Hoffman, David A. (with Osserman, Robert) The area of the generalized Gaussian image and the stability of minimal surfaces in S^n and R^n . (84f:53006)
 Ikuta, Kazuko A Riemannian submersion with 2-dimensional base space. (84f:53075)
 Markowitz, Michael J. CR-hypersurfaces in a space with a pseudoconformal connection. (84f:53029)
 Matsuyama, Yoshio Some hypersurfaces of symmetric spaces. (84f:53052)
 Okumura, Masafumi Reducing the codimension of a submanifold of a complex projective space. (84f:53083)
 Opofskaya, E. V. Almost contact imbedding in a manifold of almost contact structure. (Russian) (84f:53042)
 Osserman, Robert See Hoffman, David A., (84f:53006)
 Shimizu, Yasuhiro On a construction of homogeneous CR-submanifolds in a complex projective space. (84f:53055)
 Tian, Chou On the total curvature of submanifolds. (84f:53067)
 Vanhecke, Lieven See Gray, Alfred, (84f:53053)
 Verma, Manjula Generalised Gauss and Codazzi equations in a subspace of a Finsler (Minkowskian) Hermite space. (84f:53038)
 Veselova, G. V. A conformal mapping of the surfaces of Euclidean spaces and vector R^n -fields. (Russian) (84f:53003)
 Yamaguchi, Seiichi See Chen, Bang-yen, (84f:53055)

53B30 Lorentz metrics, indefinite metrics

- Beckers, J. (with Sinzinkayo, S.) Conformal point transformations, invariance conditions and Lie derivatives. (84f:53025)
 Ben Salem, Moncef Variété hyperbolique ayant la propriété de Killing isotrope. [Hyperbolic manifold with the isotropic Killing property] (84f:53031)
 Bouacida, Ezzeddine Minkowski space-time equipped with a pair of reciprocal quasisecurrent fields. (Italian summary) (84f:53022)
 Camu, Giovanni Coisotropic hypersurfaces of a type D space-time. (Italian. French summary) (84f:53032)
 Catenacci, Roberto On the properties of Kähler-Lorentz metrics. (84f:53033)
 Clarke, C. J. S. Space-times of low differentiability and singularities. (84f:53021)
 Mukhamedov, A. M. Groups of almost affine motions that preserve the covariantly constant quadratic complex of geodesics in space-time manifolds. (Russian) (84f:53041)
 Nicolescu, Liviu On pseudo-Riemannian spaces in geodesic correspondence. (Romanian) (84f:53026)
 Un théorème sur les métriques pseudoriemanniennes conformes. [A theorem on conformal pseudo-Riemannian metrics] (84f:53026)
 Popovici, Iulian (with Turtoi, Adriana) Spaces with constant connection and Jordan algebras. (Romanian) (See 84f:53001)
 Sinzinkayo, S. See Beckers, J., (84f:53025)
 Turtoi, Adriana See Popovici, Iulian, (See 84f:53001)

secondary classifications:

- Agnese, A. G. (with La Camera, M.) Gravitation without black holes. (84f:83022)
 Aksirov, M. M. Equations of geodesic nonstationary spaces. (Russian) (84f:53028)
 Aminova, A. V. A class of projectively moving spaces. I. (Russian) (84f:53031)
 The Eisenhart equation and first integrals of geodesics on Riemannian manifolds of Lorentz signature. (Russian) (84f:53089)
 Bellinson, M. M. Determination of Kerr congruences by algebraic methods in the theory of mapping pseudo-Riemannian spaces on Riemannian spaces. (Russian) (84f:83010)
 Buchdahl, H. A. Nonlinear Lagrangians and pp waves. (84f:83053)
 Collinson, C. D. See Vaz, E. G. L. R., (84f:83030)
 Debever, Robert Sur le tenseur de Bel. [On the Bel tensor] (84f:83032)
 Ernst, Frederick J. See Hoenselaers, Cornelius, (84f:83016)
 Fiedler, B. (2,2)-decomposable solutions of the Bach field equations of general relativity. (84f:83041)
 Gowdy, Robert H. Geometrical perturbation theory: action-principle surface terms in homogeneous cosmology. (84f:83015)
 Guo, Han Ying Models of harmonic mapping theory for the Beltrami space-time of constant curvature. (84f:83009)
 Gupta, Salil (with Mitskevich, N. V.) Novikov-type coordinates for HJ separable metrics. (84f:83023)
 Hoenselaers, Cornelius (with Ernst, Frederick J.) Remarks on the Tomimatsu-Sato metrics. (84f:83016)
 Kalnins, E. G. (with Miller, Willard, Jr.) Intrinsic characterisation of orthogonal separation of one coordinate in the Hamilton-Jacobi equation. (84f:53032)
 Kerrighan, D. B. On the uniqueness of the energy-momentum tensor for electromagnetism. (84f:83045)
 La Camera, M. See Agnese, A. G., (84f:83022)
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- Cheeger, Jeff (with Gromov, Mikhail L.; Taylor, Michael E.) Finite propagation speed, kernel estimates for functions of the Laplace operator, and the geometry of complete Riemannian manifolds. (84c:58109)
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- Hamoui, Adnan Curvature identities on Hermite manifolds. (French summary) (84c:53078)
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- Kleinjohann, Norbert (with Walter, Rolf) Nonnegativity of the curvature operator and isotropy for isometric immersions. (84c:53053)
- Kosmann-Schwarzbach, Yvette Dérivées de Lie des morphismes de fibrés. [Lie derivatives of bundle morphisms] (84d:58088)
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- Ni, Wei Ming On the elliptic equation $\Delta u + K(x)u^{(n+2)/(n-2)} = 0$, its generalizations, and applications in geometry. (84c:53049)
- Onofri, E. On the positivity of the effective action in a theory of random surfaces. (84j:58043)
- Pérez, Juan de Dios (with Santos, Florentino G.) Indefinite quaternion space forms. (84f:53040)
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- Aleksandrov, A. N. (with Kudrya, Yu. N.) Algebraic structure of gravitational fields and geodesic deviation. (Russian. English summary) (84f:83005)
 Amici, O. (with Casciaro, B.) Some remarks on regular pseudoconnections and regular pseudometrics. (Italian. English summary) (84m:53039)
 Aminova, A. V. The Eisenhart equation and first integrals of geodesics on Riemannian manifolds of Lorentz signature. (Russian) (84b:53069)
 Anosov, D. V. Generic properties of closed geodesics. (Russian) (84b:58029)
 Ballmann, Werner (with Thorbergsson, G.; Ziller, Wolfgang) Existence of closed geodesics on positively curved manifolds. (84b:58032)
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- Choi, Hyeon In Characterizations of simply connected rotationally symmetric manifolds. (84c:53042)
- Chimani, Gorô See Yamaguchi, Seichi, (84b:58039)
- Cihodariu, Gh. (with Smaranda, D.) Semi-invariant submanifolds of a manifold with Sasakian (f, g, u, v) -structure. (84b:53042)
- D'Atri, J. E. (with Dotti Miatello, Isabel) A characterization of bounded symmetric domains by curvature. (84f:32038)
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- Dotti Miatello, Isabel See Leite, Maria Luiza, (84c:53049)
- Fleischer, A. On a class of pseudo-Riemannian homogeneous spaces. (84m:53058)
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- Simon, Leon See Bartnik, Robert, (84j:58126)
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- Aubin, Thierry Métriques d'Einstein-Kähler sur les variétés kählériennes compactes. [Einstein-Kähler metrics on compact Kähler manifolds] (See 84c:53004)
- Azukawa, Kazuo Levi-Civita and Hermitian connections of a Hermitian metric. 84c:53060
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- Olzak, Zbigniew Almost cosymplectic real hypersurfaces in Kähler manifolds. (84c:53047)
- Pérez, Juan de Dios (with Santos, Florentino G.; Urbano, Francisco) On the axioms of planes in quaternionic geometry. (84b:53037)
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- Pope, C. N. Kähler manifolds and quantum gravity. (84b:83024)
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- Zucker, Steven M. A tensorial curvature and a theorem of Chern. (84m:58007)

53C60 Finsler spaces and generalizations (areal metrics) [See also 58B20.]

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- Albu, I. D. (with Oprea, D.) Géométrie des spineurs de Finsler. [Geometry of Finsler spinors] 84c:53097
- (with Oprea, D.) On the differential geometry of Finsler tangent bundle. I. (Romanian summary) 84j:53074
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- Dubey, R. S. D. (with Singh, Hukum) Commutation formulae in conformal Finsler space. II. (**84g:53044**)
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Finsler spaces ★The Proceedings of the National Seminar on Finsler Spaces. (**84i:53003**)
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- Ren, De Lin The generalized support function and its applications. (**84m:52008**)
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- Shui, Nai Xiang See Shen, Yi Bing, (**84i:53040**)
- Simon, Leon See Schoen, Richard M., (**84j:49039**)
- Stoka, Marius I. Quelques considérations concernant le problème de l'aiguille de Buffon dans l'espace euclidien E_n . [Some remarks on Buffon's needle problem in the Euclidean space E_n] (**84h:60030**)
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- Zucker, Steven M. A tensorial curvature and a theorem of Chern. (**84m:58007**)
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- Busemann, H. (with Phadke, B. B.) Symmetric spaces and ellipses. **84i:53062**
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Zucco, Andrea Sur une des conjectures de B. Grünbaum concernant les familles continues de courbes. (Italian summary) [On one of B. Grünbaum's conjectures concerning continuous families of curves] (**84i:52015**)

53C75 Geometric orders, order geometry [See also 51Lxx.]

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Spour, Gary Differentiable curves of cyclic order four. (**84e:51027**)

53C80 Applications to physics

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Ashtekar, Abhay (with Horowitz, Gary T.; Magnon-Ashtekar, Anne) A generalization of tensor calculus and its applications to physics. **84h:53099**

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- Song, Xing Chang See Zhou, Guang Zhao, (84i:81078) and (84c:81092)
- Stephani, Hans See Kramer, Dietrich; et al., (84f:83002)
- Sternberg, Shlomo See Shnider, S., (84i:58050)
- Strathdee, J. See Randjbar-Daemi, S.; et al., (84h:83045)
- Sumbator, A. S. On the integrability of the Hamilton-Jacobi equation in generalized coordinates. (84c:70022)
- Takahashi, Yasushi The Fierz identities—a passage between spinors and tensors. (84c:53017)
- Teitelboim, Claudio Causality versus gauge invariance in quantum gravity and supergravity. (84c:83027)
- Templeton, S. See Deser, Stanley; et al., (84j:81128)
- Thacker, S. C. See Patel, L. K., (84c:83012)
- Thierry-Mieg, Jean (with Ne'eman, Yuval) Exterior gauging of an internal supersymmetry and $SU(2/1)$ quantum asthenodynamics. (84h:81113)
- Tiemblo, A. See Julve, J.; et al., (84h:81110)
- Tiomno, J. See Rebouças, Marcelo J., (84j:83029)
- Tod, K. P. Self-dual Kerr-Schild metrics and null Maxwell fields. (84h:83019)
- The singularities of \mathcal{K} -space. (84m:32043)
- All metrics admitting super-covariantly constant spinors. (84m:83011)
- Tolkachev, E. A. A dual-invariant formulation of equations for interacting Yang-Mills fields. (Russian. English summary) (84c:81050)
- Torrence, R. J. Formal iteration scheme for scalar fields in some spherically symmetric spaces. (84c:83016)
- Trebin, H.-R. The topology of nonuniform media in condensed matter physics. (German summary) (84j:82001)
- Trias, A. See Gambini, R., (84h:81074)
- Tseitin, A. A. Poincaré and de Sitter gauge theories of gravity with propagating torsion. (84c:83025)
- Tseitin, M. G. The Pohlmeier transform in Euclidean space. (Russian) (84m:81131)
- Unwin, S. D. PCT invariance and the orientability of Kaluza-Klein manifolds. (84d:83034)
- Urbanke, Helmut K. A differential classification and a quasimetric associated with $SU(2)$ Yang-Mills field strengths. (See 84m:81012)
- de Urries, F. J. See Julve, J.; et al., (84h:81110)
- Urrutia, Luis F. See Rosenbaum, Marcos; et al., (84c:83048)
- Vanzo, L. Presymplectic dynamics of a pole-dipole particle in external geometric fields. (Italian summary) (84m:58126)
- (Vladimirov, Yu. S.) See Kramer, Dietrich; et al., (84f:83002)
- Wald, Robert M. (with Yip, Ping) On the existence of simultaneous synchronous coordinates in spacetimes with spacelike singularities. (84c:53059a)
- (with Yip, Ping) Erratum: "On the existence of simultaneous synchronous coordinates in spacetimes with spacelike singularities" [J. Math. Phys. 22 (1981), no. 11, 2659–2665]. (84c:53059b)
- Walker, Martin See Schmidt, Bernd Gerhard, (84j:83015)
- Walner, R. P. Notes on gauge theory and gravitation. (84c:83046)
- Wang, Shi Kun See Guo, Han Ying; et al., (84c:83042)
- Warner, N. P. Green functions on CP^n . (84g:81045)
- The spectra of operators on CP^n . (84g:81046)
- Weinberg, Erick J. A continuous family of magnetic monopole solutions. (84c:81051)
- Weinberg, Steven Charges from extra dimensions. (84c:81123)
- Weinstein, Alan See Marsden, Jerrold E., (84h:82037)
- Wess, Julius (with Bagger, Jonathan) ★ Supersymmetry and supergravity. (84c:81114)
- Witt, Donald M. See Friedman, John L., (84m:83028)
- Witten, Edward An $SU(2)$ anomaly. (84j:81090)
- Wu, Ke See Guo, Han Ying; et al., (84c:83042)
- Wünsch, Volkmar Cauchy-Problem und Huygensches Prinzip bei einigen Klassen spinorieller Feldgleichungen. I. [Cauchy problem and Huygens principle in some classes of spinorial field equations. I] (84f:58118a)
- Cauchy-Problem und Huygensches Prinzip bei einigen Klassen spinorieller Feldgleichungen. II. [Cauchy problem and Huygens principle in some classes of spinorial field equations. II] (84f:58118b)
- Yanagida, T. See Kugo, Tachiro, (84m:81181)
- Yau, Shing Tung See Schoen, Richard M., (84c:83005)
- Yip, Ping See Wald, Robert M., (84c:53059a) and (84c:53059b)
- Zaikov, R. P. Hidden symmetries for some classical field models. (Russian. English summary) (84j:81091)
- (Zakharov, V. D.) See Kramer, Dietrich; et al., (84f:83002)
- Zhou, Guang Zhao (with Song, Xing Chang) New nonlinear σ models on symmetric spaces. (84i:81078)
- (with Song, Xing Chang) The H_2 sigma-models and self-dual $SU(n)$ Yang-Mills fields in four-dimensional Euclidean space. (84c:81092)
- Zordan, Clara See Caviglia, Giacomo, (84c:83013)
- Zwanziger, Daniel Nonperturbative modification of the Faddeev-Popov formula and banishment of the naive vacuum. (84c:81089)
- Conference:
Differential geometric methods in theoretical physics ★ Conference on differential geometric methods in theoretical physics. (84m:81012)
- Trieste ★ Conference on differential geometric methods in theoretical physics. (84m:81012)

53C99 None of the above, but in this section

secondary classifications:

- De Wilde, Marc (with Lecomte, Pierre B. A.) Algebraic characterizations of the algebra of functions and of the Lie algebra of vector fields of a manifold. (84h:58012)
- Lecomte, Pierre B. A. See De Wilde, Marc, (84h:58012)
- Mukhiddinov, S. R. Determination of a differential form from its integrals along geodesics. (Russian) (See 84m:35003)
- Palandzhyants, L. Zh. A means of calculating a multiplicative integral by methods of the theory of surfaces. (Russian) (84j:65025)
- Szenthe, J. On symplectic actions of compact Lie groups with isotropy subgroups of maximal rank. (84c:58089)
- Uhlenbeck, Karen K. Conservation laws and their application in global differential geometry. (84c:58057)
- Vassiliou, Efsthios Flat bundles and holonomy homomorphisms. (84c:57024)
- Witten, Edward Supersymmetry and Morse theory. (84b:58111)

54-XX GENERAL TOPOLOGY {For the topology of manifolds of all dimensions, see 57Nxx.}

54-01 Elementary exposition, textbooks

- (Arkhangelskii, A. V.) See Kelley, John L., 84c:54002
- Gamelin, Theodore W. (with Greene, Robert Everist) ★ Introduction to topology. 84h:54001
- Greene, Robert Everist See Gamelin, Theodore W., 84h:54001
- Herrlich, Horst ★ Espacios cercanos. (Spanish) [Proximity spaces] 84c:54001
- Jantscher, Lothar ★ Topologie. (German) [Topology] 84h:54001
- Joshi, K. D. ★ Introduction to general topology. 84f:54001
- Kelley, John L. ★ Общая топология. (Russian) [General topology] 84c:54002
- Simmons, George F. ★ Introduction to topology and modern analysis. 84b:54002

secondary classifications:

- Armstrong, Mark Anthony ★ Basic topology. (84f:55001)

54-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

- Comfort, W. Wistar (with Negreponis, Stylianos A.) ★Chain conditions in topology. (84h:04002)
- Fletcher, Peter (with Lindgren, William F.) ★Quasi-uniform spaces. (84h:54026)
- Herrlich, Horst Categorical topology 1971-1981. (84h:54016)
- Lindgren, William F. See Fletcher, Peter, (84h:54026)
- Negreponis, Stylianos A. See Comfort, W. Wistar, (84h:04002)

54-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (Aleksandrov, P. S.) See Arboleda, Luis Carlos, (84j:01054)
- Arboleda, Luis Carlos Les recherches de M. Fréchet, P. Alexandrov, W. Sierpiński et K. Kuratowski sur la théorie des types de dimensions et les débuts de la topologie générale. [The research of M. Fréchet, P. Aleksandrov, W. Sierpiński and K. Kuratowski on the theory of dimension types, and the beginnings of general topology] (84j:01054)
- Demaria, Davide Carlo Francesco Severi's contribution to topology. (Italian) (See 84c:00010)
- (Fréchet, Maurice) See Arboleda, Luis Carlos, (84j:01054) and Taylor, Angus E., (84j:01077)
- Guà, Josep V. ★Sobre l'evolució històrica de la definició d'espai topològic. (Catalan) [On the historical evolution of the definition of topological space] (84c:01048)
- (Kuratowski, Kazimierz) See Arboleda, Luis Carlos, (84j:01054)
- Liu, Ying Ming See Pu, Bao Ming, (84g:54009)
- Pu, Bao Ming (with Liu, Ying Ming) A survey of some aspects on the research work of fuzzy topology in China. (84g:54009)
- (Sierpiński, Wacław) See Arboleda, Luis Carlos, (84j:01054)
- Taylor, Angus E. A study of Maurice Fréchet. I. His early work on point set theory and the theory of functionals. (84j:01077)
- Bibliography:
Fréchet, Maurice René See Taylor, Angus E., (84j:01077)
- Biography:
Fréchet, Maurice René See Taylor, Angus E., (84j:01077)

54-04 Explicit machine computation and programs (not the theory of computation or programming)

- Lopes Passos, Emmanuel Pisces A conversational system oriented for topology (MTD). (See 84f:00031)

54-06 Proceedings, conferences, etc.

- (Aleksandrov, P. S.) See Topology, 84m:54001
- (Bing, R. H.) See Continua, decompositions, manifolds, 84h:54002
- (Eaton, William T.) See Continua, decompositions, manifolds, 84h:54002
- (Gruenhage, Gary) See Proceedings: Topology Conference, 84c:54004
- (Kuperberg, Włodzimierz) See Proceedings: Topology Conference, 84c:54004
- (Novák, Josef) See General topology and its relations to modern analysis and algebra, 84c:54003
- (Reed, G. M.) See Proceedings: Topology Conference, 84c:54004
- (Starbird, Michael P.) See Continua, decompositions, manifolds, 84h:54002
- (Zenar, Phillip) See Proceedings: Topology Conference, 84c:54004
- Annapolis, Md. ★Proceedings of the 1982 Topology Conference. 84c:54004
- ★Proceedings of the 1982 Topology Conference. 84i:54001
- Austin, Tex. ★Continua, decompositions, manifolds. 84h:54002
- Conference:
Topology ★Международная Топологическая Конференция. (Russian) [International Topology Conference] 84g:54001
- ★Proceedings of the 1982 Topology Conference. 84c:54004
- ★Proceedings of the 1982 Topology Conference. 84i:54001
- ★Topology. (Russian) 84m:54001
- Continua, decompositions, manifolds ★Continua, decompositions, manifolds. 84h:54002
- General topology and its relations to modern analysis and algebra ★General topology and its relations to modern analysis and algebra. V. 84c:54003
- Moscow ★Международная Топологическая Конференция. (Russian) [International Topology Conference] 84g:54001
- ★Topology. (Russian) 84m:54001
- Prague ★General topology and its relations to modern analysis and algebra. V. 84c:54003
- Proceedings:
Topology Conference ★Proceedings of the 1982 Topology Conference. 84c:54004
- ★Proceedings of the 1982 Topology Conference. 84i:54001
- Symposium:
General Topology and its Relations to Modern Analysis and Algebra ★General topology and its relations to modern analysis and algebra. V. 84c:54003
- Prague Topological ★General topology and its relations to modern analysis and algebra. V. 84c:54003
- Texas Topology ★Continua, decompositions, manifolds. 84h:54002
- Topology ★Международная Топологическая Конференция. (Russian) [International Topology Conference] 84g:54001
- ★Topology. (Russian) 84m:54001

secondary classifications:

- (Singh, Sankatha Prasad) See Topological methods in nonlinear functional analysis, (84m:47003)
- (Thomae, S.) See Topological methods in nonlinear functional analysis, (84m:47003)
- (Watson, Bruce B.) See Topological methods in nonlinear functional analysis, (84m:47003)
- Meeting:
American Mathematical Society ★Topological methods in nonlinear functional analysis. (84m:47003)
- Session:
Fixed point theory and applications ★Topological methods in nonlinear functional analysis. (84m:47003)
- Topological methods in nonlinear functional analysis ★Topological methods in nonlinear functional analysis. (84m:47003)
- Toronto, Ont. ★Topological methods in nonlinear functional analysis. (84m:47003)

54Axx Generalities

54A05 Topological spaces and generalizations (closure spaces, etc.)

- Allam, A. A. See Mashhour, A. S.; et al., 84h:54003
- Appert, Antoine Sur le meilleur terme primitif en topologie. [On the best primitive term in topology] 84f:54002
- Doichinov, Doichin Supertopologies and some classes of extensions of topological spaces. (See 84c:54003)
- Ginsburg, John A structure theorem in finite topology. 84h:54003
- Herrmann, R. A. Closed graphs on convergence spaces. (Serbo-Croatian summary) 84i:54002
- Jankowski, Andrzej W. A characterization of the closed subsets of an $\langle \alpha, \delta \rangle$ -closure space using an $\langle \alpha, \delta \rangle$ -base. (Russian summary) 84a:54001
- Khedr, F. H. See Mashhour, A. S.; et al., 84h:54003
- Lugoian, Sorin Generalized topology. (Romanian. English summary) 84c:54005
- Mahmoud, F. S. See Mashhour, A. S.; et al., 84h:54003
- Mashhour, A. S. (with Allam, A. A.; Mahmoud, F. S.; Khedr, F. H.) On supratopological spaces. 84h:54003
- Morgan, John C., II On equivalent category bases. 84a:54002
- Šik, František Durch Relationen induzierte Topologien. [Topologies that are induced by relations] 84c:54006
- Zuzák, Igor Generalized topological spaces. (Russian summary) 84h:54004

secondary classifications:

- Dorsett, Charles Semiregular spaces. (84d:54040)
- Gähler, W. A topological approach to general structure theory. (84g:18018)
- Johnstone, Peter T. The point of pointless topology. (84f:01043)
- Kent, D. C. (with Richardson, G. D.) A compactification with θ -continuous lifting property. (84h:54048)
- Mulvey, C. J. (with Pelletier, Joan Wick) The dual locale of a seminormed space. (84i:46052)
- Palias, Guido Structures quasi-métriques. (Généralités. Exemples. Applications). [Quasimetric structures. (General characteristics. Examples. Applications)] (84g:54031)
- Pap, Endre Contributions to functional analysis on convergence spaces. (84i:54007)
- Pelletier, Joan Wick See Mulvey, C. J., (84h:54052)
- Richardson, G. D. See Kent, D. C., (84h:54048)
- Šik, František Topology on regulators of lattice ordered groups. II. Completely regular regulators. (Russian summary) (84c:06021)

54A10 Change of topology, comparison of topologies

- Ancel, Fredric D. Collections of paths and rays in the plane which fix its topology. 84c:54007
- Bandyopadhyay, Chhanda See Banerjee, N. D., 84d:54001
- Banerjee, N. D. (with Bandyopadhyay, Chhanda) Semiclosed sets and the associated topology. (Russian summary) 84d:54001
- Di Maio, Giuseppe (with Russo, Assunta) Some lattice properties of T_0 -topologies and of one of their generalizations. (Italian. English summary) 84i:54003
- (with Russo, Assunta) On the lattice of topologies over a set and over some of its sublattices. (Italian) 84h:54004
- Dube, K. K. (with Sengar, R. K.) Homeomorphism between semi- T_0 spaces. 84c:54001
- Fedorov, Yu. S. Binary relations and topologies on finite sets. (Russian) 84i:54004
- Flajnik, Barbara A. A comparison of topologies for 2^X . 84f:54003
- Fora, Ali A. (with Hdeib, Hasan Z.) On pairwise Lindelöf spaces. (Spanish summary) 84c:54001
- Guido, Cosimo On a characterization of simple extensions of topologies. (Italian summary) 84c:54002
- A characterization of simple extensions of topologies. (See 84c:54003)
- Hdeib, Hasan Z. See Fora, Ali A., 84c:54001
- Martin Peinador, Elena Irreducible maps and ultraspaces. (See 84c:54003)
- Ori, R. G. (with Rajagopalan, M.) On regular-invariance of continuity. 84m:54002
- Rajagopalan, M. See Ori, R. G., 84m:54002
- Russo, Assunta See Di Maio, Giuseppe, 84b:54004 and 84i:54003
- Sengar, R. K. See Dube, K. K., 84c:54001
- Száz, Árpád A strong topology for the union of topological spaces. 84h:54005
- Thron, W. J. (with Valent, R. A.) A class of maximal ideals in the lattice of topologies. 84c:54008
- Valent, R. A. See Thron, W. J., 84c:54008
- Warren, Richard H. The number of topologies. 84g:54002

secondary classifications:

- Das, Shrawpaw Kumar Set-reconstruction of chain sizes in a class of finite topologies. (84c:05044)
- Dobbs, David E. (with Fontana, Marco; Papick, Ira J.) On certain distinguished spectral sets. (Italian summary) (84b:13006)
- (with Fontana, Marco; Papick, Ira J.) On the flat spectral topology. (Italian summary) (84b:13007)
- Fontana, Marco See Dobbs, David E.; et al., (84b:13006) and (84b:13007)
- Kohli, J. K. A class of mappings containing all continuous mappings. (Serbo-Croatian summary) (84c:54013)
- Levinson, H. (with Silverman, Ruth) Topologies on finite sets. III. (84c:05007)
- Papick, Ira J. See Dobbs, David E.; et al., (84b:13006) and (84b:13007)
- Silverman, Ruth See Levinson, H., (84c:05007)
- Stevens, T. Christine Decisive subgroups of analytic groups. (84c:22010)

54A15 Syntopogeneous structures

- Cászár, Ákos Absolutely closed syntopogenous spaces. 84b:54005

secondary classifications:

- Gähler, Siegfried Topological problems in optimization theory. (84b:49009)

54A20 Convergence (general theory) and limits

- Benkő, Istif A sufficient number of convergent subsequences. (Romanian. English summary) 84c:54006
- Brunet, Bernard Espaces de convergence localement compacts et espaces topologiques de Kelley. [Locally compact convergence spaces and topological spaces of Kelley] 84c:54005
- Chaitin, Hendrik On weakening the first axiom of countability. 84b:54006
- Doboš, Jozef (with Šalát, Tibor) Cliques functions, Riemann integrable functions and quasi-uniform convergence. (Russian and Slovak summaries) 84a:54003
- Dolecki, Szymon (with Greco, Gabriele H.) Familles pseudotopologiques de filtres et compacité. (English summary) [Pseudotopological families of filters and compactness] 84b:54007
- Frit, Roman On sequential envelopes of convergence groups. (German, Russian and Slovak summaries) 84d:54002
- (with Koutnik, V.) Sequential convergence since Kanpur conference. 84f:54004
- Gähler, W. General notions of convergence. 84c:54006
- Gazik, R. J. Non-Hausdorff convergence spaces. 84b:54008
- Greco, Gabriele H. See Dolecki, Szymon, 84b:54007
- Hušek, Miroslav Omitting cardinal functions by topological spaces. 84d:54003
- Kamiński, A. Remarks on multivalued convergences. 84g:54003
- Kostyrko, Pavel On metrizable of convergence of functional transfinite sequences. (Russian and Slovak summaries) 84a:54004
- Koutnik, V. See Frit, Roman, 84f:54004
- Kratochvíl, Petr Sequential convergence as a partial operation. 84d:54004
- Lowen-Colebunders, Eva On the uniformization of the hyperspace of closed convergence. 84a:54005
- On the convergence of closed and compact sets. 84g:54004
- McAuley, Louis F. (with Robinson, Eric E.) On inverse convergence of sets, inverse limits, and homotopy regularity. 84d:54005
- Okano, Hsuo A unified treatment of nonstar convergences. 84a:54006
- Pap, Endre Contributions to functional analysis on convergence spaces. 84f:54007
- Robinson, Eric E. See McAuley, Louis F., 84d:54005
- Šalát, Tibor See Doboš, Jozef, 84a:54003
- Suárez M., Manuel Criteria of sequential convergence. (Spanish. English summary) 84d:54006
- Yang, Youngoh Characterizations of quasi H -closed spaces. 84a:54007
- Zanolin, Fabio A note on convergences in commutative groups. (Italian summary) 84g:54005

secondary classifications:

- Balcar, Bohuslav (with Simon, Petr) Cardinal invariants in Boolean spaces. (84f:06024)
- Buldigin, V. V. ★Сходимость случайных элементов в топологических пространствах. (Russian) [The convergence of random elements in topological spaces] (84m:60011)
- Butkovičová, E. Gaps in Rudin-Frolik order. (84m:04002)
- Dolecki, Szymon (with Salinetti, Gabriella; Wets, Roger J.-B.) Convergence of functions: equi-semicontinuity. (84c:58064)
- Herrmann, R. A. Closed graphs on convergence spaces. (Serbo-Croatian summary) (84i:54002)
- Lowen-Colebunders, Eva On two uniformization problems for Cauchy spaces. (See 84c:54003)
- Salinetti, Gabriella See Dolecki, Szymon; et al., (84c:58064)
- Simon, Petr See Balcar, Bohuslav, (84f:06024)
- Wets, Roger J.-B. See Dolecki, Szymon; et al., (84c:58064)
- Wilczyński, Władysław Upper and lower limits with respect to the σ -ideal. (Polish summary) (84f:28002)

54A25 Cardinality properties (discrete subsets, weight, etc.), ultrafilters, etc. [See also 03Exx, 04A30.]

- Argyros, Spiros A. On compact spaces without strictly positive measure. 84c:54002
- Bell, Murray G. (with Ginsburg, John) Uncountable discrete sets in extensions and metrizable. 84c:54009
- Biryukov, P. A. On spaces with π -bases of countable rank. (Russian. English summary) 84c:54007

- Comfort, W. Wistar (with Grant, Douglas L.) Cardinal invariants, pseudocompactness and minimality: some recent advances in the topological theory of topological groups. 84b:54009

- Dow, Alan Some separable spaces and remote points. 84b:54010
- Ginsburg, John See Bell, Murray G., 84c:54009
- Grant, Douglas L. See Comfort, W. Wistar, 84b:54009
- Hajnal, A. (with Szentmiklóssy, Z.) On the cardinality of quasi-hereditarily Lindelöf spaces. 84c:54003
- Juhász, I. Quasiregularity Lindelöfness and the S space problem. 84g:54006
- Malykhin, V. I. Cardinality of compacta with the weak first countability axiom. (Russian) 84c:54008
- Sakai, Shozo Cardinal functions on Pixley-Roy hyperspaces. 84m:54003
- Szentmiklóssy, Z. See Hajnal, A., 84c:54003
- Tironi, G. Some remarks on radial and pseudoradial spaces. 84d:54008
- Tkachenko, V. V. Cardinal invariants of the Suslin number type. (Russian) 84j:54001

secondary classifications:

- Arkhangelskii, A. V. On relationships between topological properties of X and $C_p(X)$. (84d:54031)
- Balcar, Bohuslav (with Simon, Petr) Strong decomposability of ultrafilters. I. (84d:04002)
- (with Simon, Petr) Cardinal invariants in Boolean spaces. (84f:06024)
- Borges, Carlos R. Equivalence of separable, Lindelöf, CCC and N_1 -compact in generalized metric spaces. (84c:54055)
- Czerwik, S. Random solutions of a system of functional-differential equations in a Banach space. (84g:34132)
- van Douwen, Eric K. Prime mappings, number of factors and binary operations. (84c:54019)
- Gerlits, J. (with Nagy, Zs.) Products of convergence properties. (84c:54024)
- Hung, H. H. On developability. (84b:54057)
- Hušek, Miroslav Omitting cardinal functions by topological spaces. (84d:54003)
- Martin Peimador, Elena Irreducible maps and ultraspaces. (See 84c:54003)
- Mukherjee, R. N. On some fixed point theorems on Hausdorff metric and Banach spaces. (84d:54077)
- Nagy, Zs. See Gerlits, J., (84c:54024)
- Peregudov, S. A. On weakly and countably weakly uniform bases and coverings. (Russian. English summary) (84c:54035)
- Simon, Petr See Balcar, Bohuslav, (84d:04002) and (84f:06024)
- Swardson, Mary Anne A generalization of F -spaces and some topological characterizations of GCH. (84j:54025)
- Tkachenko, M. G. The notion of σ -tightness and C -embedded subspaces of products. (84a:54031)
- Trnková, Věra Homeomorphisms of box-powers of a space. (Serbo-Croatian summary) (84d:54010)
- Uspenskii, V. V. A characterization of realcompactness in terms of the topology of pointwise convergence on the function space. (84m:54015)
- Velichko, N. V. On the theory of spaces of continuous functions. (Russian) (84c:54022)
- Warren, Richard H. Discrete sets and discrete maps. (84d:54027)

54A35 Consistency and independence results [See also 03E35.]

secondary classifications:

- Alas, Ofelia T. On ω_1 -metrizable spaces. (Italian summary) (84c:54032a)
- Artico, Giuliano (with Moresco, Roberto) Some ω_1 -metrization theorems. (Italian summary) (84c:54032b)
- Bell, Murray G. The space of complete subgraphs of a graph. (84a:54050)
- Brunner, Norbert Dedekind-Endlichkeit und Wohlordenbarkeit. (English summary) [Dedekind finiteness and well-orderability] (84c:03057)
- Categoriesätze und multiples Auswahlaxiom. [Category theorems and axiom of multiple choice] (84c:03123)
- Comfort, W. Wistar (with Negreponis, Stylianos A.) ★Chain conditions in topology. (84c:04002)
- Dow, Alan Some separable spaces and remote points. (84b:54010)
- Products without remote points. (84f:54031)
- Fleissner, William G. If all normal Moore spaces are metrizable, then there is an inner model with a measurable cardinal. (84b:03118)
- Gerlits, J. (with Nagy, Zs.) Some properties of $C(X)$. I. (84f:54021)
- Grayson, Robin J. A correction to: "Concepts of general topology in constructive mathematics and in sheaves" [Ann. Math. Logic 20 (1981), no. 1, 1-41; MR 82g:03105]. (84d:03075)
- Hanazawa, Masazumi Various kinds of Aronszajn tree with no subtree of a different kind. (84c:03052)
- Countable metacompactness and tree topologies. (84c:03053)
- Hansell, R. W. Point-countable Souslin-additive families and σ -discrete reduction. (84f:54052)
- Kato, Akio Nonexistence of universal paracompact M -spaces. (84f:54037)
- Martin, Donald A. The use of set-theoretic hypotheses in the study of measure and topology. (84b:03001)
- Müller, Arnold W. Some properties of measure and category. (84c:03058a)
- Corrections and additions to: "Some properties of measure and category". (84c:03058b)
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- Nagy, Zs. See Gerlits, J., (84f:54021)
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- Przymusiński, Teodor C. On Martin's axiom and perfect spaces. (84c:54030)
- Swardson, Mary Anne A generalization of F -spaces and some topological characterizations of GCH. (84j:54025)

- Szymański, Andrzej (with Zhou, Hao Xuan) The behaviour of ω^{2^*} under some consequences of Martin's axiom. (84i:54029)
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- Abd El-Monsef, M. E. (with Ghanim, M. H.; Kerre, E. E.; Mashhour, A. S.) Fuzzy topological results. 84i:54005
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secondary classifications:

- Kelemen, M. Fuzziness and structural stability. (French and Russian summaries) (84d:58052)
 Zheng, Dao Peng The topological structure in DSUL and fuzzy measure spaces. (Chinese. English summary) (84c:03068)
 Zou, Kai Qi Some properties of fuzzy topological groups. (Chinese. English summary) (84d:22007)

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- Giovannelli, Nicolò See La Francesca, A.; et al., 84b:54006
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- Ajtai, M. (with Csirmaz, L.; Nagy, Zs.) On a generalization of the game Go-moku. I. (84j:90117a)
 Csirmaz, L. (with Nagy, Zs.) On a generalization of the game Go-moku. II. (84j:90117b)
 See also Ajtai, M.; et al., (84j:90117a)
 Grayson, Robin J. On closed subsets of the intuitionistic reals. (84b:03079)
 Kalantari, Iraj Major subsets in effective topology. (84g:03064)
 Madison, E. W. A hierarchy of regular open sets of the Cantor space. (84d:03057)
 Nagy, Zs. See Ajtai, M.; et al., (84j:90117a) and Csirmaz, L., (84j:90117b)

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- El-Deeb, S. N. See Noiri, Takashi; et al., 84g:54010
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 Noiri, Takashi (with Mashhour, A. S.; Hasanein, I. A.; El-Deeb, S. N.) A note on S -closed subspaces. 84g:54010

secondary classifications:

- Giuli, Eraldo (with Tozzi, Anna) On epindense subcategories of topological categories. (84m:18008)
 Terada, Toshiji A space which contains no realcompact dense subspace. (84c:54025)
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- Alster, K. A note on Michael's problem concerning the Lindelöf property in the Cartesian products. 84i:54009
 Amirzhanov, G. P. On dense subspaces of topological spaces. (See 84c:54003)
 Arkhangel'skii, A. V. (with Ranchin, D. V.) Everywhere dense subspaces of topological products and properties associated with final compactness. (Russian. English summary) 84m:54005
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 Cauty, Robert Les facteurs de dimension un d'un produit infini de cercles sont des cercles. (English and Russian summaries) [The one-dimensional factors of an infinite product of circles are circles] 84c:54008
 Chiba, Keiko On the weak \mathfrak{B} -property of Σ -products. 84c:54012
 Dissanayake, U. N. B. A note on Lindelöf spaces. 84g:54011
 Ito, Munehiko On Σ -product of spaces which have a σ -almost locally finite base. 84b:54016
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 Miller, Arnold W. On box products. 84a:54014
 Piotrowski, Z. (with Roslanowski, A.; Scott, B. M.) The pinched-cube topology. 84c:54014
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 Zarichnyi, M. M. Hypersymmetric powers of supercompacta. (Russian. English summary) 84m:54006

secondary classifications:

- Alas, Ofelia T. Characterizations of strong collectionwise Hausdorffness. (84m:54019)
 Arkhangel'skii, A. V. Factorization theorems and spaces of functions: stability and monolithism. (Russian) (84d:54030)
 Artico, Giuliano (with Moresco, Roberto) ω_1 -additive topological spaces. (84c:54044)
 Bell, Murray G. (with Ginsburg, John) Uncountable discrete sets in extensions and metrizable. (84c:54009)
 Blasco, José Luis ★ Compacidad numerable y pseudocompacidad del producto de dos espacios topológicos. Productos finitos de espacios con topologías proyectivas de funciones reales. (Spanish) [Countable compactness and pseudocompactness of the product to two topological spaces. Finite products of spaces with projective topologies of real functions] (84m:54023)
 Brunner, Norbert Boxprodukte und Auswahlaxiom. [Box products and axiom of choice] (84g:04003)
 Deák, J. Applications of the theory of directional structures. I. (84m:54033)
 Dobos, Jozef On a certain lattice of topologies on a product of metric spaces. (Russian summary) (84b:54061)
 van Douwen, Eric K. Prime mappings, number of factors and binary operations. (84a:54019)
 An infinite product of continua without nontrivial embeddings into itself. (84b:54070)
 Forá, Ali A. The covering dimension of product of generalized Sorgenfrey lines. (84i:54038)

- Fudali, Lukasz A. On cliquish functions on product spaces. (Russian summary) (84d:54020)
- Gerlits, J. (with Nagy, Zs.) Products of convergence properties. (84e:54024)
- Ginsburg, John See Bell, Murray G., (84c:54009)
- Giuli, Eraldo (with Tozzi, Anna) On epidense subcategories of topological categories. (84m:18008)
- Hdeib, Hasan Z. A note on completely paracompact spaces. (Arabic summary) (84c:54032)
- Johnstone, Peter T. Tychonoff's theorem without the axiom of choice. (84h:03117)
- Moresco, Roberto See Artico, Giuliano, (84c:54044)
- Nagy, Zs. See Gerlits, J., (84c:54024)
- Nguyen Van Vinh Representation of semigroups by products of topological spaces with prescribed cardinal functions. (84i:54041)
- Nogura, Tsugunori Countably compact extensions of topological spaces. (84d:54011)
- Petty, Dix H. Products of regular-closed spaces. (84h:54022)
- Piotrowski, Z. Quasicontinuity and product spaces. (84d:54023)
- Przymusiński, Teodor C. Extending functions from products with a metric factor and absolutes. (84b:54029)
- Tanaka, Yoshio On the products of k -spaces question. (84f:54033)
- k -spaces and the products of closed images. (84m:54028)
- Terada, Toshiji A space which contains no realcompact dense subspace. (84c:54025)
- Tkachenko, M. G. The notion of α -tightness and C -embedded subspaces of products. (84c:54031)
- Tozzi, Anna On factorization structures and epidense hulls. (84j:18003)
- See also Giuli, Eraldo, (84m:18008)
- Uspenskii, V. V. For any X , the product $X \times Y$ is homogeneous for some Y . (84h:54075)
- de Vries, Jan Glicksberg's theorem for G -spaces. (84d:54069)
- Weinstein, Jack Connectivity of deleted products of topological couples. (84i:54036)
- Xu, Rong Quan Separability and products of bitopological spaces. (Chinese. English summary) (84g:54038)

54B15 Quotient spaces, decompositions

- Armstrong, Steve Saturated 2-sphere boundaries in Bing's straight-line segment example. (84j:54003)
- Daverman, Robert J. (with Walsh, John J.) Acyclic decompositions of manifolds. (84m:54007)
- Shrikhande, Neelima Homotopy properties of decomposition spaces. (84m:54008)
- Walsh, John J. See Daverman, Robert J., (84m:54007)

secondary classifications:

- Ancel, Fredric D. (with Duvall, Paul F.; Singh, Sukhjot) Rigid 3-dimensional compacta whose squares are manifolds. (84m:54039)
- Bellamy, David P. Another class of λ -connected products. (84c:54034)
- Daverman, Robert J. (with Garity, Dennis J.) Intrinsically $(n-2)$ -dimensional cellular decompositions of E^n . (84f:57003)
- (with Singh, Sukhjot) Arcs in the Hilbert cube (S^n) whose complements have different fundamental groups. (84h:57008)
- Denman, Richard (with Starbird, Michael P.) Shrinking countable decompositions of S^1 . (84f:57004)
- Duvall, Paul F. See Ancel, Fredric D.; et al., (84m:54039)
- Efremovich, V. A. (with Vainshtein, A. G.; Gorelik, E. M.; Loginov, E. A.) Metric fibrations of Riemannian manifolds. (See 84g:53003)
- Garity, Dennis J. General position properties related to the disjoint discs property. (84j:57013)
- See also Daverman, Robert J., (84f:57003)
- Gorelik, E. M. See Efremovich, V. A.; et al., (See 84g:53003)
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- Kovačević, Ilija A note on quotient spaces and paracompactness. (Serbo-Croatian summary) (84b:54042)
- Lacher, R. C. See Repovš, Dušan, (84m:57012)
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- Martin, Jorge M. A characterization of inverse limits of Q -bundle maps. (84m:54017)
- McAuley, Louis F. On the metrizable decomposition spaces. (84g:54037)
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- Schmidt, Hans-Jürgen Hyperspaces of quotient and subspaces. I. Hausdorff topological spaces. (84c:54011a)
- Hyperspaces of quotient and subspaces. II. Metrizable spaces. (84c:54011b)
- Singh, Sukhjot Generalized manifolds (ANRs and ARs) and null decompositions of manifolds. (84c:57010)
- See also Daverman, Robert J., (84h:57008) and Ancel, Fredric D.; et al., (84m:54039)
- Starbird, Michael P. See Denman, Richard, (84f:57004)
- Vainshtein, A. G. See Efremovich, V. A.; et al., (See 84g:53003)
- Yasui, Yoshikazu On C. J. Knight's problem concerning box product. (Japanese summary) (84h:54017)

54B17 Adjunction spaces and similar constructions

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- Miwa, Takuo Adjunction spaces of monotonically normal spaces and spaces dominated by monotonically normal subspaces. (84c:54049)

54B20 Hyperspaces

- Benkafadar, N. (with Gel'man, B. D.) Homotopic properties of spaces of subsets. (Russian) (84i:54011)

- Čerin, Zvonko Global convergences of compacta. (84d:54013)
- Dorsett, Charles Connectedness in hyperspaces. (84d:54014)
- Local connectedness in hyperspaces. (84b:54018)
- Gel'man, B. D. See Benkafadar, N., (84i:54011)
- Goel, C. K. See Vasudevan, R., (84b:54020)
- Goodykoontz, Jack T., Jr. (with Nadler, Sam B., Jr.) Whitney levels in hyperspaces of certain Peano continua. (84h:54010)
- Linichuk, R. S. Properties of certain hyperspaces of infinite-dimensional type. (Russian) (84c:54019)
- (with Safonov, V. M.) On exponential topology. (Russian) (84f:54009)
- Nadler, Sam B., Jr. See Goodykoontz, Jack T., Jr., (84b:54010)
- Okayama, Akihiro Some relationships between function spaces and hyperspaces by compact sets. (84i:54012)
- Popov, V. V. Normality of the exponent in topologies of Ochan type. (Russian) (84d:54015)
- Rhee, Choon Jai On a contractible hyperspace condition. (84f:54010)
- Safonov, V. M. See Linichuk, R. S., (84f:54009)
- Schmidt, Hans-Jürgen Hyperspaces of quotient and subspaces. I. Hausdorff topological spaces. (84c:54011a)
- Hyperspaces of quotient and subspaces. II. Metrizable spaces. (84c:54011b)
- Shou, Ji Lin Some topological relations on hyperspaces. (Chinese) (84m:54009)
- Toruńczyk, H. (with West, James E.) A Hilbert space limit for the iterated hyperspace functor. (84m:54010)
- Vasudevan, R. (with Goel, C. K.) Bitopological hyperspaces equipped with upper semifinite and lower semifinite topologies. (84b:54020)
- West, James E. See Toruńczyk, H., (84m:54010)

secondary classifications:

- Bănzaru, T. Proximities on the space of subsets. (Romanian. French summary) (84c:54053)
- Beer, Gerald Cone lattices of upper semicontinuous functions. (84j:26004)
- On Dini's theorem and a metric on $C(X)$ topologically equivalent to the uniform metric. (84j:26005)
- On functions that approximate relations. (84m:54018)
- Bell, Murray G. (with Ginsburg, John) Uncountable discrete sets in extensions and metrizable spaces. (84c:54009)
- Supercompactness of compactifications and hyperspaces. (84m:54022)
- Dorsett, Charles Connectedness in klein in hyperspaces. (84c:54021)
- Flajnik, Barbara A. A comparison of topologies for 2^X . (84f:54003)
- Friedler, Louis M. (with Petty, Dix H.) Hyperspaces of R -closed spaces. (84g:54028)
- Ginsburg, John See Bell, Murray G., (84c:54009)
- Hohti, Aarno On supercomplete uniform spaces. (84j:54016)
- Lowen, Robert Hyperspaces of fuzzy sets. (84d:54009)
- Lowen-Colebunders, Eva On the uniformization of the hyperspace of closed convergence. (84c:54005)
- On the convergence of closed and compact sets. (84g:54004)
- Malysheva, N. B. Cluster sets of mappings of topological spaces. (Russian) (84c:54025)
- Mizokami, Takemi On \mathcal{H} -contractibility. (84i:54022)
- Petty, Dix H. See Friedler, Louis M., (84g:54028)
- Sakai, Shozo Cardinal functions on Pixley-Roy hyperspaces. (84m:54003)
- van de Vel, M. Two-dimensional convexities are join-hull commutative. (84m:52002)

54B25 Sums, inverse limits

- Lončar, Ivan Inverse limits for spaces which generalize compact spaces. (Serbo-Croatian summary) (84h:54021)
- Park, Young Lim The quasi- F cover as a filter space. (84h:54011)

secondary classifications:

- Giuli, Eraldo (with Tozzi, Anna) On epidense subcategories of topological categories. (84m:18008)
- Lončar, Ivan m -compact spaces and inverse limits. (Serbo-Croatian. English summary) (84c:54045)
- Maslov, V. V. Projective limits of semisynthetic spaces. (Russian) (84i:54034)
- McAuley, Louis F. (with Robinson, Eric E.) On inverse convergence of sets, inverse limits, and homotopy regularity. (84d:54005)
- Robinson, Eric E. See McAuley, Louis F., (84d:54005)
- Rubanova, I. S. Characterization of shapes of compacta by means of similar spectra. (Russian) (84c:54018)
- Szűcs, Árpád A strong topology for the union of topological spaces. (84h:54005)
- Tozzi, Anna See Giuli, Eraldo, (84m:18008)

54B30 Categorical methods [See also 18B30.]

- Heldermann, N. C. Coreflections induced by fine functors in topological categories. (84j:54004)
- Herrlich, Horst Categorical topology 1971-1981. (84d:54016)
- Are there convenient subcategories of Top? (84c:54015)
- Mielke, M. V. Convenient categories for internal singular algebraic topology. (84m:54011)
- Niefield, S. B. Cartesian spaces over T and locales over $\Omega(T)$. (84c:54016)
- secondary classifications:
- (Brümmer, G. C. L.) See Proceedings Symposium on Categorical Algebra and Topology. (84c:18002)
- Činčura, Juraj Tensor products in categories of closure spaces. (Russian and Slovak summaries) (84c:18017)
- Dimov, G. D. On the Stone duality. (See 84c:54003)
- Fourman, M. P. T_i spaces over topological sites. (84m:18004)

- Gähler, W. A topological approach to general structure theory. (84g:18018)
 Giulio, Erardo (with Strecker, G. E.; Tozzi, Anna) On E -dense hulls and shape theory. (84g:18003)
 (with Tozzi, Anna) On epdense subcategories of topological categories. (84g:18006)
 Greve, Georg General construction of monoidal closed structures in topological, uniform and nearness spaces. (84g:18005)
 (Hardie, K. A.) See Proceedings: Symposium on Categorical Algebra and Topology. (84g:18002)
 Hastings, Maryam Shayegan On hemineariness spaces. (84c:54047)
 Hoffmann, Rudolf-E. Minimal topological completion of ${}_B \text{Ban}_1 \rightarrow {}_B \text{Vec}$. (84c:18003)
 Hong, S. S. (with Nel, L. D.) Spectral dualities involving mixed structures. (84c:18005)
 Hulek, Miroslav Applications of category theory to uniform structures. (84c:54045)
 Kriegl, A. Die richtigen Räume für Analysis im Unendlich-Dimensionalen. (English summary) [The "right" spaces for analysis in infinite dimensions] (84c:46044)
 Ladegallier, Yves Les 2-catégories 1-isotopiques et le produit 2-fibré. (English summary) [1-isotopic 2-categories and 2-fibered products] (84g:18015)
 Lešah, Kazem Construction de foncteurs topologiques. [Construction of topological functors] (84c:18010)
 Lugojan, Sorin Generalized topology. (Romanian. English summary) (84c:54005)
 Makai, Endre, Jr. The full embeddings of the category of proximity spaces into itself. (See 84c:54003)
 Melton, A. Hereditary factorization structures on Top and T_0 . (84g:18007)
 Nel, L. D. See Hong, S. S., (84c:18005)
 Nemethi, Csaba Topological functors and invariant objects. (Romanian summary) (84c:18014)
 Ohlhoff, H. J. K. (with Verwey, A.) A generalization of local connectedness in topology. (Afrikaans. English summary) (84d:54039)
 Porst, Hans-E. Adjoint diagonals for topological completions. (84c:18006)
 Raha, Asit Baran Projectives in some categories of Hausdorff spaces. (84c:18012)
 Salicrup López, Graciela Normal connection subcategories. (84c:18006)
 Schwarz, Friedhelm Exponential objects in categories of (pre)topological spaces and their natural function spaces. (84g:18016)
 Cartesian closedness, exponentiality, and final hulls in pseudotopological spaces. (84c:18005)
 Stramaccia, Luciano Monomorphisms and epimorphisms of inverse systems. (84c:18001)
 Strecker, G. E. See Giulio, Erardo; et al., (84g:18003)
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 See also Giulio, Erardo; et al., (84g:18003) and (84c:18006)
 Vázquez, R. A proper setting for connection theory. (Spanish) (84g:18001)
 Verwey, A. See Ohlhoff, H. J. K., (84d:54039)
 Vorster, Roelof Restricted adjoints and topological functors. (84m:18001)
 Cape Town ★ Proceedings of the Symposium on Categorical Algebra and Topology. (84c:18002)
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 Categorical Algebra and Topology ★ Proceedings of the Symposium on Categorical Algebra and Topology. (84c:18002)

54B35 Spectra

- Chigogidze, A. Ch. E. V. Shchepin's spectral theorem. (Russian. English and Georgian summaries) 84c:54015

secondary classifications:

- Nepomnyashchii, G. A spectral characterization of absolute multivalued retracts. (84c:54023)

54B40 Presheaves and sheaves [See also 18F20.]

- Dogaru, Oltin Cell-trivial sheaves on S^1 and S^2 . 84m:54012
 Pechanec-Dražoš, J. Sheaves of metric lattices. (Russian and Czech summaries) 84d:54017
 Embedding of presheaves into dual unit balls. (Russian and Czech summaries) 84d:54018

secondary classifications:

- Boseck, Helmut Analytic mappings of topological groups—sheaf theoretic approach. (84c:22002)
 Grayson, Robin J. A correction to: "Concepts of general topology in constructive mathematics and in sheaves" [Ann. Math. Logic 20 (1981), no. 1, 1–41; MR 82g:03105]. (84d:03075)
 Verschoren, A. Separable couples, Azumaya couples and sheaves. (84b:16009)

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secondary classifications:

- Bhatt, Piyush (with Singh, Darshan) Generalized units: the point-like sets. (84a:54037)
 Singh, Darshan See Bhatt, Piyush, (84a:54037)

54Cxx Maps and general types of spaces defined by maps

54C05 Continuous maps

- Belas, Vladislav (with Šalát, Tibor) On locally Hölderian functions. (Russian and Slovak summaries) 84d:54019

- Fudali, Lukasz A. On cliquish functions on product spaces. (Russian summary) 84d:54020

- Guthrie, J. A. A continuous modulus of continuity. 84a:54016

- Helmer, D. Joint continuity of sequentially continuous maps. 84c:54012

- Henry, Michael (with Nadler, Sam B., Jr.) Families of eventually constant mappings. 84g:54012

- Kohli, J. K. A class of mappings containing all continuous mappings. (Serbo-Croatian summary) 84c:54013

- Lane, Ernest P. Lebesgue sets and insertion of a continuous function. 84g:54013

- Nadler, Sam B., Jr. See Henry, Michael, 84g:54012

- Noiri, Takashi A function which preserves connected spaces. (Czech summary) 84d:54021

- Šalát, Tibor See Belas, Vladislav, 84d:54019

secondary classifications:

- Baird, Bridget B. The group of units as a maximal inverse subsemigroup. (84a:20068)
 Brunner, Norbert Sequential continuity. (84a:03056)
 Charatonik, Janusz J. (with Omiljanowski, K.) On the set of interiority of a mapping. (Serbo-Croatian summary) (84c:54023)
 Chigogidze, A. Ch. E. V. Shchepin's spectral theorem. (Russian. English and Georgian summaries) (84a:54015)
 Dube, K. K. (with Sengar, R. K.) Homeomorphism between semi- T_0 spaces. (84c:54001)
 Ivanov, O. V. Topological properties of a conformally invariant compact extension with the first axiom of countability. (Russian) (84j:30019)
 Kufarev, B. P. A method for studying the boundary behavior of ACL-functions. (Russian) (84f:30029)
 Omiljanowski, K. See Charatonik, Janusz J., (84c:54023)
 Ori, R. G. (with Rajagopalan, M.) On regular-invariance of continuity. (84m:54002)
 Rajagopalan, M. See Ori, R. G., (84m:54002)
 Sengar, R. K. See Dube, K. K., (84c:54001)
 Tineo, Antonio ★ Inversión global. (Spanish) [Global inversion] (84g:58011)
 Tkachenko, M. G. The notion of α -tightness and C -embedded subspaces of products. (84a:54031)

54C08 Connectivity maps, semicontinuous maps, etc.

- Berner, Andrew J. Almost continuous functions with closed graphs. 84j:54005
 Cammaroto, Filippo (with Lo Faro, Giovanni) γ -continuous functions. (Italian. English summary) 84f:54011
 Crivăţ, Nicolae p^* -continuous functions. (Romanian. English summary) 84d:54022
 Dube, K. K. (with Lee, Je Yoon; Panwar, Onkar Singh) A note on semiclosed graph. 84c:54007
 Ewert, Janina (with Lipiński, Jan S.) On points of continuity, quasicontinuity and cliquishness of real functions. 84f:54012
 (with Lipski, Tadeusz) Quasicontinuous multivalued mappings. (Russian summary) 84c:54008
 Herrington, Larry L. See Long, Paul E., 84f:54013 and 84f:54014
 Jain, P. C. See Maheshwari, S. N., 84c:54009
 Lee, Je Yoon See Dube, K. K.; et al., 84c:54007
 Lipiński, Jan S. See Ewert, Janina, 84f:54012
 Lipski, Tadeusz See Ewert, Janina, 84c:54008
 Lo Faro, Giovanni See Cammaroto, Filippo, 84f:54011
 Long, Paul E. (with Herrington, Larry L.) Paracontinuous functions. (Arabic summary) 84f:54014
 (with Herrington, Larry L.) Properties of rarely continuous functions. (Serbo-Croatian summary) 84f:54013
 Maheshwari, S. N. (with Jain, P. C.) Some new mappings. 84c:54009
 Panwar, Onkar Singh See Dube, K. K.; et al., 84c:54007
 Piotrowski, Z. Quasicontinuity and product spaces. 84d:54023
 Popa, Valeriu On certain weakened forms of continuity. (Romanian. English summary) 84c:54012
 Characterizations of weakly continuous functions. (Romanian. English summary) 84c:54014
 Pu, Huan Wên (with Pu, Huo Hui Min) Darboux property for transformations. 84b:54022
 Pu, Huo Hui Min See Pu, Huan Wên, 84b:54022
 Yang, Chao Ch'ing A theorem on weakly continuous functions. 84a:54017

secondary classifications:

- Gentry, Karl R. (with Hoyle, Hughes B., III) Generalized fundamental groups of continuous loops. (84a:54020)
 Hoyle, Hughes B., III See Gentry, Karl R., (84a:54020)
 Kowalski, Paweł (with Pochciał, Jan) On convergence of sequence of point-to-set maps. (84f:54025)
 Náther, Ondřej See Neubrunn, Tibor, (84j:54009)
 Neubrunn, Tibor (with Náther, Ondřej) On a characterization of quasicontinuous multifunctions. (Czech summary) (84j:54009)
 Noiri, Takashi A note on nearly-paracompact spaces. (84j:54012)
 Pochciał, Jan See Kowalski, Paweł, (84f:54025)
 Popa, Liliana Fonctions C -inférieurement semi-continues. [C-lower semicontinuous functions] (84m:31011)
 Popa, Valeriu Multifunctions semi-continues. [Semicontinuous multifunctions] (84f:54026)
 Rüschemdorf, Ludger Note on semicontinuous functions. (84b:46047)

54C10 Special maps: open, closed, perfect, almost open, light, etc.

- Ahmad, Bashir See Noiri, Takashi, 84c:54015
 Chaber, József Open finite-to-one images of metric spaces. 84a:54018
 Closed mappings onto metric spaces. 84c:54013
 Charatonik, Janusz J. (with Omiljanowski, K.) On the set of interiority of a mapping. (Serbo-Croatian summary) 84b:54023
 Costovici, Gh. Other elementary properties of the mappings of topological spaces. (Romanian summary) 84c:54015
 Dasgupta, H. (with Lahiri, B. K.) Continuity of semi-open and closed functions. 84b:54024
 van Douwen, Eric K. Prime mappings, number of factors and binary operations. 84c:54019
 El-Deeb, S. N. See Mashhour, A. S.; et al., 84a:54021
 Garrett, B. D. Almost continuity on Peano continua. 84c:54014
 Gentry, Karl R. (with Hoyle, Hughes B., III) Generalized fundamental groups of continuous loops. 84c:54020
 (with Hoyle, Hughes B., III) T_2 -continuous functions and separation axioms. (Serbo-Croatian summary) 84f:54015
 Hasanein, I. A. See Mashhour, A. S.; et al., 84a:54021
 Hdeib, Hasan Z. $[n, m]$ -proper mappings. (Arabic summary) 84d:54024
 Herrington, Larry L. See Long, Paul E., 84d:54025
 Hoyle, Hughes B., III See Gentry, Karl R., 84c:54020 and 84f:54015
 Isiwata, Takeshi Ultrafilters and mappings. 84f:54016
 Jungck, Gerald F. Local homeomorphisms. 84b:54013
 Lahiri, B. K. See Dasgupta, H., 84b:54024
 Long, Paul E. (with Herrington, Larry L.) The T_2 -topology and faintly continuous functions. 84d:54025
 Mashhour, A. S. (with Hasanein, I. A.; El-Deeb, S. N.) A note on semicontinuity and precontinuity. 84c:54021
 Mishkin, V. V. Peripherally compact mappings. 84c:54017
 Noiri, Takashi A note on regular-closed functions. (Italian summary) 84b:54014
 (with Ahmad, Bashir) A note on semi-open functions. 84g:54015
 On almost locally connected spaces. 84f:54017
 Olejek, V. An example of a recurrent function on a compact totally disconnected space. 84d:54026
 Omiljanowski, K. See Charatonik, Janusz J., 84b:54023
 Pareek, C. M. Open finite-to-one mappings on p -spaces. 84b:54025
 Raha, Asit Baran Lindelöf spaces and closed projections. 84c:54022
 Ricci, Biagio (with Villani, Alfonso) Openness properties of continuous real functions on connected spaces. 84g:54016
 Sadyrkanov, R. S. A generalization of closed and proper mappings. (Russian) 84f:54018
 Smital, Jaroslav (with Stanová, Eva) On almost continuous functions. (Russian and Slovak summaries) 84b:54026
 Snipes, Ray F. Characterizations of uniformly continuous and Cauchy-regular functions using nets. 84i:54014
 Stanová, Eva See Smital, Jaroslav, 84b:54026
 Tanaka, Yoshio Closed images of locally compact spaces and Fréchet spaces. 84i:54015
 Tong, Jingcheng Weak almost continuous mappings and weak nearly compact spaces. (Italian summary) 84a:54023
 A note on almost continuous mappings and Baire spaces. 84i:54027
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 Walsh, John J. Cell-like maps which do not raise dimension. 84a:54024
 Warren, Richard H. Discrete sets and discrete maps. 84d:54027
 Zaremba, Danuta Concerning confluent mappings and quasi-interior mappings. (Russian summary) 84f:54019

secondary classifications:

- Błaszczyk, A. A construction of the Gleason space. (84b:54035)
 Bose, Shantha Semi-open sets, semicontinuity and semi-open mappings in bitopological spaces. (84i:54031)
 (with Sinha, Dipti) Almost open, almost closed, θ -continuous and almost quasicompact mappings in bitopological spaces. (84i:54032)
 Charatonik, Janusz J. (with Miklos, Stanislaw) Generalized graphs and their open mappings. (French summary) (84b:54069)
 Choban, M. M. Algebras and some questions of the theory of maps. (84d:54068)
 Doboš, Jozef (with Šalát, Tibor) Cliques functions, Riemann integrable functions and quasi-uniform convergence. (Russian and Slovak summaries) (84c:54003)
 A note on the functions the graphs of which are closed sets. (Russian and Slovak summaries) (84b:54032)
 Gao, Guo Shi (with Wu, Li Sheng) Mapping theorems on mesocompact spaces. (84c:54025)
 Guido, Cosimo A characterization of simple extensions of topologies. (See 84c:54003)
 Herrington, Larry L. (with Long, Paul E.) Almost-continuous path connected spaces. (84d:54038)
 See also Long, Paul E., (84f:54013)
 Hušek, Miroslav (with Pelant, Jan) Uniform weight of uniform quotients. (84i:54030)
 Itô, Munehiko (with Tamano, Ken-ichi) Spaces whose closed images are M_1 . (84a:54056)
 Kato, Hisao A note on infinite-dimension under refinable maps. (84c:54064)
 Kholodovskii, V. E. Mappings of uniform spaces having perfect cross sections and preserving completeness. (Russian) (84f:54036)
 Kohli, J. K. A class of mappings containing all continuous mappings. (Serbo-Croatian summary) (84c:54013)
 Long, Paul E. (with Herrington, Larry L.) Properties of rarely continuous functions. (Serbo-Croatian summary) (84f:54013)
 See also Herrington, Larry L., (84d:54038)
 MacDonald, John (with Tholen, Walter) Decomposition of morphisms into infinitely many factors. (84c:18005)

- McAuley, Louis F. (with Robinson, Eric E.) On Newman's theorem for finite-to-one open mappings on manifolds. (84d:57007)
 Michaelides, G. J. Mean with respect to a map. (84c:54013)
 Miklos, Stanislaw See Charatonik, Janusz J., (84b:54069)
 Okazaki, Yoshiaki Continuous approximation of random function. (84d:28014)
 Pelant, Jan See Hušek, Miroslav, (84i:54030)
 Popa, Valeriu Almost continuous multifunctions. (84c:54034)
 Proctor, C. Wayne Upper semicontinuous collections of continua in class W . (84c:54039)
 Pu, Huan Wen (with Pu, Huo Hui Min) On a problem of L. Mišić. (Russian summary) (84c:54016)
 Pu, Huo Hui Min See Pu, Huan Wen, (84c:54016)
 Robinson, Eric E. See McAuley, Louis F., (84d:57007)
 Šalát, Tibor See Doboš, Jozef, (84c:54003)
 Sinha, Dipti See Bose, Shantha, (84i:54032)
 Tamano, Ken-ichi See Itô, Munehiko, (84a:54056)
 Tholen, Walter See MacDonald, John, (84c:18005)
 Thompson, T. A characterization of Hausdorff S -closed spaces by extremally closed graphs. (84i:54013)
 Turinici, Mihai Mean value theorems via maximal element techniques. (84i:54033)
 Wu, Li Sheng See Gao, Guo Shi, (84i:54025)
 Yang, Chao Ch'ing A theorem on weakly continuous functions. (84a:54017)

54C15 Retraction

Okromeshko, N. G. Retractions of homogeneous spaces. (Russian) 84m:54013

secondary classifications:

- Martin, John R. Neighborhood contractible spaces. (84c:54024)
 Petty, Dix H. Locally P -closed spaces and rim P -closed spaces. (84b:54045)
 Rodríguez Sanjurjo, José M. Some homotopy properties of FANR spaces. (Spanish) (84b:54037)

54C20 Extension

- Abel, Mati The extensions of topological spaces depending on cover and its applications. (See 84c:54003)
 Borushev, A. A. Uniform structures and extensions of topological spaces. (Russian) 84a:54025
 Dimov, G. D. (with Doichinov, Doichin) Regular extensions of regular topological spaces. (Russian) 84d:54028
 Doichinov, Doichin See Dimov, G. D., 84d:54028
 Gutek, Andrzej Extensions of homeomorphisms on the Cantor set. 84a:54026
 Kohli, J. K. Monotone extensions of mappings and their applications. 84j:54006
 Levy, Ronnie (with Rice, M. D.) The approximation and extension of uniformly continuous mappings. 84d:54029
 Obukhovskii, V. V. (with Skaletskii, A. G.) Some theorems on the extension and quasiextension of continuous mappings. (Russian) 84a:54027
 Ohta, Haruto Topological extension properties and projective covers. 84b:54028
 Prymushinski, Teodor C. Extending functions from products with a metric factor and absolutes. 84b:54029
 Rice, M. D. See Levy, Ronnie, 84d:54029
 Skaletskii, A. G. See Obukhovskii, V. V., 84a:54027

secondary classifications:

- Ball, B. J. (with Yokura, Shoji) Compactifications determined by subsets of $C^*(X)$. (84i:54022a)
 (with Yokura, Shoji) Erratum: "Compactifications determined by subsets of $C^*(X)$ ". (84i:54022b)
 (with Yokura, Shoji) Compactifications determined by subsets of $C^*(X)$. II. (84i:54022c)
 Chattopadhyay, K. C. (with Njåstad, Olav) Quasiregular nearness spaces and extensions of nearness-preserving maps. (84b:54056)
 Cohen, Miriam (with Rubin, Matatyahu) Lattices of continuous monotonic functions. (84c:54031)
 Friš, Roman (with Gavalec, Martin) On the Novák completion of convergence groups. (84i:54042)
 Gavalec, Martin See Friš, Roman, (84i:54042)
 Levy, Ronnie (with Rice, Michael O.) The approximation and extension of uniformly continuous Banach space valued mappings. (84c:26003)
 Mustăța, Costică Extension of bounded Lipschitz functions. (84b:54017)
 Njåstad, Olav See Chattopadhyay, K. C., (84b:54056)
 Rice, Michael O. See Levy, Ronnie, (84c:26003)
 Rubin, Matatyahu See Cohen, Miriam, (84c:54031)
 Terada, Toshiji (with Terasawa, Jun) Maximal extensions of first-countable spaces. (84a:54042)
 Terasawa, Jun See Terada, Toshiji, (84a:54042)
 Wilke, Gerhard Basen und die Fortsetzung stetiger Abbildungen. [Bases and the continuation of continuous mappings] (84m:54025)
 Yokura, Shoji See Ball, B. J., (84i:54022a); (84i:54022b) and (84i:54022c)

54C25 Imbedding

- Dow, Alan (with van Mill, Jan) An extremally disconnected Dowker space. 84a:54028
 Hajek, Darrell W. (with Irizarry, Ivette) Embedding in T_2 - F_2 spaces. 84b:54030
 Irizarry, Ivette See Hajek, Darrell W., 84b:54030
 van Mill, Jan (with Wattel, Evert) Subbase characterizations of subspaces of compact trees. 84c:54018
 See also Dow, Alan, 84a:54028

- Wattel, Evert See van Mill, Jan, 84c:54018
 Wright, David G. Ambiently universal sets in E^n . 84m:54014

secondary classifications:

- Baeg, Hyoung Gu See Jo, Young Soo, (84c:54023)
 Deák, J. Applications of the theory of directional structures. I. (84m:54033)
 Dow, Alan (with Porter, Jack) Embedding in R -closed spaces. (84c:54043)
 Doyle, Patrick H. See Hocking, J., (84g:57012)
 Hocking, J. (with Doyle, Patrick H.) Strongly reversible manifolds. (84g:57012)
 Husch, L. S. UV^k maps and embeddings. (84g:57013)
 Jo, Young Soo (with Baeg, Hyoung Gu) Some characterizations of spaces by embeddings in βX . (84c:54023)
 Porter, Jack See Dow, Alan, (84c:54043)
 Vermeer, J. Embeddings in minimal Hausdorff spaces. (84b:54046)

54C30 Real-valued functions [See also 26--XX.]

- Canela, Miguel A. Some results on bounding subsets. (Italian summary) 84c:54010
 Davies, Roy O. (with Tricot, Claude, Jr.) A theorem about countable decomposability. 84c:54019
 Lane, Ernest P. Insertion of a continuous function and $X \times I$. 84b:54031
 Monakov-Rogozkin, A. Operators connected with limits. (Russian. English summary) 84b:54015
 Mustić, Costica About the determination of extrema of a Hölder function. (See 84i:00008)
 Pu, Huan Wen (with Pu, Huo Hui Min) On a problem of L. Mišić. (Russian summary) 84c:54016
 Pu, Huo Hui Min See Pu, Huan Wen, 84c:54016
 Tricot, Claude, Jr. See Davies, Roy O., 84c:54019
 Zakhharov, V. K. Topological and algebraic aspects of some sets of measurable functions. 84g:54017

secondary classifications:

- Bandyopadhyay, Chhanda See Banerjee, N. D., (84d:54001)
 Banerjee, N. D. (with Bandyopadhyay, Chhanda) Semiclosed sets and the associated topology. (Russian summary) (84d:54001)
 Belas, Vladislav (with Šalát, Tibor) On locally Hölderian functions. (Russian and Slovak summaries) (84d:54019)
 Borsik, Ján (with Doboš, Jozef) On metrization of the uniformity of a product of metric spaces. (Russian summary) (84g:54034)
 Bourgain, Jean On convergent sequences of continuous functions. (84c:46018)
 Cox, G. V. (with Humke, Paul D.) A note on pointwise limits of functions which are approximately continuous and almost everywhere continuous. (84g:26002)
 Doboš, Jozef See Borsik, Ján, (84g:54034)
 Humke, Paul D. See Cox, G. V., (84g:26002)
 Ikeda, Yoshito On wa-realcompact extensions. (84b:54051)
 Koumoullis, G. Perfect, u -additive measures and strict topologies. (84b:46037)
 Lane, Ernest P. Lebesgue sets and insertion of a continuous function. (84g:54013)
 Mandelkern, Mark Constructive continuity. (84j:26007)
 Pestov, V. G. The coincidence of the dimensions \dim of l -equivalent topological spaces. (Russian) (84c:54008)
 Ricceri, Biagio Applications de théorèmes de semi-continuité inférieure. (English summary) [Applications of lower semicontinuity theorems] (84c:58017)
 (with Villani, Alfonso) Openness properties of continuous real functions on connected spaces. (84c:54016)
 Šalát, Tibor See Belas, Vladislav, (84d:54019)
 Shakhenko, N. I. Topological rings of continuous real-valued functions. (Russian) (84d:16049)
 Villani, Alfonso See Ricceri, Biagio, (84g:54016)
 Žamecin, Batar Uniformly composition-closed function classes. (84b:54055)

54C35 Function spaces [See also 58D15.]

- Arkhangel'skii, A. V. Factorization theorems and spaces of functions: stability and monolithism. (Russian) 84d:54030
 Linear homeomorphisms of function spaces. (Russian) 84f:54020
 Batty, C. J. K. Connected spaces without derivations. 84g:54018
 Crabbé, Marcel On the reduction of type theory. 84c:54011
 Doboš, Jozef A note on the functions the graphs of which are closed sets. (Russian and Slovak summaries) 84b:54032
 Henry, Michael (with Reynolds, Donald F.; Trapp, George E.) A note on Gale's property (G). 84g:54019
 (with Reynolds, Donald F.; Trapp, George E.) Equicontinuous and regular collections of functions. 84i:54016
 Morales, Pedro Compactness of subsets of Tychonoff sets via exponential laws. 84c:54017
 Reynolds, Donald F. See Henry, Michael; et al., 84g:54019 and 84i:54016
 Šiška, Jaromír The LCC-topology on the space of continuous functions. 84g:54020
 Trapp, George E. See Henry, Michael; et al., 84g:54019 and 84i:54016
 Uspenskii, V. V. A characterization of realcompactness in terms of the topology of pointwise convergence on the function space. 84m:54015

secondary classifications:

- Abel, Mati Description of the ideals of a topological algebra of continuous functions. (Russian. English summary) (84c:46054)
 Beer, Gerald On Dini's theorem and a metric on $C(X)$ topologically equivalent to the uniform metric. (84j:26005)

- Blasco, José Luis Hausdorff compactifications and Lebesgue sets. (84m:54024)
 Cambern, Michael (with Pathak, Vijay D.) Isomorphisms of spaces of differentiable functions. (84c:46052)
 Cohen, Miriam (with Rubin, Matatyahu) Lattices of continuous monotonic functions. (84c:54031)
 Govaerts, W. Sequentially continuous linear functionals on spaces of continuous functions. (84c:46051)
 Jarosz, Krzysztof A generalization of the Banach-Stone theorem. (84c:46039)
 Okuyama, Akihito Some relationships between function spaces and hyperspaces by compact sets. (84i:54012)
 Pathak, Vijay D. See Cambern, Michael, (84c:46052)
 Phan Phu Hien Comportement asymptotique de solutions d'équations d'évolution, lorsque le second membre a une mesure asymptotique. (English summary) [Asymptotic behavior of solutions for evolution equations, when the second member has an asymptotic measure] (84c:34090)
 Pytker, E. G. Sequentiality of spaces of continuous functions. (Russian) (84c:54020)
 Rubin, Matatyahu See Cohen, Miriam, (84c:54031)
 Velichko, N. V. On the theory of spaces of continuous functions. (Russian) (84c:54022)

54C40 $C(X)$; algebraic techniques (ideals, etc.) [See also 46J10.]

- Abian, Alexander (with Salbany, Sergio) Rings of bounded real-valued functions and the finite subcovering property. 84c:54029
 Arkhangel'skii, A. V. On relationships between topological properties of X and $C_p(X)$. 84c:54031
 Banaschewski, Bernhard On lattices of continuous functions. 84c:54012
 Gerlits, J. (with Nagy, Zs.) Some properties of $C(X)$. I. 84f:54021
 Some properties of $C(X)$. II. 84f:54018
 Henriksen, Melvin (with Smith, F. A.) Sums of z -ideals and semiprime ideals. 84d:54032
 Jayne, John E. (with Jellet, Francis) Anneaux de fonctions de Baire. (English summary) [Rings of Baire functions] 84d:54033
 Jellet, Francis See Jayne, John E., 84d:54033
 Misra, Prabudh $C(X)$ -rings. (Portuguese) 84j:54007
 Nagy, Zs. See Gerlits, J., 84f:54021
 Pytker, E. G. Sequentiality of spaces of continuous functions. (Russian) 84c:54020
 Roitman, Judy Nonisomorphic hyper-real fields from nonisomorphic ultrapowers. 84c:54030
 Salbany, Sergio See Abian, Alexander, 84c:54029
 Smith, F. A. See Henriksen, Melvin, 84d:54032
 Vechtomov, E. M. The module of functions with compact support over the ring of continuous functions. (Russian) 84c:54021
 Velichko, N. V. On the theory of spaces of continuous functions. (Russian) 84c:54022

secondary classifications:

- Anderson, Marlow (with Conrad, Paul) The hulls of $C(Y)$. (84d:06026)
 Argyros, Spiros A. (with Tsarpalias, Athanasios) Isomorphic embeddings of $l^1(\Gamma)$ into subspaces of $C(\Omega)$. (84c:46024)
 Bankston, Paul On productive classes of function rings. (84c:03056)
 Conrad, Paul See Anderson, Marlow, (84d:06026)
 Fourneau, René Idéaux des lattices $C(X)$ et $C^*(X)$. [Ideals of the lattices $C(X)$ and $C^*(X)$] (84b:06013)
 González, Gilberto See Rajagopalan, M., (84i:46052)
 Hatzenbuehler, James (with Mattson, Don A.; Sizer, Walter S.) An algebraic characterization of remainders of compactifications. (84m:54026)
 Hong, S. S. (with Nel, L. D.) Spectral dualities involving mixed structures. (84k:18005)
 Mattson, Don A. See Hatzenbuehler, James; et al., (84m:54026)
 Nel, L. D. See Hong, S. S., (84k:18005)
 Rajagopalan, M. (with González, Gilberto) ★ Un álgebra de funciones sobre el conjunto de Cantor. (Spanish) [A function algebra over the Cantor set] (84i:46052)
 ★ Uniform algebras and scattered spaces. (84i:46053)
 Sizer, Walter S. See Hatzenbuehler, James; et al., (84m:54026)
 Tsarpalias, Athanasios See Argyros, Spiros A., (84c:46024)
 Valdivia, Manuel ★ Topics in locally convex spaces. (84i:46007)
 Xiong, Hong Yun Characterizations of the completely regular topological spaces X for which $C(X)$ is a dual ordered vector space. (84b:46033)

54C45 C - and C^* -embedding

- Azad, K. K. See Srivastava, Pramila, 84c:54023
 Srivastava, Pramila (with Azad, K. K.) On C^* -spaces. 84c:54023
 Tkachenko, M. G. The notion of o -tightness and C -embedded subspaces of products. 84c:54031

secondary classifications:

- Swardson, Mary Anne A generalization of F -spaces and some topological characterizations of GCH. (84j:54025)

54C50 Zero sets, Baire sets and functions [See also 26A21.]

- Brown, J. B. (with Cox, G. V.) Classical theory of totally imperfect spaces. 84g:54021
 Cox, G. V. See Brown, J. B., 84g:54021
 Jastrzebski, Jan On directional cluster sets. 84g:54022

secondary classifications:

- Domínguez Benavides, Tomás Generic existence of a solution for a differential equation in a scale of Banach spaces. (84b:34093)
 Jirái, A. Regularity properties of functional equations. (84k:39015)

- Levi, Sandro On the Baire property in separable metric spaces. (Italian summary) (84c:54016b)
 Park, Young Lim The quasi- F cover as a filter space. (84c:54011)
 Talagrand, Michel Filtrés: mesurabilité, rapidité, propriété de Baire forte. [Filters: measurability, rate of convergence, strong Baire property] (84b:28005)

54C55 Absolute neighborhood extensor, absolute extensor, absolute neighborhood retract (ANR), absolute retract spaces (general properties) [See also 54F40, 55M15.]

- Ancei, Fredric D. (with Anderson, Stuart) Cell-like maps on approximate ANRs. (84c:54013)
 Anderson, Stuart See Ancei, Fredric D., 84c:54013
 Kłisowski, Jacek A survey of various modifications of the notions of absolute retracts and absolute neighborhood retracts. (84b:54033)
 Lutsenko, A. G. Retracts of D^n . (Russian) (84f:54022)
 Martin, John R. Neighborhood contractible spaces. (84c:54024)
 Mitchell, W. J. R. General position properties of ANRs. (84c:54017)
 Nepomnyashchii, G. A spectral characterization of absolute multivalued retracts. (84f:54023)

secondary classifications:

- Boxer, Laurence AANRs and ARI maps. (84b:54034)
 Čerin, Zvonko On medial properties of maps. (84b:54035)
 McAuley, Louis F. (with Robinson, Eric E.) On inverse convergence of sets, inverse limits, and homotopy regularity. (84d:54005)
 Mitchell, W. J. R. Another note on closed N -cells in R^N . (84b:57007)
 Miwa, Takuo Adjunction spaces of monotonically normal spaces and spaces dominated by monotonically normal subsets. (84c:54049)
 Nguyễn Nhuy Shape theory in the category of metric spaces and uniformly continuous maps. (84g:54023)
 Robinson, Eric E. See McAuley, Louis F., (84d:54005)
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 Suszycki, Alfred Retracts and homotopies for multimaps. (84c:54014)
 Živanović, Žarko Union and product of W -spaces. (Russian) (84a:54065)

54C56 Shape theory [See mainly 55P55, 57N25.]

- Boxer, Laurence AANRs and ARI maps. (84b:54034)
 Čerin, Zvonko On medial properties of maps. (84b:54035)
 Dydak, Jerzy (with Segal, Jack) Approximate polyhedra and shape theory. (84b:54036)
 Godlewski, Stanisław On components of MANR-spaces. (84a:54032)
 Kodama, Yukihiko Compactification of pointed 1-movable spaces. (84m:54016)
 Martín, Jorge M. A characterization of inverse limits of Q -bundle maps. (84m:54017)
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 Rodríguez Sanjurjo, José M. Some homotopy properties of FANR spaces. (Spanish) (84b:54037)
 Rubanov, I. S. Characterization of shapes of compacta by means of similar spectra. (Russian) (84c:54018)
 Segal, Jack See Dydak, Jerzy, 84b:54036

secondary classifications:

- Ancei, Fredric D. (with Anderson, Stuart) Cell-like maps on approximate ANRs. (84c:54013)
 Anderson, Stuart See Ancei, Fredric D., (84c:54013)
 Cathey, F. (with Segal, Jack) Strong shape theory and resolutions. (84c:55014)
 Čerin, Zvonko Global convergences of compacta. (84d:54013)
 Giulì, Eraldo (with Strecker, G. E.; Tozzi, Anna) On E -dense hulls and shape theory. (84g:18003)
 Mardešić, Sibe (with Segal, Jack) ★Shape theory. (84b:55020)
 Pavel, Monique "Shape theory" and pattern recognition. (84c:68055)
 Segal, Jack See Mardešić, Sibe, (84b:55020) and Cathey, F., (84c:55014)
 Shrikhande, Neelima Homotopy properties of decomposition spaces. (84m:54008)
 Stramaccia, Luciano Monomorphisms and epimorphisms of inverse systems. (84c:18001)
 Strecker, G. E. See Giulì, Eraldo, et al., (84g:18003)
 Tholen, Walter Completions of categories and shape theory. (84g:18009)
 Tozzi, Anna See Giulì, Eraldo, et al., (84g:18003)
 Živanović, Žarko Union and product of W -spaces. (Russian) (84a:54065)

54C60 Set-valued maps [See also 26E25, 28B20.]

- Bănzaru, T. (with Crivăţ, Nicolae) Nets and almost-periodicity for multifunctions. (Romanian. English summary) (84i:54019)
 Beer, Gerald Dense selections. (84j:54008)
 On functions that approximate relations. (84m:54018)
 Chvalina, Jan On continuous functional parametrizations of topological general systems. (84f:54024)
 Crivăţ, Nicolae See Bănzaru, T., 84i:54019
 De Blasi, Francesco S. (with Myjak, Józef) Sur l'existence de sélections continues. (English summary) [On the existence of continuous selections] (84g:54024)
 Dolecki, Szymon (with Lechicki, Alojzy) On structure of upper semicontinuity. (84a:54033)
 Hadžić, Olga On almost continuous selection property. (84d:54034)

- Jayne, John E. (with Rogers, C. A.) Upper semicontinuous set-valued functions. (84c:54038)
 Kowalski, Paweł (with Pochcial, Jan) On convergence of sequence of point-to-set maps. (84f:54025)
 Lechicki, Alojzy See Dolecki, Szymon, 84a:54033
 Malysheva, N. B. Cluster sets of mappings of topological spaces. (Russian) (84c:54025)
 Mishkin, V. V. Upper and lower semicontinuous set-valued maps into e -spaces. (See 84c:54003)
 Myjak, Józef See De Blasi, Francesco S., 84g:54024
 Náther, Ondřej See Neubrunn, Tibor, 84j:54009
 Neubrunn, Tibor (with Náther, Ondřej) On a characterization of quasicontinuous multifunctions. (Czech summary) (84j:54009)
 Multifunctions and quasicontinuity. (See 84c:54003)
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 Śleszak, Włodzimierz Some counterexamples in multifunction theory. (84g:54025)
 Suszycki, Alfred Retracts and homotopies for multimaps. (84c:54014)

secondary classifications:

- Ben-El-Mechaiekh, Hichem (with Deguire, Paul; Granas, Andrzej) Points fixes et coïncidences pour les applications multivoques (applications de Ky Fan). (English summary) [Fixed points and coincidences for set-valued maps (applications of Ky Fan)] (84m:54042a)
 (with Deguire, Paul; Granas, Andrzej) Points fixes et coïncidences pour les fonctions multivoques (applications de type φ et φ^*). II. (English summary) [Fixed points and coincidences for set-valued maps (maps of type φ and φ^*). II] (84m:54042b)
 Benkafadar, N. (with Gel'man, B. D.) Homotopic properties of spaces of subsets. (Russian) (84i:54011)
 Chen, Shao Zhong See Liu, Dso Su, (84m:60078)
 Colvin, M. R. Multivalued mappings of closed and bounded subsets of a normed linear space—a mapping degree. (84a:55001)
 De Blasi, Francesco S. (with Myjak, Józef) A remark on the definition of topological degree for set-valued mappings. (84c:54068)
 Deguire, Paul See Ben-El-Mechaiekh, Hichem; et al., (84m:54042a) and (84m:54042b)
 Fisher, Brian Fixed points for set-valued mappings on metric spaces. (84d:54072)
 (with Iséki, Kiyoshi) Fixed points for set-valued mappings on complete and compact metric spaces. (84c:54039)
 Gel'man, B. D. See Benkafadar, N., (84i:54011)
 Grace, E. E. Monotone decompositions of θ -continua. (84c:54036)
 Granas, Andrzej See Ben-El-Mechaiekh, Hichem; et al., (84m:54042a) and (84m:54042b)
 Iséki, Kiyoshi See Fisher, Brian, (84c:54039)
 Jiang, Jia He Fixed point theorems for multivalued mappings in locally convex spaces. (84d:47077)
 Liu, Dso Su (with Chen, Shao Zhong) On fixed point theorems for random set-valued maps. (84m:60078)
 Maxwell, Charles N. A fixed-point index for symmetric product maps on Euclidean spaces. (84j:55002)
 Morales, Pedro Compactness of subsets of Tychonoff sets via exponential laws. (84i:54017)
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 Nadire, Abdelhaq Classes d'homéomorphie d'une multiapplication. [Homeomorphy classes of a multivalued map] (84c:49017a)
 Projection souslinienne et multiapplications mesurables. [Suslin projection and measurable multivalued maps] (84c:49017b)
 Classes d'homéomorphie et fibration d'une multiapplication mesurable à valeurs compactes. [Homeomorphy classes and fibration of a measurable multivalued map with compact values] (84c:49017c)
 Nešić, Slobodan Č. Some results on fixed points. (84a:54092)
 Nowak, Andrzej Random fixed points of multifunctions. (Polish summary) (84i:54051)
 Obukhovskii, V. V. (with Skaletskii, A. G.) Some theorems on the extension and quasiextension of continuous mappings. (Russian) (84a:54027)
 Papageorgiou, Nikolaos S. Fixed point theorems for multifunctions in metric and vector spaces. (84i:54053)
 Skaletskii, A. G. See Obukhovskii, V. V., (84a:54027)
 Vlach, M. On nonenlarging closures in affine spaces. (See 84c:54003)
 Zhang, Shi Sheng A common random fixed-point theorem for a sequence of multivalued mappings. (Chinese. English summary) (84a:54098)
 Zhirkov, Nikolai V. Continuity and nonmultivaluedness properties of metric projections and antiprojections. (84d:41065)

54C65 Selections [See also 28B20.]

- Coletti, Giulianella (with Regoli, Giuliana) Continuous selections and multivalued differential equations. (Italian summary) (84a:54035)
 Deutsch, Frank (with Kenderov, Pet'r S.) Continuous selections and approximate selection for set-valued mappings and applications to metric projections. (84c:54026)
 Gajić, Ljiljana See Hadžić, Olga, 84g:54026
 Hadžić, Olga (with Gajić, Ljiljana) A theorem on almost continuous selection property and its applications. (Serbo-Croatian summary) (84g:54026)
 Kenderov, Pet'r S. See Deutsch, Frank, 84c:54026
 Maitra, Ashok Selectors for Borel sets with large sections. (84c:54015)

Nedev, Stoyan I. A selection theorem. **84c:54027**

Regoli, Giuliana. See Coletti, Giuliana, **84c:54035**

Suszzycki, Alfred. Elementary extensions of multivalued maps. **84c:54019**

Wilhelm, M. Nearly lower semicontinuity and its applications. **84d:54035**

Zakharov, V. K. On the hyper-Stonian cover of a compact. **84d:54036**

secondary classifications:

Beer, Gerald. Dense selections. **(84j:54008)**

Bourass, A. Comparaison de fonctionnelles intégrales sur les sélections d'une multiapplication mesurable. II. Conditions de croissance et inclusion des domaines et des cônes radiaux. [Comparison of integral functionals on the selections of a measurable multifunction. II. Growth conditions and inclusion of domains and radial cones] **(84c:28010b)**

De Blasi, Francesco S. (with Myjak, Józef) Sur l'existence de sélections continues. (English summary) [On the existence of continuous selections] **(84g:54024)**

Fougères, Alain. Comparaison de fonctionnelles intégrales sur les sélections d'une multiapplication mesurable. I. Théorème d'approximation, et condition de croissance liée à l'inclusion des sections. [Comparison of integral functionals on the selections of a measurable multifunction. I. Approximation theorem, and growth condition related to the inclusion of sections] **(84c:28010a)**

Frankiewicz, Ryszard (with Gutek, Andrzej; Plewik, Szymon; Rocznik, Jan) On the theorem on measurable selectors. (Russian summary) **(84c:28012)**

Graf, Siegfried. Selected results on measurable selections. **(84m:28019)**

Gutek, Andrzej. See Frankiewicz, Ryszard; et al., **(84b:28012)**

Haddad, Georges (with Lasry, Jean-Michel) Periodic solutions of functional-differential inclusions and fixed points of ϕ -selectionable correspondences. **(84m:34015)**

Haddic, Olga. On almost continuous selection property. **(84d:54034)**

Jayne, John E. (with Rogers, C. A.) Upper semicontinuous set-valued functions. **(84b:54038)**

Lasry, Jean-Michel. See Haddad, Georges, **(84m:34015)**

Levi, Sandro. On the Baire property in separable metric spaces. (Italian summary) **(84c:54016b)**

Mauldin, R. Daniel (with Stone, A. H.) Realization of maps. **(84b:28001)**

One-to-one selections—marriage theorems. **(84b:28013)**

Myjak, Józef. See De Blasi, Francesco S., **(84g:54024)**

Plewik, Szymon. See Frankiewicz, Ryszard; et al., **(84b:28012)**

Rhee, Choon-Jai. On a contractible hyperspace condition. **(84f:54010)**

Rocznik, Jan. See Frankiewicz, Ryszard; et al., **(84b:28012)**

Rogers, C. A. See Jayne, John E., **(84b:54038)**

Szrak, Włodzimierz. Some counterexamples in multifunction theory. **(84g:54025)**

Stone, A. H. See Mauldin, R. Daniel, **(84b:28001)**

54C70 Entropy

Lind, D. A. Entropies and factorizations of topological Markov shifts. **84j:54010**

secondary classifications:

Bernhardt, Chris. Periodic points and topological entropy of maps of the circle. **(84h:58119)**

Block, Louis. Periodic orbits and topological entropy of one-dimensional discrete dynamical systems. (See **84c:00005**)

Chernov, N. I. See Sinai, Ya. G., **(84j:82022)**

Ivanov, N. V. Entropy and Nielsen numbers. (Russian) **(84m:58074)**

Komornik, Józef. See Komorniková, Magda, **(84c:28026)** and **(84g:28023)**

Komorniková, Magda (with Komornik, Józef) Comparing measure theoretic entropy for ϕ -finite measures with topological entropy. (Russian summary) **(84c:28026)**
(with Komornik, Józef) Goodwyn's theorem for sequential entropy on pseudocompact spaces. (Russian summary) **(84g:28023)**

Liu, Wang Jin. The study of topological entropy in dynamical systems. (Chinese) **(84m:58075)**

See also Zhou, Zuo Ling, **(84f:58073)**

Manning, Anthony. More topological entropy for geodesic flows. **(84j:58096)**

A relation between Lyapunov exponents, Hausdorff dimension and entropy. **(84h:58064)**

Pignataro, Thea. Feasibility of calculating dimension and topological entropy. (See **84f:58001**)

Reddy, William L. Expansive canonical coordinates are hyperbolic. **(84a:54076)**

Sinai, Ya. G. (with Chernov, N. I.) Entropy of a gas of hard spheres with respect to the group of space-time shifts. (Russian. English summary) **(84j:82022)**

Zhou, Zuo Ling (with Liu, Wang Jin) A sufficient condition for the vanishing of the topological entropy of a self-mapping of an interval. (Chinese) **(84f:58073)**

54C99 None of the above, but in this section

Demaria, Davide Carlo. On regular functions from a topological space to a graph. **84d:54037**

Levi, Sandro. On the classification of functions in separable metric spaces. (Italian summary) **84c:54016a**

On the Baire property in separable metric spaces. (Italian summary) **84c:54016b**

Mizokami, Takemi. On \mathcal{M} -contractibility. **84c:54022**

Mustăța, Costică. Extension of bounded Lipschitz functions. **84h:54017**

Norin, V. P. Proximities for mappings. (Russian. English summary) **84h:54018**

Pu, Huan Wen (with Pu, Huo Hui Min) Uniform limits of strong Darboux functions. **84c:54017**

Pu, Huo Hui Min. See Pu, Huan Wen, **84c:54017**

Tineo, Antonio. ★ Un teorema de invertibilidad local. (Spanish) [A theorem of local invertibility] **84c:54020**

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Azad, K. K. Fuzzy Hausdorff spaces and fuzzy perfect mappings. **(84c:54010)**

Dzhorbenadze, S. S. The dimension of mappings of certain subclasses of scaly spaces. (Russian. English and Georgian summaries) **(84c:54041)**

van Engelen, Fons (with van Mill, Jan) Decompositions of rigid spaces. **(84m:54040)**

Gashkov, S. B. On the complexity of approximate realization of analytic functions by schemes and formulas. (Russian. English summary) **(84j:41053)**

Goodykoontz, Jack T., Jr. (with Nadler, Sam B., Jr.) Whitney levels in hyperspaces of certain Peano continua. **(84h:54010)**

Jayne, John E. (with Rogers, C. A.) First level Borel functions and isomorphisms. **(84a:54072)**

Jha, Kamal Kant (with Palei, Gopal Krishna) On uniform groups of functions and their applications. **(84j:54017)**

Lintz, R. G. Les mathématiques non-déterministes et applications aux sciences physiques et naturelles. [Nondeterministic mathematics and application to the physical and natural sciences] **(84j:92048)**

van Mill, Jan. See van Engelen, Fons, **(84m:54040)**

Nadler, Sam B., Jr. See Goodykoontz, Jack T., Jr., **(84h:54010)**

Palei, Gopal Krishna. See Jha, Kamal Kant, **(84j:54017)**

Piergallini, Riccardo. Some homogeneity properties of Banach spaces and topological manifolds. (Italian. English summary) **(84f:57006)**

Rădulescu, Florin. A topological property of \mathbb{R}^2 related to Froda theorem concerning discontinuities. **(84b:26006)**

Ricceri, Biagio. Two characterizations of the Scorza-Dragoni property. (Italian) **(84f:28011)**

Rogers, C. A. See Jayne, John E., **(84a:54072)**

Young, Sam W. Tree-like continua and simple bonding maps. **(84c:54034)**

54Dxx Fairly general properties

secondary classifications:

Grayson, Robin J. A correction to: "Concepts of general topology in constructive mathematics and in sheaves" [Ann. Math. Logic **20** (1981), no. 1, 1–41; MR **82g:03105**]. **(84d:03075)**

54D05 Connected and locally connected spaces (general aspects)

Dorsett, Charles. Connectedness in the kleinian in hyperspaces. **84c:54021**

Herrington, Larry L. (with Long, Paul E.) Almost-continuous path connected spaces. **84d:54038**

Kunen, Kenneth (with Starbird, Michael P.) Arc components in metric continua. **84b:54019**

Long, Paul E. See Herrington, Larry L., **84d:54038**

Ohlhoff, H. J. K. (with Verwey, A.) A generalization of local connectedness in topology. (Afrikaans. English summary) **84d:54039**

Preuss, Gerhard. Some point set properties of merotopic spaces and their cohomology groups. **84c:54018**

Rakowski, Markus. Semilocal connectedness by a change of the topology. **84a:54036**

Starbird, Michael P. See Kunen, Kenneth, **84b:54019**

Verwey, A. See Ohlhoff, H. J. K., **84d:54039**

secondary classifications:

Dasgupta, H. (with Lahiri, B. K.) On connectedness in bitopological spaces. **(84c:54055)**

Dorsett, Charles. Local connectedness in hyperspaces. **(84h:54018)**

van Douven, Eric K. A locally pathwise connected not path-determined Fréchet space, or a method of constructing examples. **(84b:54050)**

Lahiri, B. K. See Dasgupta, H., **(84c:54055)**

MacDonald, John (with Tholen, Walter) Decomposition of morphisms into infinitely many factors. **(84c:18005)**

Noiri, Takashi. A function which preserves connected spaces. (Czech summary) **(84d:54021)**

Petkova, S. V. Coincidence of homologies on homologically locally connected spaces. (Russian) **(84c:55005)**

Ricceri, Biagio (with Villani, Alfonso) Openness properties of continuous real functions on connected spaces. **(84g:54016)**

Tholen, Walter. See MacDonald, John, **(84c:18005)**

Villani, Alfonso. See Ricceri, Biagio, **(84g:54016)**

54D10 Separation axioms, T_0 - T_3

Bhatt, Piyush (with Singh, Darshan) Generalized units: the point-like sets. **84a:54037**

Dorsett, Charles. Semiregular spaces. **84d:54040**

Farrag, A. S. See Mashhour, A. S.; et al., **84h:54020**

Hasanein, I. A. See Mashhour, A. S.; et al., **84h:54020**

Janković, Dragan. On some separation axioms and θ -closure. **84h:54039**

On R_0 and R_1 topological spaces. **84c:54028**

Mashhour, A. S. (with Hasanein, I. A.; Farrag, A. S.) Remarks on some localized separation axioms and their implications. **84h:54020**

Papić, P. Quelques généralisations de la notion de régularité. (English and Serbo-Croatian summaries) [Some generalizations of the notion of regularity] **84d:54041**

Singh, Darshan. See Bhatt, Piyush, **84a:54037**

Tong, Jingcheng. A separation axiom between T_0 and T_1 . **84c:54022**

secondary classifications:

Dorsett, Charles. Connectedness in hyperspaces. **(84d:54014)**

Dube, K. K. A note on R_1 -topological spaces. **(84c:54027)**

- Ello, P. Local near-compactness in connection with some generalizations of compactness and separation axioms. (Russian. English summary) (84c:54021)
- Gentry, Karl R. (with Hoyle, Hughes B., III) T_1 -continuous functions and separation axioms. (Serbo-Croatian summary) (84f:54015)
- Hajek, Darrell W. (with Izziary, Ivette) Embedding in T_2 - F_2 spaces. (84b:54030)
- Hoffmann, Rudolf-E. Factorization of cones. II. With applications to weak Hausdorff spaces. (84b:18002)
- Hoyle, Hughes B., III See Gentry, Karl R., (84f:54015)
- Izziary, Ivette See Hajek, Darrell W., (84b:54030)
- Piotrowski, Z. (with Roslanowski, A.; Scott, B. M.) The pinched-cube topology. (84c:54014)
- Pixley, Carl P. An easily verified regular Hausdorff space which is not normal. (84c:54043)
- Roslanowski, A. See Piotrowski, Z.; et al., (84c:54014)
- Scott, B. M. See Piotrowski, Z.; et al., (84c:54014)
- Wilke, Gerhard Eine Kennzeichnung topologischer Räume durch Vervollständigungen. [A characterization of topological spaces by completions] (84m:06009)

54D15 Higher separation axioms (completely regular, normal, perfectly or collectionwise normal, etc.)

- Alas, Ofelia T. Characterizations of strong collectionwise Hausdorffness. 84m:54019
- Fleissner, William G. Discrete sets of singular cardinality. 84c:54023
- Hoshina, Takao Spaces with a property related to uniformly local finiteness. 84b:54040
- Levy, Ronnie (with Rice, M. D.) Normal P -spaces and the G_2 -topology. 84c:54029
- Llorens, J. L. (with Serra, V.; Tarazona, E.) The complete regularity of a topological space is not a local property. (Spanish. English summary) 84i:54024
- Mysior, Adam A remark on scattered spaces. 84b:54041
- Prasad, R. (with Yadav, R. S.) On strongly s -regular and strongly s -normal spaces. (Hindi. English summary) 84f:54027
- Przymusiński, Teodor C. On Martin's axiom and perfect spaces. 84c:54030
- Reed, G. M. Collectionwise Hausdorff versus collectionwise normal with respect to compact sets. 84m:54020
- Rice, M. D. See Levy, Ronnie, 84c:54029
- Rudin, Mary Ellen Collectionwise normality in screenable spaces. 84a:54038
- Serra, V. See Llorens, J. L.; et al., 84i:54024
- Tarazona, E. See Llorens, J. L.; et al., 84i:54024
- Watson, W. Stephen Corkscrews in completely regular spaces. 84c:54019
- Yadav, R. S. See Prasad, R., 84f:54027

secondary classifications:

- Deak, J. Operations on orderly spaces. (84c:54042)
- Dimov, G. D. (with Doichinov, Doichin) Regular extensions of regular topological spaces. (Russian) (84c:54028)
- Doichinov, Doichin See Dimov, G. D., (84c:54028)
- El-Deeb, S. N. See Mashhour, A. S.; et al., (84c:54029)
- Fath Alla, M. A. See Mashhour, A. S.; et al., (84b:54047)
- Hasanein, I. A. See Mashhour, A. S.; et al., (84b:54047)
- Khedr, F. H. See Mashhour, A. S.; et al., (84b:54029)
- Mahmoud, F. S. See Mashhour, A. S.; et al., (84b:54047)
- Mashhour, A. S. (with Khedr, F. H.; El-Deeb, S. N.) 5-separation axioms in bitopological spaces. (Arabic summary) (84c:54029)
- (with Mahmoud, F. S.; Fath Alla, M. A.; Hasanein, I. A.) On some generalization of compactness. (84b:54047)
- Miwa, Takuo Adjunction spaces of monotonically normal spaces and spaces dominated by monotonically normal subsets. (84c:54049)
- Nedev, Stoyan I. A selection theorem. (84c:54027)
- Wang, Guo Jun Separation axioms in topological molecular lattices. (Chinese. English summary) (84m:54041)

54D18 Paracompactness, pointwise paracompactness, etc.

- Gandini, Pier Mario Sur les espaces $\alpha\beta\gamma\delta$ -compacts. (Italian summary) [On $\alpha\beta\gamma\delta$ -compact spaces] 84c:54031
- Hattori, Yasumao On a question of R. Telgarsky. 84j:54011
- Hdeib, Hasan Z. A note on completely paracompact spaces. (Arabic summary) 84c:54032
- Kovačević, Bilja Locally nearly paracompact spaces. 84c:54033
- A note on quotient spaces and paracompactness. (Serbo-Croatian summary) 84b:54042
- Noiri, Takashi A note on nearly-paracompact spaces. 84j:54012
- Rudin, Mary Ellen A normal screenable nonparacompact space. 84d:54042

secondary classifications:

- Arkhangel'skii, A. V. (with Ranchin, D. V.) Everywhere dense subspaces of topological products and properties associated with final compactness. (Russian. English summary) (84m:54005)
- Blasco, José Luis ★ Compacidad numerable y pseudocompacidad del producto de dos espacios topológicos. Productos finitos de espacios con topologías proyectivas de funciones reales. (Spanish) [Countable compactness and pseudocompactness of the product to two topological spaces. Finite products of spaces with projective topologies of real functions] (84m:54023)
- Borubaev, A. A. Uniform structures and extensions of topological spaces. (Russian) (84c:54025)
- Comfort, W. Wistar (with Grant, Douglass L.) Cardinal invariants, pseudocompactness and minimality: some recent advances in the topological theory of topological groups. (84b:54009)
- Grant, Douglass L. See Comfort, W. Wistar, (84b:54009)

- Hohti, Aarno A theorem on uniform paracompactness. (84d:54054)
- On supercomplete uniform spaces. (84j:54016)
- Hoshina, Takao Spaces with a property related to uniformly local finiteness. (84b:54040)
- Miller, Arnold W. On box products. (84c:54014)
- O'Farrell, J. M. The Sorgenfrey line is not totally metacompact. (84i:54039)
- Ranchin, D. V. See Arkhangel'skii, A. V., (84m:54005)
- Rudin, Mary Ellen (with Watson, Steve) Countable products of scattered paracompact spaces. (84i:54010)
- Sakai, Shozo Cardinal functions on Pixley-Roy hyperspaces. (84m:54003)
- Watson, Steve See Rudin, Mary Ellen, (84i:54010)
- Yasui, Yoshikazu Some questions on the \mathfrak{B} - and weak \mathfrak{B} -property. (84c:54036)
- Zahid, Muhammad I. Minimal topologies of para- H -closed spaces. (84c:54037)
- Zarichnyi, M. M. Hypersymmetric powers of supercompacta. (Russian. English summary) (84m:54006)

54D20 Covering properties: Lindelöf, (m, n) -compact, etc.

- Aparina, L. V. Uniformity and proximity analogues of the Lindelöf property. (Russian) 84c:54039
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- Arkhangel'skii, A. V. (with Ranchin, D. V.) Everywhere dense subspaces of topological products and properties associated with final compactness. (Russian. English summary) **(84m:54005)**
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- Ball, B. J. (with Yokura, Shoji) Compactifications determined by subsets of $C^*(X)$. **(84c:54022a)**
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- Gianella, Gian Mario. On a compactification class. (Italian. English summary) (84a:54046)
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- Aparina, L. V. Uniformity and proximity analogues of the Lindelöf property. (Russian) (84c:54039)
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- Aparina, L. V. Uniformity and proximity analogues of the Lindelöf property. (Russian) (84c:54039)
- Beilagitz, Amer Embedding cosmic spaces in Lusin spaces. (84b:54037)
- Borubaeu, A. A. Uniform structures and extensions of topological spaces. (Russian) (84a:54025)
- Coyle, D. G. (with Szabo, M. E.) Monadic properties of uniformities. (84b:54047)
- Fisher, Brian See Khan, Mohd. Saeed, (84f:54062)
- Gromov, Mikhail L. (with Milman, Vitali D.) A topological application of the isoperimetric inequality. (84c:28012)
- Hejman, J. Metrization lemmas and equivalence of Lipschitz structures. (84d:54053)
- Heldermann, N. C. Coreflections induced by fine functors in topological categories. (84j:54004)
- Hušek, Miroslav (with Reichel, Hans-Christian) Topological characterizations of linearly uniformizable spaces. (84d:54058)
- Jumilla, H. J. K. On stratifiable spaces and M_0 -spaces. (84g:54033)
- Khan, Mohd. Saeed (with Fisher, Brian) Common fixed points in uniform spaces. (84f:54062)
- Milman, Vitali D. See Gromov, Mikhail L., (84c:28012)
- Mishra, S. N. See Singh, Shyam Lal, (84c:54052)
- Mizokami, Takemi On a certain class of M_1 -spaces. (84c:54050)
- Reichel, Hans-Christian See Hušek, Miroslav, (84d:54058)
- Singh, Shyam Lal (with Mishra, S. N.) Common fixed points and convergence theorems in uniform spaces. (84c:54052)
- Snipes, Ray F. Characterizations of uniformly continuous and Cauchy-regular functions using nets. (84f:54014)
- Szabo, M. E. See Coyle, D. G., (84b:54047)

54E17 Nearness spaces

- Carlson, John W. Compactly generated extensions. 84m:54030
- Chattopadhyay, K. C. (with Njåstad, Olav) Quasiregular nearness spaces and extensions of nearness-preserving maps. 84b:54056
- Hastings, Maryam Shayeagan On hemineariness spaces. 84c:54047
- Njåstad, Olav See Chattopadhyay, K. C., 84b:54056

secondary classifications:

- Bentley, H. L. A note on the homology of regular nearness spaces. (84a:55003)
- Greve, Georg General construction of monoidal closed structures in topological, uniform and nearness spaces. (84b:18005)
- Heldermann, N. C. Coreflections induced by fine functors in topological categories. (84j:54004)
- Preuss, Gerhard Some point set properties of merotopic spaces and their cohomology groups. (84c:54018)

54E18 p -spaces, M -spaces, σ -spaces, etc.

- Itô, Munehiko M_1 -spaces whose every point has a closure preserving outer base are M_1 . 84g:54032
- Kato, Akio Nonexistence of universal paracompact M -spaces. 84f:54037

secondary classifications:

- Bennett, H. R. Metrization of F_p -spaces. (84c:54033)
- Chaber, Józef Open finite-to-one images of metric spaces. (84a:54018)
- Closed mappings onto metric spaces. (84i:54013)
- Chiba, Keiko On the weak \mathfrak{G} -property of Σ -products. (84c:54012)
- Hodel, R. E. Two metrization theorems of Arkhangel'skii and their influence in general topology. (84f:54041)
- Mishkin, V. V. Upper and lower semicontinuous set-valued maps into σ -spaces. (See 84c:54003)
- Oka, Shinpei Dimension of stratifiable spaces. (84c:54052)
- Pareek, C. M. Open finite-to-one mappings on p -spaces. (84b:54025)

54E20 Stratifiable spaces, cosmic spaces, etc.

- Borges, Carlos R. Equivalence of separable, Lindelöf, CCC and N_1 -compact in generalized metric spaces. 84a:54055
- (with Gruenhage, Gary) Sup-characterization of stratifiable spaces. 84c:54031
- Bregman, Yu. Kh. δ -metrizable and stratifiable spaces. (Russian) 84f:54038
- A note about M_1 -spaces and stratifiable spaces. 84f:54039
- Chigogidze, A. Ch. On κ -metrizable spaces. (Russian) 84c:54048
- Gruenhage, Gary See Borges, Carlos R., 84c:54031
- Itô, Munehiko (with Tamano, Ken-ichi) Spaces whose closed images are M_1 . 84a:54056
- Jumilla, H. J. K. On stratifiable spaces and M_0 -spaces. 84g:54033
- Levi, Sandro On Baire cosmic spaces. 84d:54052
- Miwa, Takuo Adjunction spaces of monotonically normal spaces and spaces dominated by monotonically normal subsets. 84c:54049
- Mizokami, Takemi On the adjunction spaces of free L -spaces and M_1 -spaces. 84c:54051
- On a certain class of M_1 -spaces. 84c:54050
- Oka, Shinpei Dimension of stratifiable spaces. 84c:54052
- Tamano, Ken-ichi Stratifiable spaces defined by pair collections. 84k:54026
- See also Itô, Munehiko, 84a:54056

secondary classifications:

- Borges, Carlos R. Expansion of closure-preserving collections and metrization. (84b:54060)
- Davis, S. W. Cauchy conditions on symmetrics. (84a:54052)

- Hušek, Miroslav (with Reichel, Hans-Christian) On linearly uniformizable spaces. (84d:54050)
- Okuyama, Akihiro An example of an L -, non- D -space. (84g:54047)
- Reichel, Hans-Christian See Hušek, Miroslav, (84d:54050)

54E25 Semimetric spaces

- Silva-Rebermann, Celmar Topological and uniform properties of semimetric spaces. (Spanish. English summary) 84c:54053

secondary classifications:

- Burke, D. K. (with Davis, S. W.) Questions on symmetrizable spaces. (84k:54024)
- Coyle, D. G. (with Szabo, M. E.) Monadic properties of uniformities. (84b:54047)
- Davis, S. W. Cauchy conditions on symmetrics. (84a:54052)
- See also Burke, D. K., (84k:54024)
- Szabo, M. E. See Coyle, D. G., (84b:54047)

54E30 Moore spaces

- Fleissner, William G. Normal nonmetrizable Moore space from continuum hypothesis or nonexistence of inner models with measurable cardinals. 84f:54040
- Hung, H. H. On developability. 84b:54057

secondary classifications:

- Bing, R. H. Metrization problems. (84b:54059)
- Chaber, Józef Closed mappings onto metric spaces. (84i:54013)
- Fleissner, William G. If all normal Moore spaces are metrizable, then there is an inner model with a measurable cardinal. (84b:03118)
- Przymusiński, Teodor C. On Martin's axiom and perfect spaces. (84c:54030)
- Reed, G. M. Collectionwise Hausdorff versus collectionwise normal with respect to compact sets. (84m:54020)

54E35 Metric spaces, metrization

- Alas, Ofelia T. On ω_1 -metrizable spaces. (Italian summary) 84c:54032a
- Artico, Giuliano (with Moresco, Roberto) Some results on ω_1 -metric spaces. 84b:54058
- (with Moresco, Roberto) Some ω_1 -metrization theorems. (Italian summary) 84c:54032b
- Assoud, Patrice Pseudodistances, facteurs et dimension métrique. [Pseudodistances, factors and metric dimension] 84h:54027
- Bennett, H. R. Metrization of F_p -spaces. 84c:54033
- Bing, R. H. Metrization problems. 84b:54059
- Borges, Carlos R. Expansion of closure-preserving collections and metrization. 84b:54060
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- Calka, Aleksander On locally expansive selfcoverings of compact metrizable spaces. 84g:54035
- Dobóš, Jozef On a certain lattice of topologies on a product of metric spaces. (Russian summary) 84b:54061
- See also Borsik, Ján, 84g:54034
- Foged, L. On g -metrization. 84c:54054
- Hejman, J. Metrization lemmas and equivalence of Lipschitz structures. 84d:54053
- Hodel, R. E. Two metrization theorems of Arkhangel'skii and their influence in general topology. 84f:54041
- Hohti, Aarno A theorem on uniform paracompactness. 84d:54054
- Iladis, S. Espaces α -métriques. [α -metric spaces] 84k:54027
- Li, Sök Hui On metrization of topological spaces. I. (Korean. English summary) 84f:54042a
- On the metrization of topological spaces. II. (Korean. English summary) 84f:54042b
- Mai, Jie Hua (with Tang, Yun) An injective metrization for collapsible polyhedra. 84g:54036
- Marjanović, M. M. Converting a directed set into a metric space. 84m:54031
- McAuley, Louis F. On the metrization of decomposition spaces. 84g:54037
- Moresco, Roberto See Artico, Giuliano, 84b:54058 and 84c:54032b
- Peregudov, S. A. On metrization in a class of topological spaces with a weakly uniform base. (Russian. English summary) 84j:54019a
- On metrization in a class of topological spaces with a weakly uniform base. II. (Russian. English summary) 84j:54019b
- Tang, Yun See Mai, Jie Hua, 84g:54036
- Turnici, Mihai A maximality principle on ordered metric spaces. (Spanish summary) 84d:54055
- Väisälä, Jussi Dividing an arc to subarcs with equal chords. 84d:54056
- Xavier, Ailton Fontenele Sampaio Random arc length in probabilistic metric spaces. (Portuguese) (See 84b:00011)

secondary classifications:

- Antonovskii, M. Ya. (with Choban, M. M.) Invariant generalized metrics on topological algebras. (Russian) (84c:22006)
- (with Choban, M. M.) Radial metrics and their applications to topological groups. (Russian) (84c:22003)
- Arosio, A. (with Ferreira, Arturo V.) On nonseparable 0-dimensional metrizable spaces. (84j:54023)
- Baeg, Hyoung Gu See Jo, Young Soo, (84k:54023)
- Bell, Murray G. (with Ginsburg, John) Uncountable discrete sets in extensions and metrization. (84c:54009)

- Bregman, Yu. Kh. δ -metrizable and stratifiable spaces. (Russian) (84f:54038)
- Broughan, Kevin A. Topologies induced by metrics with disconnected range. (84c:54061)
- Brown, Lawrence M. A topic in the theory of bitopological spaces. (84m:54032)
- Chigogidze, A. Ch. On κ -metrizable spaces. (Russian) (84c:54048)
- Choban, M. M. See Antonovskii, M. Ya., (84c:22006) and (84c:22003)
- Davies, Roy O. (with Tricot, Claude, Jr.) A theorem about countable decomposability. (84c:54019)
- Domiaty, R. Z. Zur inneren Geometrie quasimetrischer Räume. [On the intrinsic geometry of quasimetric spaces] (84b:53071)
- Ferreira, Arturo V. See Arosio, A., (84j:54023)
- Fleissner, William G. Normal nonmetrizable Moore space from continuum hypothesis or nonexistence of inner models with measurable cardinals. (84f:54040)
- Ginsburg, John See Bell, Murray G., (84c:54009)
- Hung, H. H. On developability. (84b:54057)
- Hušek, Miroslav (with Reichel, Hans-Christian) On linearly uniformizable spaces. (84d:54050)
- Jo, Young Soo (with Baeg, Hyoung Gu) Some characterizations of spaces by embeddings in βX . (84c:54023)
- Kato, Akio Nonexistence of universal paracompact M -spaces. (84f:54037)
- Levi, Sandro On the classification of functions in separable metric spaces. (Italian summary) (84k:54016a)
- On the Baire property in separable metric spaces. (Italian summary) (84k:54016b)
- Pötscher, B. M. Some results on ω_1 -metric spaces. (84c:54046)
- Rajkumar Dare, V. Metric topology on infinite derivations of algebraic grammars. (84a:68086)
- Reichel, Hans-Christian See Hušek, Miroslav, (84d:54050)
- Robinson, Stewart M. (with Robinson, Zachary) Uniformly continuous partitions of unity on a metric space. (84b:54044)
- Robinson, Zachary See Robinson, Stewart M., (84b:54044)
- Romaguera, S. On bitopological quasipseudometrization. (84j:54020)
- Sadyrhanov, R. S. A generalization of closed and proper mappings. (Russian) (84f:54018)
- Strantzen, John An average distance result in Euclidean n -space. (84c:52015)
- Tanaka, Yoshio Closed images of locally compact spaces and Fréchet spaces. (84f:54015)
- Tricot, Claude, Jr. See Davies, Roy O., (84c:54019)
- Turinici, Mihai Maximal elements in topological and generalized metric spaces. (84b:54068)
- Uspenskii, V. V. A metrizable space is imbedded in a metrizable field. (Russian) (84j:12030)
- Yost, David Thomas Average distances in compact connected spaces. (84c:52016)

54E40 Isometries, contractions, expansions

- Broughan, Kevin A. Isotropic metrics with disconnected range. 84f:54043
- Charatonik, Janusz J. (with Miklos, Stanislaw) Images of graphs under local expansions. (See 84c:54003)
- Flachsmeyer, J. On the convergence of motions. 84f:54044
- Miklos, Stanislaw See Charatonik, Janusz J., (See 84c:54003)
- Turinici, Mihai Local and global Lipschitzian mappings on ordered metric spaces. 84k:54028a

Function Lipschitzian mappings on Banach spaces and applications. 84k:54028b

secondary classifications:

- Borwein, Jonathan M. Completeness and the contraction principle. (84a:54080)
- Caika, Aleksander On locally expansive selfcoverings of compact metrizable spaces. (84g:54035)
- Chatterjee, Dipak Generalized contraction principle. (84a:54081)
- Chung, Kun Jen On weakly nonlinear contractions. (84m:54072)
- Ewert, Janina (with Lipinski, Jan S.) On points of continuity, quasicontinuity and cliquishness of real functions. (84f:54012)
- Fickett, James W. Approximate isometries on bounded sets with an application to measure theory. (84d:28019)
- Gao, Zhi Min See Wang, Shang Zhi; et al., (84j:54037)
- Li, Bo Yu See Wang, Shang Zhi; et al., (84j:54037)
- Lipinski, Jan S. See Ewert, Janina, (84f:54012)
- Luukkainen, Jouni (with Tukia, P.) Quasisymmetric and Lipschitz approximation of embeddings. (84a:57020)
- Mukherjee, R. N. On some fixed point theorems on Hausdorff metric and Banach spaces. (84d:54077)
- Ram, Babul Contractive mapping and their fixed points in 2-metric spaces. (84m:54048)
- Tukia, P. (with Väisälä, Jussi) Lipschitz and quasiconformal approximation and extension. (84a:57016)
- See also Luukkainen, Jouni, (84a:57020)
- Väisälä, Jussi See Tukia, P., (84c:57016)
- Wang, Shang Zhi (with Li, Bo Yu; Gao, Zhi Min) Expansive mappings and fixed-point theorems for them. (Chinese) (84j:54037)

54E45 Compact (locally compact) metric spaces

secondary classifications:

- Assouad, Patrice Embeddability of regular polytopes and honeycombs in hypercubes. (84c:52004)
- Grace, E. E. Monotone decompositions of θ -continua. (84c:54036)
- Hatzenbuehler, James (with Mattson, Don A.; Sizer, Walter S.) An algebraic characterization of remainders of compactifications. (84m:54026)
- Katz, Elyahu (with Morris, Sidney A.) On metrizable k_ω -spaces. (84m:54034)
- Kunen, Kenneth (with Starbird, Michael P.) Arc components in metric continua. (84h:54019)

- Mattson, Don A. See Hatzenbuehler, James; et al., (84m:54026)
- Morris, Sidney A. See Katz, Elyahu, (84m:54034)
- Sizer, Walter S. See Hatzenbuehler, James; et al., (84m:54026)
- Starbird, Michael P. See Kunen, Kenneth, (84h:54019)

54E50 Complete metric spaces

secondary classifications:

- Berner, Andrew J. Almost continuous functions with closed graphs. (84j:54005)
- Studený, M. On the differentiation theorem in metric groups. (84j:28007)

54E52 Completions, Baire category

secondary classifications:

- Brunner, Norbert Kategoriesätze und multiples Auswahlaxiom. [Category theorems and axiom of multiple choice] (84k:03123)
- Gandini, Pier Mario Sur les espaces $\alpha\beta\gamma\delta$ -compacts. (Italian summary) [On $\alpha\beta\gamma\delta$ -compact spaces] (84c:54031)
- Morgan, John C., II On equivalent category bases. (84c:54002)
- Nepeivoda, N. N. Some possibilities for the application of constructive analysis to classical analysis. (Russian) (84d:03076)

54E55 Bitopologies

- Bose, Shantha Semi-open sets, semicontinuity and semi-open mappings in bitopological spaces. 84f:54031
- (with Sinha, Dipti) Almost open, almost closed, θ -continuous and almost quasicompact mappings in bitopological spaces. 84c:54032
- Brown, Lawrence M. Sequentially normal bitopological spaces. 84b:54062
- A topic in the theory of bitopological spaces. 84m:54032
- Dasgupta, H. (with Lahiri, B. K.) On connectedness in bitopological spaces. 84c:54055
- El-Deeb, S. N. See Mashhour, A. S.; et al., 84c:54029
- Elic, Milena Dimensions of bitopological spaces. (Russian) 84c:54056
- Khedr, F. H. See Mashhour, A. S.; et al., 84c:54029
- Lahiri, B. K. See Dasgupta, H., 84c:54055
- Mashhour, A. S. (with Khedr, F. H.; El-Deeb, S. N.) 5-separation axioms in bitopological spaces. (Arabic summary) 84k:54029
- Mrišević, Mla Local compactness in bitopological spaces. 84b:54063
- Mukherjee, M. N. On pairwise almost compactness and pairwise H -closedness in a bitopological space. 84b:54064
- Pairwise category properties of some pairwise minimal bitopological spaces. 84k:54030
- Noiri, Takashi A note on pairwise π -normal spaces. 84a:54057
- Romaguera, S. On bitopological quasipseudometrization. 84j:54020
- Sinha, Dipti See Bose, Shantha, 84f:54032
- Swart, J. Pairwise almost compact spaces. 84b:54065
- Xu, Rong Quan Separability and products of bitopological spaces. (Chinese. English summary) 84g:54038
- Žižović, Mla R. The mutuality property of bitopological spaces. (Serbo-Croatian. English summary) 84b:54066

secondary classifications:

- Banaschewski, Bernhard (with Brümmer, G. C. L.; Hardie, K. A.) Biframes and bispaces. (84h:06012)
- Brümmer, G. C. L. See Banaschewski, Bernhard; et al., (84h:06012)
- Goel, C. K. See Vasudevan, R., (84b:54020)
- Hardie, K. A. See Banaschewski, Bernhard; et al., (84h:06012)
- Jeon, Jaeseok Some properties of fuzzy topological spaces. (84b:54011)
- Mrišević, Mla On nonsymmetric proximity spaces. (See 84c:54003)
- Vasudevan, R. (with Goel, C. K.) Bitopological hyperspaces equipped with upper semifinite and lower semifinite topologies. (84b:54020)

54E60 CW-complexes, triangulable spaces

secondary classifications:

- Barros, Manuel (with Urbano, Francisco) Submanifolds of complex Euclidean space which admit a holomorphic distribution. (84g:53079)
- Johnson, Francis E. A. On the triangulation of stratified sets and singular varieties. (84c:58007)
- Ungar, S. A remark on shape paths and homotopy pro-groups. (84g:55012)
- Urbano, Francisco See Barros, Manuel, (84g:53079)

54E65 Countability conditions, separability

secondary classifications:

- Amirzhanov, G. P. On dense subspaces of topological spaces. (See 84c:54003)
- Bešliagić, Amer Embedding cosmic spaces in Lusin spaces. (84h:54037)
- Chaitin, Hendrik On weakening the first axiom of countability. (84b:54006)
- Foged, L. On g -metrizability. (84c:54054)
- Gerlits, J. Some properties of $C(X)$. II. (84i:54018)
- Giovannelli, Nicolò See La Francesca, A.; et al., (84k:54006)
- La Francesca, A. (with Giovannelli, Nicolò; Valenti, S.) Sur les points du premier genre dans les topologies non-séparables (B_1). (Italian summary) [Points of the first kind in nonseparable (B_1) topologies] (84k:54006)
- Levy, Ronnie (with Rice, M. D.) Normal P -spaces and the G_δ -topology. (84c:54029)

- Malykhin, V. I. Cardinality of compacta with the weak first countability axiom. (Russian) (84c:54006)
 Rice, M. D. See Levy, Ronnie, (84c:54029)
 Suárez M., Manuel Criteria of sequential convergence. (Spanish. English summary) (84d:54006)
 Valenti, S. See La Francesca, A.; et al., (84c:54006)

54E99 None of the above, but in this section

- Antonovskii, M. Ya. Generalized metrics and measures and some of their applications. (Russian) 84d:54057
 Birsan, T. Generation of the probabilistic quasipseudometric spaces. 84f:54045
 Boryan, D. Some properties of the topology induced by a G -2 metric. (Romanian. English summary) 84g:54039
 Deak, J. Applications of the theory of directional structures. I. 84m:54033
 Đỗ Hồng Tân A note on probabilistic measures of noncompactness. 84h:54028
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 Jacas, J. (with Rubió, J.; Trillas, Enric; Vila, A.) Characterization of the spectrum and the metric morphisms between two Boolean metric spaces. (Catalan. English summary) (See 84i:03003)
 Kassimatis, N. See Stratigopoulos, D., 84g:54042
 Katz, Elyahu (with Morris, Sidney A.) On metrizable k_ω -spaces. 84m:54034
 Kent, D. C. See Frič, Roman, (See 84c:54003)
 Morris, Sidney A. See Katz, Elyahu, 84m:54034
 Nagata, Jun-iti Some questions. 84g:54040
 Nguyễn Nhưy (with Trần Huyền) Quasiconvex metric spaces and the property of absolute boundedness. (Vietnamese. English summary) 84g:54041
 Rubió, J. See Jacas, J.; et al., (See 84i:03003)
 Stratigopoulos, D. (with Kassimatis, N.) Espaces ultramétriques orientés. [Oriented ultrametric spaces] 84g:54042
 Trần Huyền See Nguyễn Nhưy, 84g:54041
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secondary classifications:

- Alcina, Claudi (with Schweizer, B.) On a theorem Mouchtari and Šerstnev. (84c:60014)
 Beer, Gerald In which metric spaces are parallel bodies of closed sets closed? (84g:51026)
 Brown, J. B. (with Cox, G. V.) Classical theory of totally imperfect spaces. (84g:54021)
 Constantin, R. F. On some geometric models for probabilistic metric spaces. (Romanian) (See 84f:53001)
 Constantinescu, Corneliu Spaces of measures on topological spaces. (84d:28009)
 Cox, G. V. See Brown, J. B., (84g:54021)
 Daneš, J. A covering theorem for mappings between metric spaces. (84f:47071)
 Efremovich, V. A. (with Vainshtein, A. G.; Gorelik, E. M.; Loginov, E. A.) Metric fibration of Riemannian manifolds. (See 84g:53003)
 Gorelik, E. M. See Efremovich, V. A.; et al., (See 84g:53003)
 Hitchcock, A. G. Categorical anatomy of closed graph and open mapping theorems. (84i:46010)
 Höhle, Ulrich Probabilistic topologies induced by L -fuzzy uniformities. (84h:54007a)
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 Loginov, E. A. See Efremovich, V. A.; et al., (See 84g:53003)
 Lowen, Robert (with Wuyts, P.) Completeness, compactness, and precompactness in fuzzy uniform spaces. I. (84h:54007b)
 (with Wuyts, P.) Completeness, compactness, and precompactness in fuzzy uniform spaces. II. (84h:54007c)
 Luukkainen, Jouni Extension of locally uniformly equivalent metrics. (84a:54054)
 van Mill, Jan A homogeneous Eberlein compact space which is not metrizable. (84h:54036)
 Nagami, Keiō Weak L -structures and dimension. (84h:54073)
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 Vinárek, Jiří Representations of commutative semigroups by products of metric 0-dimensional spaces. (84m:20072)
 Vul'pe, I. M. (with Ostraiikh, D.; Khoiman, F.) The topological structure of a quasimetric space. (Russian) (84f:46036)
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 Zhong, Hu Mian Invariant measures for Markov processes on a compact metric space. (Chinese. English summary) (84m:60088)

54Fxx Special properties

- 54F05 Ordered topological spaces, partially ordered spaces [See also 06B30, 06F30.]
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 Chertanov, G. I. The connection between Aronszajn trees and nonmetrizable N_0 -monolithic linearly ordered compacta that satisfy the first axiom of countability. (Russian) 84a:54059
 Cohen, Miriam (with Rubin, Matatyahu) Lattices of continuous monotonic functions. 84c:54031
 Husek, Miroslav (with Reichel, Hans-Christian) Topological characterizations of linearly uniformizable spaces. 84d:54058
 Katrnioška, František M -base and the representation of orthocomplemented posets. (See 84c:54003)

- Maslov, V. V. Projective limits of semisyntopogenic spaces. (Russian) 84i:54034
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secondary classifications:

- Belbas, Stavros A. Nonlinear stochastic integral equations over partially ordered topological spaces. (84c:60087)
 Brunner, Norbert Geordnete Lauchli Kontinuen. [Ordered Lauchli continua] (84i:03122)
 Bula, Witold On continua having three types of open subsets. (84a:54060)
 Deak, J. Operations on orderly spaces. (84c:54042)
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 Di Maio, Giuseppe (with Russo, Assunta) Some lattice properties of T_1 -topologies and of one of their generalizations. (Italian. English summary) (84i:54003)
 Dobbs, David E. Posets admitting a unique order-compatible topology. (84a:06007)
 Fedorova, V. P. σ -additive and τ -additive functionals on lattices of uniformly continuous functions. (Russian) (84c:46050)
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 Katsaras, A. K. Ordered fuzzy topological spaces. (84b:54013)
 Kent, D. C. On the order scale of a uniform space. (84d:54051)
 Le Donne, A. See De Marco, G.; et al., (84d:54065)
 Marjanović, M. M. Converting a directed set into a metric space. (84m:54031)
 Mehta, Ghanshyam Order-separable spaces. (84i:90030)
 Russo, Assunta See Di Maio, Giuseppe, (84i:54003)
 Salzberg, Pablo M. Absolute stability of general systems. (84f:93048)
 Savel'ev, L. Ya. Measures on ortholattices. (Russian) (84i:06005)
 Skucha, Jerzy Topological properties of c -nets. (84f:06007)
 Todorćević, Stevo Stationary sets, trees and continuums. (84g:03078)
 Turinici, Mihai A maximality principle on ordered metric spaces. (Spanish summary) (84d:54055)
 Williams, S. W. Coabsolutes of Čech-Stone remainders and orderable spaces. (84i:54028)
 Wilson, Richard Gordon See De Marco, G.; et al., (84d:54065)

54F15 Continua and generalizations

- Charatonik, Janusz J. (with Miklos, Stanislaw) Generalized graphs and their open mappings. (French summary) 84b:54069
 van Douwen, Eric K. An infinite product of continua without nontrivial embeddings into itself. 84b:54070
 Hagopian, Charles L. No homogeneous tree-like continuum contains an arc. 84d:54059
 Miklos, Stanislaw See Charatonik, Janusz J., 84b:54069

secondary classifications:

- Cauty, Robert Les facteurs de dimension un d'un produit infini de cercles sont des cercles. (English and Russian summaries) [The one-dimensional factors of an infinite product of circles are circles] (84e:54008)
 Duda, Edwin A sum theorem for semipan of continua. (See 84c:54003)
 Gutek, Andrzej (with Hagopian, Charles L.) A nonmetric indecomposable homogeneous continuum every proper subcontinuum of which is an arc. (84a:54063)
 Hagopian, Charles L. See Gutek, Andrzej, (84a:54063)
 Krupski, P. Continuous homogeneity of continua. (84f:54046)
 Rhee, Choon Jai On a contractible hyperspace condition. (84f:54010)

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 Bula, Witold On continua having three types of open subsets. 84a:54060
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 Gutek, Andrzej (with Hagopian, Charles L.) A nonmetric indecomposable homogeneous continuum every proper subcontinuum of which is an arc. 84a:54063
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 A characterization of solenoids—an application of the property of Kelley. (See 84c:54003)

- Lewis, Wayne Homeomorphism groups and homogeneous continua. 84b:54071
Pseudo-arcs and connectedness in homeomorphism groups. 84c:54038
- Mayer, John C. Embeddings and prime end structure of chainable continua. 84c:54058
- Nadler, Sam B., Jr. (with Ward, L. E., Jr.) Concerning exactly $(n, 1)$ images of continua. 84c:54059
- Oversteegen, Lex G. (with Tymchatyn, E. D.) Plane strips and the span of continua. I. 84b:54030
- Proctor, C. Wayne Upper semicontinuous collections of continua in class W . 84c:54039
- Rakowski, Marius Smooth Hausdorff continua. 84a:54064
- Rogers, James T., Jr. Homogeneous hereditarily indecomposable continua are tree-like. 84b:54072
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- Tymchatyn, E. D. Some rational continua. 84m:54035
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- Vought, Eldon J. Structure of θ - and θ_2 -continua. 84c:54060
- Ward, L. E., Jr. See Nadler, Sam B., Jr., 84c:54059

secondary classifications:

- Brunner, Norbert Geordnete Lauchli-Kontinuen. [Ordered Lauchli continua] (84i:03122)
- van Douwen, E. K. Continua and $\beta X - X$. (See 84c:54003)
- Goodykoontz, Jack T., Jr. (with Nadler, Sam B., Jr.) Whitney levels in hyperspaces of certain Peano continua. (84b:54010)
- Hagopian, Charles L. Plane continua and the fixed-point property. (84a:54090)
No homogeneous tree-like continuum contains an arc. (84d:54059)
- Handel, Michael A pathological area preserving C^∞ diffeomorphism of the plane. (84f:58040)
- Muenzenberger, T. B. (with Smithson, R. E.; Ward, L. E., Jr.) Characterizations of arboroids and dendritic spaces. (84a:54071)
- Nadler, Sam B., Jr. See Goodykoontz, Jack T., Jr., (84b:54010)
- Smithson, R. E. See Muenzenberger, T. B.; et al., (84a:54071)
- Ward, L. E., Jr. See Muenzenberger, T. B.; et al., (84a:54071)

54F25 Peano spaces and generalizations

- Pach, Janos (with Rogers, C. A.) Partly convex Peano curves. 84m:54036
- Rogers, C. A. See Pach, Janos, 84m:54036

secondary classifications:

- Garrett, B. D. Almost continuity on Peano continua. (84g:54014)

54F30 Cyclic elements

54F35 Higher dimensional local connectedness [See also 55Mxx, 55Nxx.]

secondary classifications:

- Rote, D. Peripheral cohomological local connectedness. (Russian. English summary) (84m:55005)

54F40 Compact (locally compact) absolute neighborhood retracts

- Fedorchuk, V. V. Absolute retracts and some functors. (See 84c:54003)
- Zarichnyi, M. M. Free topological groups of absolute neighborhood retracts and infinite-dimensional manifolds. (Russian) 84f:54047

secondary classifications:

- Klisowski, Jacek A survey of various modifications of the notions of absolute retracts and absolute neighborhood retracts. (84c:54033)
- Martin, John R. Neighborhood contractible spaces. (84c:54024)

54F43 Shape theory [See mainly 55P55, 57N25.]

- Kadlolf, A. An example of pointed shape which has no simple constituent. (Serbo-Croatian summary) 84m:54037
- Živanović, Žarko Union and product of W -spaces. (Russian) 84a:54065

secondary classifications:

- Jani, Mahendra Induced shape fibrations and fiber shape equivalence. (84a:55016)
- Ungar, Š. A remark on shape paths and homotopy pro-groups. (84g:55012)

54F45 Dimension theory [See also 55M10.]

- Bakhtin, V. I. Properties of the entropy and Hausdorff dimensions. (Russian. English summary) 84a:54066
- Baković, V. On Hurewicz families of separable metric spaces. (See 84c:54003)
- Bowers, Philip L. Detecting cohomologically stable mappings. 84b:54032
- Broughan, Kevin A. Topologies induced by metrics with disconnected range. 84c:54061
- Charalambous, M. G. The dimension of inverse limit and N -compact spaces. 84c:54062
- Chatyrko, V. A. On inductive dimensions. (Russian) 84i:54037
- Dzhorbenadze, S. S. The dimension of mappings of certain subclasses of scaly spaces. (Russian. English and Georgian summaries) 84c:54041
- Engelking, Ryszard (with Pol, E.) Countable-dimensional spaces: a survey. (See 84c:54003)
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- Fora, Ali A. The covering dimension of product of generalized Sorgenfrey lines. 84i:54038
- Hattori, Yasunao On questions of Z. Shmueli concerning infinite-dimensional spaces. 84g:54045
- Katětov, M. On a dimension function based on Bolzano's ideas. 84c:54046
- Kato, Hisao A note on infinite-dimension under refinable maps. 84c:54064
- Keesling, James (with Wilson, David C.) Mappings and dimension. 84d:54060
- Leibo, I. M. Dimension of closed images of metric spaces. (Russian) 84f:54048
- Luxemburg, Leonid On compactifications of metric spaces with transfinite dimensions. 84d:54061
- van Mill, Jan (with Mogilski, Jerzy) Property C and fine homotopy equivalences. 84m:54038
- Mogilski, Jerzy See van Mill, Jan, 84m:54038
- Nagami, Keiō Weak L -structures and dimension. 84b:54073
- Nagata, Jun-iti ★Modern dimension theory. 84b:54033
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- Norin, V. P. On the dimension of remainders of mappings. (Russian. English summary) 84c:54033
- Okuyama, Akihiro An example of an L -, non- D -space. 84g:54047
- Pasyukov, B. A. On the monotonicity of dimension. (Russian) 84b:54074
- Pestov, V. G. The coincidence of the dimensions \dim of I -equivalent topological spaces. (Russian) 84a:54068
- Pol, E. See Engelking, Ryszard, (See 84c:54003)
- Pol, Roman On analytic-measurable collections of countable-dimensional and weakly infinite-dimensional compacta. 84c:54067
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- Rubin, Leonard R. Totally disconnected spaces and infinite cohomological dimension. 84f:54049
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- van de Vel, M. Convex structures and dimension. 84d:54063
- Walsh, John J. Homological embedding properties of the fibers of a map and the dimension of its image. 84b:54034
- Wilson, David C. See Keesling, James, 84d:54060
- Zambakhidze, L. G. Dimensions defined by systems of disjoint open subsets of topological spaces. (Russian. English and Georgian summaries) 84j:54022

secondary classifications:

- Arosio, A. (with Ferreira, Arturo V.) On nonseparable 0-dimensional metrizable spaces. (84j:54023)
- Borsuk, Karol Some problems on n -dimensional geometric measure. (See 84c:54003)
- Broughan, Kevin A. Isotropic metrics with disconnected range. (84f:54043)
- Brown, J. B. (with Cox, G. V.) Classical theory of totally imperfect spaces. (84g:54021)
- Chorin, Alexandre Joel Numerical estimates of Hausdorff dimension. (84j:58073)
- Cox, G. V. See Brown, J. B., (84g:54021)
- Deak, J. Applications of the theory of directional structures. I. (84m:54033)
- Deo, Satya Sheaf theoretic cohomological dimension and finitistic spaces. (84b:55010)
On tautness in sheaf cohomology. (84g:55008)
- Ferreira, Arturo V. See Arosio, A., (84j:54023)
- Itō, Munehiko (with Tamano, Ken-ichi) Spaces whose closed images are M_1 . (84a:54056)
- Mandelbrot, Benoit B. ★The fractal geometry of nature. (84b:00021)
- Oka, Shinpei Dimension of stratifiable spaces. (84c:54052)
- Skurikhin, E. E. Normal sheaves and cohomology dimension of completely regular spaces. (Russian) (84c:55009)
- Tamano, Ken-ichi Stratifiable spaces defined by pair collections. (84k:54026)
See also Itō, Munehiko, (84a:54056)
- Vilimovský, Jiří Entropic dimension of uniform spaces. (84b:54054)
- Walsh, John J. Cell-like maps which do not raise dimension. (84a:54024)

54F50 Spaces of dimension ≤ 1 ; curves, dendrites [See also 26A03.]

- Charatonik, Janusz J. Open mappings of universal dendrites. (Russian summary) 84a:54069
Several problems on universal smooth dendroids. 84f:54050
- Czuba, S. T. Open functions and pointwise smooth dendroids. 84d:54064
- Jones, F. Burton Generalizations of the n -arc theorem. 84a:54070
- Young, Sam W. Tree-like continua and simple bonding maps. 84d:54034

secondary classifications:

- Bellamy, David P. Some topics in modern continua theory. (84j:54021)
- Chertanov, G. I. The connection between Aronszajn trees and nonmetrizable N_0 -monolithic linearly ordered compacta that satisfy the first axiom of countability. (Russian) (84a:54059)
- Dębski, Wojciech A noncontractible dendroid. (Polish summary) (84a:54061)
- Duda, Edwin (with Kell, James, III) Two sum theorems for semispaces. (84c:54057)
- Gutek, Andrzej Extensions of homeomorphisms on the Cantor set. (84a:54026)
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- Hagopian, Charles L. See Gutek, Andrzej, (84a:54063)
- Hart, Klaus Pieter Characterizations of R -embeddable and developable ω_1 -trees. (84k:04004)
- Kell, James, III See Duda, Edwin, (84c:54057)
- Lewis, Wayne Pseudo-arcs and connectedness in homeomorphism groups. (84c:54038)
- Mayer, John C. Embeddings and prime end structure of chainable continua. (84c:54058)
- van Mill, Jan (with Wattel, Evert) Subbase characterizations of subspaces of compact trees. (84c:54018)
- Muenzenberger, T. B. (with Smithson, R. E.; Ward, L. E., Jr.) Characterizations of arboroids and dendritic spaces. (84a:54071)

- Nadler, Sam B., Jr. (with Ward, L. E., Jr.) Concerning exactly $(n, 1)$ images of continua. (84c:54059)
 Paulowich, D. G. Trees are contractible. (84b:54067)
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 Rogers, James T., Jr. Homogeneous hereditarily indecomposable continua are tree-like. (84c:54072)
 Smithson, R. E. See Muenzenberger, T. B.; et al., (84a:54071)
 Tymchatyn, E. D. Some rational continua. (84m:54035)
 Väisälä, Jussi Dividing an arc to subarcs with equal chords. (84d:54056)
 Ward, L. E., Jr. See Muenzenberger, T. B.; et al., (84a:54071) and Nadler, Sam B., Jr., (84c:54059)
 Wattel, Evert See van Mill, Jan, (84c:54018)

54F55 Unicoherence, multicoherence

secondary classifications:

- Elčić, Milena Dimensions of bitopological spaces. (Russian) (84c:54056)
 Paulowich, D. G. Trees are contractible. (84b:54067)

54F60 Maps into S_n

54F62 Periodic maps

secondary classifications:

- Brechner, Beverly Extendable periodic homeomorphisms on chainable continua. (84c:54035)

54F65 Topological characterizations of particular spaces

- Muenzenberger, T. B. (with Smithson, R. E.; Ward, L. E., Jr.) Characterizations of arboroids and dendritic spaces. (84a:54071)
 Smithson, R. E. See Muenzenberger, T. B.; et al., (84a:54071)
 Ward, L. E., Jr. See Muenzenberger, T. B.; et al., (84a:54071)

secondary classifications:

- Deák, J. Applications of the theory of directional structures. I. (84m:54033)
 Ginsburg, John A structure theorem in finite topology. (84b:54003)
 Grace, E. E. Monotone decompositions of θ -continua. (84c:54036)
 Hung, H. H. On developability. (84b:54057)
 Lacher, R. C. See Repovš, Dušan, (84m:57012)
 Repovš, Dušan (with Lacher, R. C.) A disjoint disks property for 3-manifolds. (84m:57012)

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- De Marco, G. (with Le Donne, A.; Wilson, Richard Gordon) Compact dispersed spaces and the α -left property. (84d:54065)
 Le Donne, A. See De Marco, G.; et al., (84d:54065)
 Wilson, Richard Gordon See De Marco, G.; et al., (84d:54065)

secondary classifications:

- Argyros, Spiros A. (with Mercourakis, S.; Negrepontis, Stelios) Analytic properties of Corson-compact spaces. (84i:46035)
 Gurevich, Yuri Crumbly spaces. (84g:03044)
 Mercourakis, S. See Argyros, Spiros A.; et al., (84i:46035)
 Negrepontis, Stelios See Argyros, Spiros A.; et al., (84i:46035)
 Popa-Burcă, Liana Schwartz Binary relations, Galois connections and Čech topological closure operators. (Romanian. English summary) (84j:68058)
 Savat'ev, L. Ya. Exterior measures and exterior topologies. (Russian) (84f:06023)

54Gxx Peculiar spaces

54G05 Extremely disconnected spaces, F -spaces, etc.

- Arosio, A. (with Ferreira, Arturo V.) On nonseparable 0-dimensional metrizable spaces. (84j:54023)
 Blaszczyk, A. A construction of the Gleason space. (84b:54035)
 Dow, Alan On F -spaces and F^* -spaces. (84j:54024)
 Ferreira, Arturo V. See Arosio, A., (84j:54023)
 Swardson, Mary Anne A generalization of F -spaces and some topological characterizations of GCH. (84j:54025)

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- Azad, K. K. See Srivastava, Pramila, (84c:54023)
 Dow, Alan (with van Mill, Jan) An extremely disconnected Dowker space. (84a:54028)
 van Mill, Jan See Dow, Alan, (84a:54028)
 Ohta, Haruto Topological extension properties and projective covers. (84b:54028)
 Ori, R. G. (with Thron, W. J.) On θ -proximities and related f -proximities. (84c:54043)
 Srivastava, Pramila (with Azad, K. K.) On C^* -spaces. (84c:54023)
 Thron, W. J. See Ori, R. G., (84c:54043)

54G10 P -spaces

secondary classifications:

- Armstrong, Thomas E. When is the algebra of regular sets for a finitely additive Borel measure a σ -algebra? (84f:28010)
 Dow, Alan On F -spaces and F^* -spaces. (84j:54024)

54G15 Pathological spaces

- Blaszczyk, A. A note on rigid spaces and rigid Boolean algebras. (84d:54066)

secondary classifications:

- Dube, K. K. (with Lee, Je Yoon; Panwar, Onkar Singh) A note on semiclosed graph. (84k:54007)
 Gutek, Andrzej (with Hagopian, Charles L.) A nonmetric indecomposable homogeneous continuum every proper subcontinuum of which is an arc. (84a:54063)
 Hagopian, Charles L. See Gutek, Andrzej, (84a:54063)
 Lee, Je Yoon See Dube, K. K.; et al., (84k:54007)
 Panwar, Onkar Singh See Dube, K. K.; et al., (84k:54007)

54G20 Counterexamples

- Ancel, Fredric D. (with Duvall, Paul F.; Singh, Sukhjit) Rigid 3-dimensional compacta whose squares are manifolds. (84m:54039)
 Deák, J. Operations on orderly spaces. (84c:54042)
 Duvall, Paul F. See Ancel, Fredric D.; et al., (84m:54039)
 van Engelen, Fons (with van Mill, Jan) Decompositions of rigid spaces. (84m:54040)
 (Engelking, Ryszard) See Luo, Mao Kang, (84k:54035)
 Luo, Mao Kang Corrections to: *General topology* [PWN, Warsaw, 1977; MR 58 #18316b] by R. Engelking. (Chinese. English summary) (84k:54035)
 van Mill, Jan A homogeneous Eberlein compact space which is not metrizable. (84h:54036)
 See also van Engelen, Fons, (84m:54040)
 O'Farrell, J. M. The Sorgenfrey line is not totally metacompact. (84i:54039)
 Pixley, Carl P. An easily verified regular Hausdorff space which is not normal. (84c:54043)
 Singh, Sukhjit See Ancel, Fredric D.; et al., (84m:54039)
 Uspenskii, V. V. For any X , the product $X \times Y$ is homogeneous for some Y . (84b:54075)
 Wattel, Evert Partitions of \mathbb{R}^n into $n+1$ homogeneous zero-dimensional homeomorphic measurable parts. (84f:54051)

secondary classifications:

- Blasco, José Luis On the product of two b_R -spaces and the class \mathfrak{D} of Frolik. (84b:54015)
 Charalambous, M. G. The dimension of inverse limit and N -compact spaces. (84c:54062)
 Dorsett, Charles s -normal and s -regular spaces. (84c:54026)
 van Douwen, Eric K. (with van Mill, Jan) Spaces without remote points. (84d:54046)
 Gutek, Andrzej (with Hagopian, Charles L.) A nonmetric indecomposable homogeneous continuum every proper subcontinuum of which is an arc. (84a:54063)
 Hagopian, Charles L. See Gutek, Andrzej, (84a:54063)
 Hart, Klaas Pieter More on M. E. Rudin's Dowker space. (84a:54040)
 Jungck, Gerald F. Local radial contractions—a counterexample. (84c:54076)
 van Mill, Jan See van Douwen, Eric K., (84d:54046)
 Rubin, Leonard R. Totally disconnected spaces and infinite cohomological dimension. (84f:54049)
 Rudin, Mary Ellen A normal screenable nonparacompact space. (84d:54042)
 Terada, Toshiiji A space which contains no realcompact dense subspace. (84k:54025)
 Vermeer, J. Embeddings in minimal Hausdorff spaces. (84b:54046)
 Zarichnyi, M. M. Hypersymmetric powers of supercompacta. (Russian. English summary) (84m:54006)

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secondary classifications:

- Mysior, Adam A remark on scattered spaces. (84b:54041)
 Trnková, Věra Representations of commutative semigroups by products of topological spaces. (84e:54009)
 Telgarsky, Rastislav On a game of Choquet. (84f:54035)

54Hxx Connections with other structures, applications

54H05 Descriptive set theory (topological aspects of Borel, analytic, projective, etc. sets) [See also 03E15, 04A15, 26A21, 28A05.]

- Balogh, Zoltán (with Junnila, H. J. K.) Totally analytic spaces under $V=L$. (84j:54026)
 Bešlagić, Amer Embedding cosmic spaces in Lusin spaces. (84b:54037)
 Brown, J. B. (with Cox, G. V.) Continuous images of Lusin sets. (84i:54040)
 Cox, G. V. See Brown, J. B., (84i:54040)
 Fremlin, D. H. (with Hansell, R. W.; Junnila, H. J. K.) Borel functions of bounded class. (84d:54067)
 Hansell, R. W. Point-countable Souslin-additive families and σ -discrete reduction. (84f:54052)
 See also Fremlin, D. H.; et al., (84d:54067)
 Jayne, John E. (with Rogers, C. A.) First level Borel functions and isomorphisms. (84a:54072)
 (with Rogers, C. A.) Invariance of Borel classes in metric spaces. (84g:54048)
 Junnila, H. J. K. See Fremlin, D. H.; et al., (84d:54067) and Balogh, Zoltán, (84j:54026)
 Kharazishvili, A. B. An application of the Baire property. (Russian. English and Georgian summaries) (84h:54038)
 Rogers, C. A. See Jayne, John E., (84a:54072) and (84g:54048)
 Topsoe, Flemming The Souslin operation in topology and measure theory, selected topics. (84a:54073)

secondary classifications:

- Adamski, Wolfgang On the relations between continuous and nonatomic measures. (84d:28003)

- Argyros, Spiros A. (with Kalamidas, N.) Property $k_{\alpha, \alpha}$ on spaces with strictly positive measures. (84c:04001)
- Bruck, Ronald E. Endomorphisms of contractions in metric and Banach spaces. (84c:47075)
- Dellacherie, C. Transformations analytiques. Théorèmes de capacité, de séparation et d'itération transfinie. [Analytic transformations. Theorems on capacity, separation and transfinite iteration] (84c:03119)
- Emeryk, Adam Partitions of indecomposable continua into composants. (84c:54062)
- Hay, Louise (with Miller, Douglas E.) The Addison game played backwards: index sets in topology. (84d:03060)
- Kalamidas, N. See Argyros, Spiros A., (84c:04001)
- Kunen, Kenneth (with Starbird, Michael P.) Arc components in metric continua. (84b:54019)
- Lane, K. W. Another interesting property concerning the probability measures on the rationals. (84g:60003)
- Le Gac, Barthélemy Some properties of Borel subgroups of real numbers. (84m:28022)
- Levi, Sandro On Baire cosmic spaces. (84c:54052)
- Louveau, Alain (with Simpson, Stephen G.) A separable image theorem for Ramsey mappings. (Russian summary) (84g:04002)
- Maitra, Ashok Selectors for Borel sets with large sections. (84c:54015)
- de Maria González, José L. Un théorème de Marczewski-Sikorski pour les espaces LF. [A Marczewski-Sikorski theorem for LF spaces] (84c:28012)
- Mauldin, R. Daniel (with Stone, A. H.) Realization of maps. (84b:28001)
- Measurable representations of preference orders. (84a:90008)
- Miller, Arnold W. Some properties of measure and category. (84c:03058a)
- A characterization of the least cardinal for which the Baire category theorem fails. (84b:04002)
- Corrections and additions to: "Some properties of measure and category". (84c:03058b)
- Miller, Douglas E. See Hay, Louise, (84d:03060)
- Pol, Roman On analytic-measurable collections of countable-dimensional and weakly infinite-dimensional compacta. (84c:54067)
- Rao, B. V. See Rao, K. P. S. Bhaskara, (84c:28001)
- Rao, K. P. S. Bhaskara (with Rao, B. V.) Borel spaces. (84c:28001)
- Sami, Ramez L. Sur la conjecture de Vaught en théorie descriptive. (English summary) [On Vaught's conjecture in descriptive set theory] (84a:03055)
- Simpson, Stephen G. See Louveau, Alain, (84g:04002)
- Starbird, Michael P. See Kunen, Kenneth, (84b:54019)
- Stone, A. H. See Mauldin, R. Daniel, (84b:28001)
- Van Osdel, Donovan H. A Borel topos. (84b:18013)
- Zholkov, S. Yu. On Radon spaces. (Russian) (84b:28018)

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- Choban, M. M. Algebras and some questions of the theory of maps. 84d:54068
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- Di Maio, Giuseppe (with Russo, Assunta) On the lattice of topologies over a set and over some of its sublattices. (Italian) (84b:54004)
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- Rhoades, B. E. Some fixed point theorems for generalized nonexpansive mappings. (See **84c:47002**)
(with Singh, Kanahya L.; Whitfield, J. H. M.) Fixed points for generalized nonexpansive mappings. **84a:54093**
Fixed point theorems for set-valued mapping. **84i:54055**
- Rogers, Thomas D. (with Hardy, George E.) Remarks on mappings with diminishing orbital diameters. **84g:54064**
- Rus, Ioan A. An iterative method for the solution of the equation $x=f(x, \dots, x)$. **84a:54094**
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- Sastry, K. P. R. (with Naidu, S. V. R.) On contraction maps. **84g:54065**
- Scaravelli, C. See Azzimondi, P., **84a:54078**
- Schirmer, Helga Fixed point sets of continuous self-maps. **84b:54045**
Fixed point sets of homotopies. (See **84c:47002**)
- Sharma, Ashok K. On generalized contractions in 2-metric spaces. **84i:54056**
- Sharma, P. L. (with Yuel, A. K.) Fixed point theorems under asymptotic regularity at a point. II. **84f:54065**
(with Yuel, A. K.) Fixed point theorems on contractive mappings. **84g:54066**
(with Yuel, A. K.) Fixed point theorems on contractive mappings. **84m:54049**
See also Yuel, A. K., **84a:54097** and Iyer, Shantha, **84c:54075**
- Shen, Yu Fixed and periodic points of commuting mappings. (Chinese. English summary) **84c:54045**
- Singare, V. M. On fixed point mappings satisfying rational inequalities. **84j:54036**
- Singh, Kanahya L. See Guay, Merle D., **84a:54089**; Rhoades, B. E.; et al., **84a:54093** and Guay, Merle D., **84i:54049**
- Singh, Shyam Lal (with Mishra, S. N.) Common fixed points and convergence theorems in uniform spaces. **84c:54052**
(with Kasahara, S.) On some recent results on common fixed points. **84c:54078**
A note on recent fixed point theorems for commuting mappings. (Hindi. English summary) **84m:54050**
See also Tivari, B. M. L., **84g:54067**
- Som, Tanmoy (with Mukherjee, R. N.) Fixed point theorems in L -space. **84b:54046**
See also Mukherjee, R. N., **84h:54043**
- Srivastava, Pramila (with Srivastava, Subhash Chandra) Fixed point theorems for strongly nonperiodic families of mappings. **84a:54095**
- Srivastava, Subhash Chandra See Srivastava, Pramila, **84a:54095**
- Sullivan, Francis E. Ordering and completeness of metric spaces. **84d:54079**
- Syamala Devi, M. See Naagraja, I. H., **84i:54050**
- Tasković, R. Milan On common fixed points of mappings. **84c:54046**
- Thomeier, S. Some remarks and examples concerning the fixed point property of polyhedra. **84c:54079**
- Tivari, B. M. L. (with Singh, Shyam Lal) Common fixed points of mappings in complete metric spaces. **84g:54067**
See also Kulshrestha, Chitra, **84a:54091**
- Turincic, Mihai A class of operator equations on ordered metric spaces. **84d:54080**
- Wang, Shang Zhi (with Li, Bo Yu; Gao, Zhi Min) Expansive mappings and fixed-point theorems for them. (Chinese) **84j:54037**
- Whitfield, J. H. M. See Rhoades, B. E.; et al., **84a:54093**
- Williams, B. B. See Gillespie, A. A., **84c:54073**
- Yeh, Cheh Chih Remark on common fixed point of commuting mappings in L -spaces. **84i:54057**
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See also Ch'en, Ming Po, **84i:54047**
- Yuel, A. K. (with Sharma, P. L.) Contraction type mappings on 2-metric spaces. **84a:54097**
See also Sharma, P. L., **84f:54065**; **84g:54066** and **84m:54049**
- Zhang, Guang Lu The common fixed point of an average quasicontractive family of mappings. (Chinese. English summary) **84k:54047**
- Zhang, Shi Sheng A common random fixed-point theorem for a sequence of multivalued mappings. (Chinese. English summary) **84a:54098**
Further research concerning the common fixed-point problem for a sequence of mappings. (Chinese. English summary) **84f:54066**
On the equivalence problem for contractive mappings and some new fixed-point theorems. (Chinese. English summary) **84j:54038**
On an open question and a fixed-point theorem for a class of contractive mappings. (Chinese. English summary) **84a:54099**

secondary classifications:

- Bainsab, A. P. See Panja, Chumki, (**84m:47073**)
- Chen, Shao Zhong See Liu, Duo Su, (**84m:60078**)
- Chung, Kun Jen On weakly nonlinear contractions. (**84m:47072**)
- Dacka, Czesław On the controllability of certain nonlinear systems. (Russian and Polish summaries) (**84c:93011**)
- Ding, Wei Yue A generalization of the Poincaré-Birkhoff theorem. (**84f:54053**)
- Dominguez Benavides, Tomás Generic existence of a nonempty compact set of fixed points. (**84c:47072**)
- Gajić, Ljiljana See Hadžić, Olga, (**84g:54026**)
- Glover, Henry H. (with Homer, William D.) Fixed points on flag manifolds. (**84c:55002**)
- Guay, Merle D. (with Singh, Kanahya L.; Whitfield, J. H. M.) Fixed point theorems for nonexpansive mappings in convex metric spaces. (**84b:47066**)
- Hadžić, Olga A generalization of a fixed point theorem in probabilistic locally convex spaces. (**84i:47073**)

- (with Gajić, Ljiljana) A theorem on almost continuous selection property and its applications. (Serbo-Croatian summary) (84g:54026)
- On Kakutani's fixed point theorem in topological vector space. (Russian summary) (84d:47073)
- Homer, William D. See Glover, Henry H., (84e:55002)
- Horiuchi, Kazuo A mathematical theory of system fluctuations. (84k:93078)
- Jiang, Jia He Fixed point theorems for multivalued mappings in locally convex spaces. (84d:47077)
- Kim, Soon Kyu (with Pak, Jinyal) Reidemeister numbers and applications to the fixed point theory. (84h:55002)
- Kirk, W. A. Locally nonexpansive mappings in Banach spaces. (84g:47047)
- Nonexpansive mappings in metric and Banach spaces. (Italian summary) (84j:47091)
- Kuhn, Gabriella Generalized nonexpansive mappings: approximation of fixed points. (Italian summary) (84e:47069)
- Lami Dozo, Enrique Asymptotic centers in particular spaces. (84g:47049)
- Lassonde, Marc On the use of KKM multifunctions in fixed point theory and related topics. (84k:47049)
- Liu, Dso Su (with Chen, Shao Zhong) On fixed point theorems for random set-valued maps. (84m:60078)
- Massatt, Paul A fixed point theorem for α -condensing maps on a sphere. (84g:47048)
- Maxwell, Charles N. A fixed-point index for symmetric product maps on Euclidean spaces. (84j:55002)
- Messano, Basilio Existence of periodic points of a mapping of a totally ordered set into itself. (Italian. English summary) (84g:58075)
- Naimpally, S. A. (with Singh, Kanahya L.; Whitfield, J. H. M.) Common fixed points for nonexpansive and asymptotically nonexpansive mappings. (84j:47094)
- Pak, Jinyal See Kim, Soon Kyu. (84e:55002)
- Panja, Chumki (with Baisnab, A. P.) On simultaneous fixed point theorems. (84m:47073)
- Phan Văn Chu'ong Théorèmes de point fixe des multiapplications aléatoires de type contraction sans hypothèse de continuité. [Fixed-point theorems for multivalued random contraction mappings without the continuity condition] (84f:49023)
- Ray, William O. (with Sine, Robert C.) Nonexpansive mappings with precompact orbits. (84h:47058)
- Rosenholtz, Ira Counting fixed points. (84h:55003)
- Rus, Ioan A. On a theorem of Eisenfeld-Lakshmikantham. (84g:47053)
- Rzepecki, Bogdan A note on fixed point theorem of Schauder type with applications. (84f:47067)
- Schirmer, Helga Coincidence sets of coincidence producing maps. (84g:55003)
- Sehgal, V. M. (with Singh, Sankatha Prasad; Watson, Bruce B.) A coincidence theorem for topological vector spaces. (84j:47096)
- Sieberg, Hans Willi (with Skordev, G.) Fixed point index and chain approximations. (84d:55003)
- Sine, Robert C. See Ray, William O., (84h:47058)
- Singh, Kanahya L. See Guay, Merle D.; et al., (84d:47066) and Naimpally, S. A.; et al., (84j:47094)
- Singh, Sankatha Prasad See Sehgal, V. M.; et al., (84j:47096)
- Skordev, G. See Sieberg, Hans Willi. (84d:55003)
- Srivastava, Pramila (with Srivastava, Subhash Chandra) Common fixed point theorems for generalised almost weakly periodic nonexpansive mappings. (84m:47074)
- Srivastava, Subhash Chandra See Srivastava, Pramila. (84m:47074)
- Stojaković, Milla A common fixed point theorem of a family of mappings in probabilistic locally convex spaces. (Serbo-Croatian summary) (84d:47082)
- Turinici, Mihai Quasimaximal elements in topological spaces. (84k:54032)
- Vainikko, G. Invariance of rotation of vector fields in the approximation of multivalued mappings. (Russian. English summary) (84h:47063)
- Vora, Chandan S. Fixed point theorems for certain compact weighted maps of a manifold. (84k:55002a)
- Some applications of the fixed point theorems for compact weighted maps. (84k:55002b)
- Watson, Bruce B. See Sehgal, V. M.; et al., (84j:47096)
- Whitfield, J. H. M. See Guay, Merle D.; et al., (84d:47066) and Naimpally, S. A.; et al., (84j:47094)
- Zhang, Shi Sheng Random fixed point theorems for commuting random operators in probabilistic functional analysis. (84k:60084)
- Recent development of the theory of fixed points. I. (Chinese) (84i:47071)
- 54H99 None of the above, but in this section
- Eberhart, Carl (with Stepp, James W.) Lattices of closed equivalences: simplicity results. (Russian summary) 84c:54080
- Stepp, James W. See Eberhart, Carl, 84c:54080
- secondary classifications:
- Bergstra, Jan A. (with Tiuryn, Jerzy) Regular extensions of iterative algebras and metric interpretations. (84h:68059)
- Bonet, Eduard Theory of measurement. (Catalan) (See 84i:03003)
- Cherri, Franco Convergence of averages and invariant measures on noncompact metrizable spaces. (Italian summary) (84e:28025)
- Dekking, F. M. Recurrent sets. (84e:52023)
- Fay, Temple H. (with Rajagopalan, M.; Thomas, Barbara V. Smith) Free groups, free products and 0-dimensionality. (84f:22003)
- Gähler, Siegfried Topological problems in optimization theory. (84h:49009)
- Hara, Masateru (with Noguchi, Shoichi) Cellular system and its topological characteristics. (84h:68036)
- Jha, Kamal Kant (with Palei, Gopal Krishna) On uniform groups of functions and their applications. (84j:54017)
- Jo, Young Soo (with Lee, Sang Ki) A note on \mathcal{H} -ideals. (84a:08001)
- Lee, Sang Ki See Jo, Young Soo, (84a:08001)
- Makai, Endre, Jr. See Trần Trọng Huệ; et al., (84f:16011)
- Noguchi, Shoichi See Hara, Masateru, (84h:68036)
- Palei, Gopal Krishna See Jha, Kamal Kant, (84j:54017)
- Pham Phu Hien Comportement asymptotique de solutions d'équations d'évolution, lorsque le second membre a une mesure asymptotique. (English summary) [Asymptotic behavior of solutions for evolution equations, when the second member has an asymptotic measure] (84c:34050)
- Rajagopalan, M. See Fay, Temple H.; et al., (84f:22003)
- Ruelle, David Repellers for real analytic maps. (84f:58095)
- Szász, Ferenc Andor See Trần Trọng Huệ; et al., (84f:16011)
- Thomas, Barbara V. Smith See Fay, Temple H.; et al., (84f:22003)
- Tiuryn, Jerzy See Bergstra, Jan A., (84h:68059)
- Trần Trọng Huệ (with Makai, Endre, Jr.; Szász, Ferenc Andor) A topology on the class of unequivocal rings. (84f:16011)
- Turinici, Mihai Mapping theorems via contractor directions in metrizable locally convex spaces. (Russian summary) (84k:47051)
- Uspenskii, V. V. A topological group generated by a Lindelöf Σ -space has the Suslin property. (Russian) (84c:22005)
- van de Vel, M. Convex structures and dimension. (84d:54063)
- Two-dimensional convexities are join-hull commutative. (84m:52002)
- Finite-dimensional convex structures. II. The invariants. (84m:52015)
- Vinár, Jiří Representations of commutative semigroups by products of metric 0-dimensional spaces. (84m:20072)
- 54J05 Nonstandard topology [See also 03Hxx.]
- Coyle, D. G. (with Szabo, M. E.) Monadic properties of uniformities. 84h:54047
- Szabo, M. E. See Coyle, D. G., 84h:54047
- secondary classifications:
- Čuda, Karel (with Kussová, B.) Basic equivalences in the alternative set theory. (84h:03070)
- Kamo, Shizuo Nonstandard real number systems with regular gaps. (84f:03060)
- Kussová, B. See Čuda, Karel, (84h:03070)
- Richter, Michael M. ★Ideale Punkte, Monaden und Nichtstandard-Methoden. (German) [Ideal points, monads and nonstandard methods] (84g:03107)
- 55-XX ALGEBRAIC TOPOLOGY
- Poénaru, Valentin Elementary algebraic topology related to the theory of defects and textures. (See 84m:82009)
- 55-01 Elementary exposition, textbooks
- Armstrong, Mark Anthony ★Basic topology. 84f:55001
- Blackett, Donald W. ★Elementary topology. 84g:55001
- Maunder, Charles Richard Francis ★Algebraic topology. 84k:55001
- Romero Ros, Emilio See Zisman, Michel, 84e:55001
- Zisman, Michel ★Topología algebraica elemental. (Spanish) [Elementary algebraic topology] 84e:55001
- secondary classifications:
- Asperti, Antonio Carlos (with Mercuri, Francesco) ★Topologia e geometria das curvas planas (ou $\pi_1(S^1) = \mathbb{Z}$). (Portuguese) [Topology and geometry of plane curves (or $\pi_1(S^1) = \mathbb{Z}$)] (84m:55002)
- (Bykov, V. M.) See Kosniowski, Czes., (84m:57001)
- Dieudonné, Jean ★Éléments d'analyse. Tome IX. Chapitre XXIV. (French) [Elements of analysis. Vol. IX. Chapter XXIV] (84a:57021)
- Gamelin, Theodore W. (with Greene, Robert Everist) ★Introduction to topology. (84h:54001)
- Greene, Robert Everist See Gamelin, Theodore W., (84h:54001)
- Karoubi, Max (with Leruste, Christian) ★Méthodes de géométrie différentielle en topologie algébrique. Partie I, II. (French) [Methods of differential geometry in algebraic topology. Part I, II] (84c:57001)
- Kosniowski, Czes. ★Начальный курс алгебраической топологии. (Russian) [A first course in algebraic topology] (84m:57001)
- Leruste, Christian See Karoubi, Max, (84c:57001)
- Mercuri, Francesco See Asperti, Antonio Carlos, (84m:55002)
- (Siklyarenko, E. G.) See Kosniowski, Czes., (84m:57001)
- Vrabc, Jože ★Bordism, homology, and Stiefel-Whitney numbers. (84k:57022)
- 55-02 Advanced exposition (research surveys, monographs, etc.)
- Adams, J. F. ★Бесконечнократные пространства петель. (Russian) [Infinite loop spaces] 84d:55001
- (Bukhshtaber, V. M.) See Fulton, William; et al., 84m:55001
- (Fuks, D. B.) See Adams, J. F., 84d:55001
- Fulton, William (with MacPherson, Robert D.) ★Категорический подход к изучению пространств с особенностями. (Russian) [Categorical framework for the study of singular spaces] 84m:55001
- MacPherson, Robert D. See Fulton, William, 84m:55001
- (Rudjak, Yu. B.) See Adams, J. F., 84d:55001
- (Shokurov, A. V.) See Adams, J. F., 84d:55001 and Fulton, William; et al., 84m:55001
- (Shokurov, V. V.) See Fulton, William; et al., 84m:55001
- Current problems in homotopy theory and related topics Current problems in homotopy theory and related topics. 84j:55001

secondary classifications:

- Félix, Yves (with Thomas, Jean-Claude) Homotopie rationnelle. Dualité et complémentarité des modèles. [Rational homotopy. Duality and complementarity of models] (84h:55010)
 Friedlander, Eric M. ★Étale homotopy of simplicial schemes. (84h:55012)
 Mardesić, Sibe (with Segal, Jack) ★Shape theory. (84h:55020)
 Segal, Jack See Mardesić, Sibe, (84h:55020)
 Thomas, Jean-Claude See Félix, Yves, (84h:55010)

55-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Toda, Hirosi Fifty years of homotopy theory. (Japanese) (84e:01047)
 Whitehead, George W. Fifty years of homotopy theory. (84e:01048)

55-04 Explicit machine computation and programs (not the theory of computation or programming)

55-06 Proceedings, conferences, etc.

- (Miller, Haynes R.) See Proceedings: Northwestern Homotopy Theory Conference. 84h:55001
 (Priddy, Stewart B.) See Proceedings: Northwestern Homotopy Theory Conference. 84h:55001
 Conference:
 Northwestern, Homotopy Theory ★Proceedings of the Northwestern Homotopy Theory Conference. 84h:55001
 Evanston, Ill. ★Proceedings of the Northwestern Homotopy Theory Conference. 84h:55001
 Proceedings:
 Northwestern Homotopy Theory Conference ★Proceedings of the Northwestern Homotopy Theory Conference. 84h:55001

secondary classifications:

- (Aleksandrov, P. S.) See Topology. (84m:54001)
 (Lomonaco, Samuel J., Jr.) See Low-dimensional topology. (84j:57001)
 Conference:
 Topology ★Topology. (Russian) (84m:54001)
 Low-dimensional topology ★Low-dimensional topology. (84j:57001)
 Meeting:
 American Mathematical Society ★Low-dimensional topology. (84j:57001)
 Moscow ★Topology. (Russian) (84m:54001)
 San Francisco, Calif. ★Low-dimensional topology. (84j:57001)
 Session:
 Low-dimensional topology ★Low-dimensional topology. (84j:57001)
 Topology ★Topology. (Russian) (84m:54001)

55Mxx Classical topics (For the topology of Euclidean spaces and manifolds, see 57N05, 57N10, 57N15.)

- Asperti, Antonio Carlos (with Mercuri, Francesco) ★Topologia e geometria das curvas planas (ou $\pi_1(S^1) = \mathbb{Z}$). (Portuguese) [Topology and geometry of plane curves (or $\pi_1(S^1) = \mathbb{Z}$)] 84m:55002
 Mercuri, Francesco See Asperti, Antonio Carlos, 84m:55002

55M05 Duality

secondary classifications:

- Julian, William (with Mines, Ray; Richman, Fred) Alexander duality. (84j:03115)
 Massey, W. S. A generalization of the Alexander duality theorem. II. (84i:57011)
 Mines, Ray See Julian, William; et al., (84j:03115)
 Richman, Fred See Julian, William; et al., (84j:03115)

55M10 Dimension theory [See also 54F45.]

secondary classifications:

- Bowers, Philip L. Detecting cohomologically stable mappings. (84h:54032)
 Deo, Satya Sheaf theoretic cohomological dimension and finitistic spaces. (84b:55010)
 Kochman, Stanley O. Integral cohomology operations. (84f:55017)
 Skurikhin, E. E. Normal sheaves and cohomology dimension of completely regular spaces. (Russian) (84c:55009)
 Walsh, John J. Homological embedding properties of the fibers of a map and the dimension of its image. (84h:54034)

55M15 Absolute neighborhood retracts [See also 54C55, 54F40.]

secondary classifications:

- Ancl, Fredric D. (with Duvall, Paul F.; Singh, Sukhjit) Rigid 3-dimensional compacta whose squares are manifolds. (84m:54039)
 Burghel, Dan Converting compact ANR fibrations into locally trivial bundles with compact manifolds as fibres. (84g:55022)
 Duvall, Paul F. See Ancl, Fredric D.; et al., (84m:54039)
 Singh, Sukhjit See Ancl, Fredric D.; et al., (84m:54039)

55M20 Fixed points and coincidences [See also 54H25.]

- Cellina, Arrigo (with Sartori, Caterina) Continuous dependence on the convex sets and on the initial data of a method for finding fixed points. (See 84a:34003)
 Chow, Shui Nee Finding zeros of maps—continuation methods. (See 84b:00011)
 Fadell, E. R. (with Husseini, S. Y.; Rabinowitz, Paul H.) Borsuk-Ulam theorems for arbitrary S^1 actions and applications. 84h:55001
 Fournier, Gilles (with Fournier, Reine) On the homotopy property of Nussbaum's fixed point index. 84g:55002
 Fournier, Reine See Fournier, Gilles, 84g:55002
 Glover, Henry H. (with Homer, William D.) Fixed points on flag manifolds. 84e:55002
 Gottlieb, Daniel Henry The Lefschetz number and Borsuk-Ulam theorems. 84m:55003
 Homer, William D. See Glover, Henry H., 84e:55002
 Husseini, S. Y. See Fadell, E. R.; et al., 84h:55001
 Jezewski, Jerzy A remark on Dold's fixed-point index-homomorphism. (Russian summary) 84d:55002a
 The Nielsen relation for fibre maps. (Russian summary) 84d:55002b
 Jiang, Bo Ju ★Lectures on Nielsen fixed point theory. 84f:55002
 On the computations of the Nielsen number. 84m:55004
 Kim, Soon Kyu (with Pak, Jingyul) Reidemeister numbers and applications to the fixed point theory. 84h:55002
 Maxwell, Charles N. A fixed-point index for symmetric product maps on Euclidean spaces. 84j:55002
 Pak, Jingyul See Kim, Soon Kyu, 84h:55002
 Rabinowitz, Paul H. See Fadell, E. R.; et al., 84h:55001
 Rosenholtz, Ira Counting fixed points. 84h:55003
 Sartori, Caterina See Cellina, Arrigo, (See 84a:34003)
 Schirmer, Helga Coincidence sets of coincidence producing maps. 84g:55003
 Schlagbauer, H. Dimension defects and the Hopf invariant. 84g:55004
 Segiet, Wojciech Local coincidence index for morphisms. (Russian summary) 84c:55001
 Sieberg, Hans Willi (with Skordev, G.) Fixed point index and chain approximations. 84d:55003
 Skordev, G. See Sieberg, Hans Willi, 84d:55003
 Stynes, M. A remark on Stenger's topological degree algorithm. 84i:55001
 Vora, Chandan S. Fixed point theorems for certain compact weighted maps of a manifold. 84i:55002a
 Some applications of the fixed point theorems for compact weighted maps. 84k:55002b

secondary classifications:

- Bárany, Imre (with Lovász, László) Borsuk's theorem and the number of facets of centrally symmetric polytopes. (84g:52007)
 Baum, Paul Fixed point formula for singular varieties. (84j:14018)
 Bertin, José (with Elençwaj, G.) Symétries des fibres vectoriels sur P^n et nombre d'Euler. [Symmetries of vector bundles over P^n and the Euler number] (84f:14012)
 Brown, Robert F. The fixed point property and Cartesian products. (84c:54047)
 Duistermaat, J. J. Convexity and tightness for restrictions of Hamiltonian functions to fixed point sets of an antisymplectic involution. (84c:53035)
 Elençwaj, G. See Bertin, José, (84f:14012)
 Fenske, Christian C. A fixed point index for maps with Borsuk-presentable fixed point set. (84a:54086)
 Gauthier, Gilles (with Granas, Andrzej) Le théorème de Lefschetz pour les ANR approximatifs. [The Lefschetz theorem for approximate ANRs] (84a:54088)
 Granas, Andrzej See Gauthier, Gilles, (84a:54088)
 Kojima, Masakazu (with Yamamoto, Yoshitsugu) Variable dimension algorithms: basic theory, interpretations and extensions of some existing methods. (84h:90082)
 Liulevicius, Arunas Borsuk-Ulam theorems for spherical space forms. (84j:55008)
 Lovász, László See Bárany, Imre, (84g:52007)
 Scarf, Herbert E. Fixed-point theorems and economic analysis. (84i:90038)
 Thomeier, S. Some remarks and examples concerning the fixed point property of polyhedra. (84c:54079)
 Todd, Michael J. Piecewise-linear homotopy algorithms for sparse systems of nonlinear equations. (84f:65048)
 Yamamoto, Yoshitsugu See Kojima, Masakazu, (84h:90082)

55M25 Degree, winding number

- Bowzyc, C. On the winding number and equivariant homotopy classes of maps of manifolds with some finite group actions. 84h:55002
 Chou, Chin Ch'eng Quelques exemples d'homologies sectionnaires de Shih. [Some examples of Shih's sectional homologies] 84c:55002
 Colvin, M. R. Multivalued mappings of closed and bounded subsets of a normed linear space—a mapping degree. 84a:55001
 Ni, Lu Qun A combinatorial approach to the topological degree. 84c:55003
 Wille, Friedrich On a conjecture of Hopf for n -separating maps from manifolds into spheres. 84a:55002
 Über eine Vermutung von Hopf zur Lösbarkeit nichtlinearer Gleichungssysteme. [On a conjecture of Hopf on the solvability of nonlinear systems of equations] 84d:55004

secondary classifications:

- Browder, Felix E. Fixed point theory and nonlinear problems. (84h:58027)
 Carter, Patricia H. An improvement of the Poincaré-Birkhoff fixed point theorem. (84h:54041)
 De Biasi, Francesco S. (with Myjak, Józef) A remark on the definition of topological degree for set-valued mappings. (84c:54068)
 Dibag, Ibrahim On the Adams conjecture. (84f:55014)
 Duplantier, Bertrand Linking numbers of closed manifolds at random in \mathbb{R}^n , inductances and contacts. (84a:53072)

Guillob, F. (with Huguenin, P.) Canonical scattering transformation in quantum mechanics. (84c:81073)

Huguenin, P. See Guillob, F., (84c:81073)

McAuley, Louis F. (with Robinson, Eric E.) On Newman's theorem for finite-to-one open mappings on manifolds. (84d:57007)

Myjak, Józef. See De Blasi, Francesco S., (84c:54068)

Peters, James V. The ham sandwich theorem and some related results. (84d:44007)

Robinson, Eric E. See McAuley, Louis F., (84d:57007)

Rothe, E. H. Some homotopy theorems concerning Leray-Schauder maps. (84j:58037)

Searf, Herbert E. Production sets with indivisibilities. I. Generalities. (84a:90015a)

Production sets with indivisibilities. II. The case of two activities. (84a:90015b)

Todd, Michael J. Computing fixed points, with applications to economic equilibrium models. (See 84b:00034)

55M30 Ljusternik-Schnirelman (Lyusternik-Shnirel'man) category of a space

secondary classifications:

Félix, Yves (with Halperin, Stephen) Rational LS category and its applications. (84c:55011)

Halperin, Stephen. See Félix, Yves, (84c:55011)

55M35 Finite groups of transformations (including Smith theory) [See also 57S17.]

secondary classifications:

Cappell, Sylvain E. (with Shaneson, Julius L.) Fixed points of periodic differentiable maps. (84c:57038)

Gottlieb, Daniel Henry The Lefschetz number and Borsuk-Ulam theorems. (84m:55003)

Kahn, Steven M. The Conner-Miller classes of periodic maps and an equivariant point index. (84b:57033)

Lin, Tsau Young On generalization of Conner-Miller classes to Z_2 -actions. I. (84b:57034)

McAuley, Louis F. (with Robinson, Eric E.) On Newman's theorem for finite-to-one open mappings on manifolds. (84d:57007)

Robinson, Eric E. See McAuley, Louis F., (84d:57007)

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55Nxx Homology and cohomology theories [See also 57Txx.]

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55N07 Steenrod-Sitnikov homologies

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Fáry, István Some results on Poincaré duality. (84j:57014)

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55N15 K -theory [For algebraic K -theory, see 18F25.]

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Booss, B. K -Theorie zwischen Kanonisierung und Anwendungsbezug. [K -theory between canonization and reference to application] (See 84c:00016)

Hashimoto, Shin On the connective K -homology groups of the classifying spaces BZ/p^n . 84m:55006

Jiang, Ren Bi C -isomorphism relations between real and complex K -groups in K -theory. (Chinese. English summary) 84c:55003

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On equivariant KO -groups of complex projective spaces with linear involutions. 84c:55006b

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Baaj, Saad (with Julg, Pierre) Théorie bivalente de Kasparov et opérateurs non bornés dans les C^* -modules hilbertiens. (English summary) [Bivariant Kasparov theory and unbounded operators on Hilbert C^* -modules] (84m:46091)

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Douglas, Ronald G. See Baum, Paul, (84d:58075) and (84m:58139)

Dwyer, William (with Friedlander, Eric M.; Snaitch, Victor Percy; Thomason, Robert) Algebraic K -theory eventually surjects onto topological K -theory. (84i:14015)

Friedlander, Eric M. See Dwyer, William; et al., (84i:14015)

Johnson, Keith On compact cohomology theories and Pontrjagin duality. (84m:55007)

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Kane, Richard Finite H -spaces and the Thom map for connective K -theory. (84b:55016)

Karoubi, Max Connexions, courbures et classes caractéristiques en K -théorie algébrique. [Connections, curvatures and characteristic classes in algebraic K -theory] (84f:57013)

Kassel, Christian La K -théorie stable. (English summary) [Stable K -theory] (84f:18018)

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Snaitch, Victor Percy ★Алгебраический кобордизм в K -теории. (Russian) [Algebraic cobordism and K -theory] (84c:57021)

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Valette, Alain Extensions of C^* -algebras: a survey of the Brown-Douglas-Fillmore theory. (84h:46098)

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Wu, Zhen De The KO -groups of Stiefel manifolds $O_{n,k}$. (Chinese) (84b:57025)

55N20 Generalized (extraordinary) homology and cohomology theories

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Robinson, Alan Derived tensor products in stable homotopy theory. (84c:55011)

55N22 Bordism and cobordism theories, formal group laws [See also 14L05, 57R75, 57R77, 57R85, 57R90.]

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Yosimura, Zen-ichi. See Landweber, Peter S., 84b:55007

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Hausmann, Jean-Claude Poincaré spaces with the homology of a sphere. (84j:57015)

Papastavridis, Stavros An algebraic proof of a theorem of D. Pengelly on the structure of $H_*(MSO; Z_2)$. (84b:57025a)

Pengelly, David J. The A -algebra structure of Thom spectra: MSO as an example. (84b:57025b)

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Vershinin, V. V. Symplectic cobordisms with singularities. (Russian) (84i:57028)

55N25 Homology with local coefficients, equivariant cohomology

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Blass, Andreas Cohomology detects failures of the axiom of choice. (84h:03116)

tom Dieck, Tammo ★Группы преобразований и теория представлений. (Russian) [Transformation groups and representation theory] (84f:57028)

Elmendorf, A. D. Systems of fixed point sets. (84f:57029)
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55N30 Sheaf cohomology [See also 18F20, 32C35, 32L10.]

Deo, Satya Sheaf theoretic cohomological dimension and finitistic spaces. 84h:55010
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Abatangelo, V. (with Larato, B.) Cohomology with coefficients in the sheaf of functions with parallel gradient on a manifold with a linear connection. (Italian. English summary) (84h:53035)

Davitadze, A. V. The functor \lim and the sheaf cohomology group. (Russian. English and Georgian summaries) (84c:18011)

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55N35 Other homology theories

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Caddeo, Renzo On the Molino torsion cohomology of an almost complex manifold. (Italian. French summary) (84h:53034)

Cheeger, Jeff (with Goresky, R. Mark; MacPherson, Robert D.) L^2 -cohomology and intersection homology of singular algebraic varieties. (84f:58005)

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Kazhdan, David (with Lusztig, George) Schubert varieties and Poincaré duality. (84g:14054)

Kernchen, Michael Bemerkungen zur Borel-Moore-Homologie. (English summary) [Comments on the Borel-Moore homology] (84a:55004)

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55N40 Axioms for homology theory and uniqueness theorems

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55N45 Products and intersections

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secondary classifications:

Kochman, Stanley O. Integral cohomology operations. (84f:55017)

55N91 Equivariant homology and cohomology

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55N99 None of the above, but in this section

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Ballico, Edoardo (with Bolondi, Giorgio) On the homology groups of q -complete spaces. (Italian summary) (84k:32025)

Blass, Andreas Cohomology detects failures of the axiom of choice. (84h:03116)

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Bousfield, A. K. On homology equivalences and homological localizations of spaces. (84g:55014)

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Fulton, William (with MacPherson, Robert D.) ★Категорический подход к изучению пространств с особенностями. (Russian) [Categorical framework for the study of singular spaces] (84m:55001)

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Lemaire, Jean-Michel Anneaux locaux et espaces de lacets à séries de Poincaré irrégulières (d'après Anick, Roos, etc...). [Local rings and loop spaces with irrational Poincaré series (after Anick, Roos, etc.)] (84c:55006)

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Smith, Larry A note on the realization of graded complete intersection algebras by the cohomology of a space. (84a:57044a)

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55Pxx Homotopy theory (For simple homotopy type, see 57Q10.)

55P05 Homotopy extension properties, cofibrations

secondary classifications:

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55P10 Homotopy equivalences

Ando, Yutaka (with Yamaguchi, Kohhei) On homotopy self-equivalences of the product $A \times B$. 84c:55005

Dror, E. (with Dwyer, William; Kan, D. M.) Self-homotopy equivalences of virtually nilpotent spaces. 84h:55005

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Burghela, Dan Converting compact ANR fibrations into locally trivial bundles with compact manifolds as fibres. (84g:55022)

May, J. P. (with Taylor, Laurence R.) Generalized splitting theorems. (84h:55014)

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Scheerer, Hans (with Strambach, Karl) Idempotent Multiplikationen. [Idempotent multiplications] 84g:55011

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secondary classifications:

Haefliger, André Rational homotopy of the space of sections of a nilpotent bundle. (84a:55010)

Kösa, András On the homotopy type of some spaces occurring in the calculus of variations. (84k:58048)

Sieradski, Allan J. Hereditary homotopy equivalences. (84j:57002)

55P20 Eilenberg-Mac Lane spaces

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Hillman, Jonathan A. Corrigendum to: "Aspherical four-manifolds and the centres of two-knot groups" [Comment. Math. Helv. 56 (1981), no. 3, 465-473; MR 83d:57017] (84d:57011)

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55P30 Eckmann-Hilton duality

55P35 Loop spaces

- Baues, Hans Joachim The homology sequence induced by the fibre sequence of a pinch map. **84i:55004**
- Cohen, F. R. (with Mahowald, M. E.) Unstable properties of $\Omega^{\infty}S^{n+k}$. **84a:55006**
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- Cohen, R. L. See Cohen, F. R.; et al., **84m:55009**
- Kuhn, N. J. See Cohen, F. R.; et al., **84m:55009**
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- Mori, Masamitsu A note on the James filtration degree. **84m:55010**
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- Jacobsson, Calle On the double Poincaré series of the enveloping algebras of certain graded Lie algebras. **(84c:17010a)**
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- Löfwall, Clas Appendix to: "On the double Poincaré series of the enveloping algebras of certain graded Lie algebras" [Math. Scand. **51** (1982), no. 1, 45–58; MR **84c:17010a**] by C. Jacobsson. **(84c:17010b)**
- Vigné-Poirrier, Micheline Dans le fibré de l'espace des lacets libres, la fibre n'est pas, en général, totalement non cohomologue à zéro. [In the free-loop-space fibration the fiber is not, in general, totally noncohomologous to zero] **(84e:55007)**

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- Komiya, Katsuhiko (with Morimoto, Masaharu) Equivariant desuspension of G -maps. **(84b:57026)**
- Kono, Susumu (with Tamamura, Akie) On J -groups of $S^1(RP(t-1)/RP(n-1))$. **(84b:55023)**
- Morimoto, Masaharu See Komiya, Katsuhiko, **(84b:57026)**
- Tamamura, Akie See Kono, Susumu, **(84b:55023)**

55P42 Stable homotopy theory, spectra

- Carlsson, Gunnar G. B. Segal's Burnside ring conjecture for $(\mathbb{Z}/2)^k$. **84a:55007**
- Davis, Donald M. (with Mahowald, M. E.) The nonrealizability of the quotient $A//A_2$ of the Steenrod algebra. **84a:55008**
- Lewis, L. G. (with May, J. P.; McClure, James E.) Classifying G -spaces and the Segal conjecture. **84d:55007a**
- Mahowald, M. E. See Davis, Donald M., **84a:55008**
- May, J. P. (with McClure, James E.) A reduction of the Segal conjecture. **84d:55007b**
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- McClure, James E. See Lewis, L. G.; et al., **84d:55007a** and May, J. P., **84d:55007b**
- Robinson, Alan Derived tensor products in stable homotopy theory. **84c:55011**
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- Dancer, E. N. On the existence of zeros of perturbed operators. **(84m:47077)**
- Nishida, Goro On the algebraic K -group of lens spaces and its applications. **(84c:55005)**

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- Aguadé, J. (with Zabrodsky, A.) Algebraic and geometric models for H_G -spaces. **84b:55015**
- Cheng, Chao Kun Loop multiplication on a fiber space. **84j:55003**
- Harper, John R. Rank 2 mod 3 H -spaces. **84b:55006**
- Henn, Hans-Werner On almost rational co- H -spaces. **84c:55012**
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Properties of certain H -spaces. **84b:55007**
- Sagle, Arthur A. (with Holmes, J. P.) Algebraic identities and invariant vector fields on H -spaces. **84c:55011**
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- Shar, Albert Homotopy torsion free H -spaces. **84b:55018**
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- Zabrodsky, A. See Aguadé, J., **84b:55015**

secondary classifications:

- Kadeishvili, T. V. The algebraic structure in the homology of an $A(\infty)$ -algebra. (Russian. English and Georgian summaries) **(84c:55009)**
- Navarro, J.-L. Co- H -groups: obstruction to commutativity and central maps. (Spanish. English summary) **(84c:55007)**
- Sasao, Seiya $\mathcal{E}(X)$ for non-simply connected H -spaces. **(84c:55003)**

55P47 Infinite loop spaces

- Kono, Akira Uniqueness of the infinite loop space structures on connective fibre spaces of $B\mathbb{SO}$. **84d:55009**
- Kraines, David (with Lada, Thomas) Applications of the Miller spectral sequence. **84f:55006**
- Lada, Thomas See Kraines, David, **84f:55006**
- May, J. P. Multiplicative infinite loop space theory. **84c:55013**

secondary classifications:

- Adams, J. F. ★Бесконечнократные пространства петель. (Russian) [Infinite loop spaces] **(84d:55001)**
- Fuks, D. B. See Adams, J. F., **(84d:55001)**
- McClure, James E. Dyer-Lashof operations in K -theory. **(84e:55014)**
- Miller, Haynes R. (with Snaith, Victor Percy) On $K_*(QRP^n; \mathbb{Z}/2)$. **(84f:55015)**
- Rudiyak, Yu. B. See Adams, J. F., **(84d:55001)**
- Shokurov, A. V. See Adams, J. F., **(84d:55001)**
- Sivera, Rafael A geometric interpretation of the Chern classes. **(84b:57016)**
- Snaith, Victor Percy See Miller, Haynes R., **(84f:55015)**

55P50 Category and cocategory, etc.

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- Félix, Yves (with Halperin, Stephen) Rational LS category and its applications. **(84b:55011)**
- Halperin, Stephen See Félix, Yves, **(84b:55011)**

55P55 Shape theory [See also 54C56, 54F43, 55Q07.]

- Cathey, F. (with Segal, Jack) Strong shape theory and resolutions. **84c:55014**
- Dydak, Jerzy Relations between homology and homotopy pro-groups of continua. **84b:55019**
- Hastings, Harold M. Suspensions of strong shape equivalences are CE equivalences. **84c:55015**
- Mardesic, Sibe (with Segal, Jack) ★Shape theory. **84b:55020**
- Pop, I. On the concept of shape for spaces with two topologies. (See **84f:53001**)
- Segal, Jack See Mardesic, Sibe, **84b:55020** and Cathey, F., **84c:55014**
- Ungar, S. A remark on shape paths and homotopy pro-groups. **84g:55012**

secondary classifications:

- Cordier, Jean-Marc (with Porter, Timothy) Functors between shape categories. **(84c:55003)**
- Pavel, Monique "Shape theory" and pattern recognition. **(84k:68055)**
- Porter, Timothy See Cordier, Jean-Marc, **(84c:55003)**
- Shrikhande, Neelima Homotopy properties of decomposition spaces. **(84m:54008)**
- Stramaccia, Luciano Reflective subcategories and dense subcategories. **(84c:18004)**
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55P60 Localization and completion

- Alonso, Juan M. Fibrations that are cofibrations. **84d:55010**
- Anderson, Gerald A. Localization with respect to a class of spaces. **84g:55013**
- Bousfield, A. K. On homology equivalences and homological localizations of spaces. **84g:55014**
- Deleanu, Aristide On a theorem of Baumslag, Dyer and Heller linking group theory and topology. **84g:55015**
- Hilton, Peter J. (with Leite, Paulo Ferreira) On nilpotent spaces and \mathbb{C} -theory. (See **84b:00011**)
- Hurvitz, Sara I' -isolated maps and localizations. **84b:55009**
- Leite, Paulo Ferreira See Hilton, Peter J., (See **84b:00011**)
- Nanda, Sribatsa Acyclic decomposition of acyclic spaces. **84j:55004**

secondary classifications:

- Harper, John R. Rank 2 mod 3 H -spaces. **(84b:55006)**
- Hilton, Peter J. Relative groups and spaces. **(84d:20036)**
Nilpotent groups and abelianization. **(84g:20066)**
- Neisendorfer, Joseph (with Selick, P. S.) Some examples of spaces with or without exponents. **(84b:55017)**
- Rao, Vidhyanath Nilpotency of homotopy pushouts. **(84b:55013)**
- Selick, P. S. See Neisendorfer, Joseph, **(84b:55017)**

55P62 Rational homotopy theory

- Félix, Yves (with Thomas, Jean-Claude) Homotopie rationnelle. Dualité et complémentarité des modèles. [Rational homotopy. Duality and complementarity of models] **84b:55010**
(with Halperin, Stephen; Thomas, Jean-Claude) Sur certaines algèbres de Lie de dérivations. (English summary) [Some Lie algebras of derivations] **84m:55011**
(with Thomas, Jean-Claude) The radius of convergence of Poincaré series of loop spaces. **84f:55007**
(with Halperin, Stephen) Rational LS category and its applications. **84b:55011**
- Haeffliger, André Rational homotopy of the space of sections of a nilpotent bundle. **84a:55010**
- Hain, Richard M. Twisting cochains and duality between minimal algebras and minimal Lie algebras. **84g:55016**
- Halperin, Stephen See Félix, Yves, **84b:55011** and **84m:55011**

- Kumar, Shrawan A G -minimal model for principal G -bundles. (French summary) **84f:55008**
- Meier, Willi Some topological properties of Kähler manifolds and homogeneous spaces. **84j:55005**
- Papadima, Ștefan Homotopie rationnelle des espaces de Thom et problèmes de lissage. (English summary) [Rational homotopy of Thom spaces and smoothing problems] **84c:55012**
- Thomas, Jean-Claude See Félix, Yves, **84f:55007**; **84h:55010** and **84m:55011**
- Triantafyllou, Georgia Vitanjic Equivariant minimal models. **84g:55017**
- Vigué-Poirrier, Micheline Dans le fibré de l'espace des lacets libres, la fibre n'est pas, en général, totalement non cohomologue à zéro. [In the free-loop-space fibration the fiber is not, in general, totally noncohomologous to zero] **84c:55007**

secondary classifications:

- Aguadé, J. (with Zabrodsky, A.) Algebraic and geometric models for H_0 -spaces. **(84b:55015)**
- Grove, Karsten (with Halperin, Stephen) Contributions of rational homotopy theory to global problems in geometry. **(84b:58030)**
- Halperin, Stephen See Grove, Karsten, **(84b:58030)**
- Hsiang, W. C. (with Staffeldt, R. E.) A model for computing rational algebraic K -theory of simply connected spaces. **(84h:18015)**
- McCleary, John Cartan's cohomology theories and spectral sequences. **(84f:55019)**
- Meier, Willi On fibre inclusions and Kähler manifolds. **(84m:55014)**
- Staffeldt, R. E. See Hsiang, W. C., **(84h:18015)**
- Thomas, Jean-Claude Applications rationnelles équivalentes. [Rationally equivalent mappings] **(84h:55015)**
- Triantafyllou, Georgia Vitanjic Rationalization for Hopf G -spaces. **(84c:55008)**
- Zabrodsky, A. See Aguadé, J., **(84b:55015)**

55P65 Homotopy functors

- Chogoshvili, G. S. D -functors. (Russian. English and Georgian summaries) **84g:55018**

55P91 Equivariant homotopy theory

55P99 None of the above, but in this section

- Calder, Allan (with Siegel, Jerrold; Williams, Frank) The width of homotopies into spheres. **84a:55011**
- Dennett, J. R. Modulo \mathbb{C} homotopy. **84m:55012**
- Friedlander, Eric M. \star Étale homotopy of simplicial schemes. **84h:55012**
- Hefter, Harald Dehnungsuntersuchungen an Sphärenabbildungen. [Investigations of dilation in mappings of spheres] **84a:55012**
- Higgins, Philip J. (with Taylor, John) The fundamental groupoid and the homotopy crossed complex of an orbit space. **84b:55021**
- Hilton, Peter J. Group structure in homotopy theory and generalizations of a theorem of Blackburn. (See **84b:00011**)
- Nguyen Le Anh Generalized homotopy axiom. (Russian) **84i:55005**
- Rao, Vidhyanath Nilpotency of homotopy pushouts. **84b:55013**
- Siegel, Jerrold See Calder, Allan; et al., **84a:55011**
- Sutherland, W. A. Path-components of function spaces. **84g:55019**
- Switzer, Robert M. Counting elements in homotopy sets. **84i:55006**
- Taylor, John See Higgins, Philip J., **84b:55021**
- Williams, Frank See Calder, Allan; et al., **84a:55011**

secondary classifications:

- Adams, J. F. Maps from a surface to the projective plane. **(84h:58042)**
- Anderson, Douglas R. Steenrod's equivariant Moore space problem for cohomologically trivial modules. **(84d:18011)**
- Armstrong, Mark Anthony Lifting homotopies through fixed points. **(84h:57001)**
- Benkafadar, N. (with Gel'man, B. D.) Homotopic properties of spaces of subsets. (Russian) **(84i:54011)**
- Björner, Anders (with Walker, James W.) A homotopy complementation formula for partially ordered sets. **(84f:06003)**
- Cherenack, Paul Cones and comparisons in ind-affine homotopy theory. **(84c:14017)**
- Demaria, Davide Carlo On regular functions from a topological space to a graph. **(84d:54037)**
- Dogaru, Olin Cell-trivial sheaves on S^1 and S^2 . **(84m:54012)**
- Gel'man, B. D. See Benkafadar, N., **(84i:54011)**
- Gray, John W. Enriched algebras, spectra and homotopy limits. **(84c:18020)**
- Kundu, A. Soliton solutions with nontrivial Hopf invariant on an intermediate S^3 manifold. **(84h:81067)**
- Kurland, Henry L. Homotopy invariants of repeller-attractor pairs. I. The Puppe sequence of an R -A pair. **(84d:58049)**
- Mayer, Dieter H. (with Viswanathan, K. S.) A note on the vacuum structure of an $SU(2)$ Yang-Mills theory. **(84k:81083)**
- Rosenberg, Jonathan The role of K -theory in noncommutative algebraic topology. **(84h:46097)**
- Smelyakov, S. V. (with Stoyan, Yu. G.) A basis of equivalence classes of paths in optimization problems. **(84m:49037)**
- Stoyan, Yu. G. See Smelyakov, S. V., **(84m:49037)**
- Thomason, R. W. The homotopy limit problem. **(84j:18012)**
- Trebin, H.-R. The topology of nonuniform media in condensed matter physics. (German summary) **(84j:82001)**
- Viswanathan, K. S. See Mayer, Dieter H., **(84k:81083)**
- Walker, James W. See Björner, Anders, **(84f:06003)**
- Wong, Y. L. Chain homotopy pullbacks and pushouts. **(84c:55023)**

55Qxx Homotopy groups

55Q05 Homotopy groups, general; sets of homotopy classes

- Gramellini, M. Letizia (with Tozzi, Anna) The Hurewicz isomorphism for fiber spaces. (Italian. English summary) **84c:55016**
- Harvey, D. R. A. The fundamental group in fibrations. **84f:55009**
- Tozzi, Anna See Gramellini, M. Letizia, **84c:55016**

secondary classifications:

- Burzio, Marco (with Demaria, Davide Carlo) Duality theorems for regular homotopy of finite directed graphs. **(84g:05064)**
- Demaria, Davide Carlo See Burzio, Marco, **(84g:05064)**
- Hardie, K. A. (with Jansen, A. V.) Toda brackets and the category of homotopy pairs. **(84f:55010)**
- Jansen, A. V. See Hardie, K. A., **(84f:55010)**
- Rutter, John W. The group of homotopy self-equivalence classes of CW complexes. **(84i:55002)**
- Vistoli, Angelo Gluing of closed points and the algebraic and topological fundamental group. (Italian) **(84m:14019)**

55Q07 Shape groups

secondary classifications:

- Dydak, Jerzy Relations between homology and homotopy pro-groups of continua. **(84b:55019)**
- Suszycki, Alfred Retracts and homotopies for multimaps. **(84k:54014)**

55Q10 Stable homotopy groups

- Hardie, K. A. (with Jansen, A. V.) Toda brackets and the category of homotopy pairs. **84f:55010**
- Jansen, A. V. See Hardie, K. A., **84f:55010**
- Schwartz, Lionel Quelques familles d'éléments dans $\pi_n^s(CP^\infty, \mathbb{Z}/p)$. (English summary) [Some families of elements in $\pi_n^s(CP^\infty, \mathbb{Z}/p)$] **84c:55017**

secondary classifications:

- Adams, J. F. Graeme Segal's Burnside ring conjecture. **(84b:55024)**

55Q15 Whitehead products and generalizations

secondary classifications:

- Furukawa, Yasukuni Whitehead products in the complex Stiefel manifolds. **(84k:57031)**
- Oka, Shichirō Small ring spectra and p -rank of the stable homotopy of spheres. **(84j:55006)**

55Q20 Homotopy groups of wedges, joins, and simple spaces

55Q25 Hopf invariants

- Callenaere, B. (with Félix, Yves) Variations sur les applications de S^1 dans S^2 . [Variations on the mappings of S^1 into S^2] **84c:55008**
- Félix, Yves See Callenaere, B., **84c:55008**
- Navarro, J.-L. Co- H -groups: obstruction to commutativity and central maps. (Spanish. English summary) **84i:55007**

secondary classifications:

- Schlagbauer, H. Dimension defects and the Hopf invariant. **(84g:55004)**
- Selick, P. S. On the indecomposability of certain sphere-related spaces. **(84b:55012)**

55Q30 Homotopy groups of triads, n -ads

55Q35 Operations in homotopy groups

secondary classifications:

- Hardie, K. A. (with Jansen, A. V.) Toda brackets and the category of homotopy pairs. **(84f:55010)**
- Jansen, A. V. See Hardie, K. A., **(84f:55010)**
- Sasao, Seiya The stable group of self-homotopy equivalences of sphere bundles over the sphere. **(84b:55011)**

55Q40 Homotopy groups of spheres

- (Feigin, B. L.) See Toda, Hirosi, **84a:55013**
- (Fuks, D. B.) See Toda, Hirosi, **84a:55013**
- Iriye, Kouyemon The nilpotency of elements of the equivariant stable homotopy groups of spheres. **84k:55013**
- Toda, Hirosi \star Композиционные методы в теории гомотопических групп сфер. (Russian) [Composition methods in the homotopy groups of spheres] **84a:55013**

55Q45 Stable homotopy of spheres

- Oka, Shichirō (with Shimomura, Katsumi) On products of the β -elements in the stable homotopy of spheres. **84b:55022**
- Small ring spectra and p -rank of the stable homotopy of spheres. **84j:55006**
- Shimomura, Katsumi See Oka, Shichirō, **84b:55022**

secondary classifications:

- Al-Sabti, George On framed hypersurfaces. (84c:57028)
 Araki, Shōrō Equivariant stable homotopy theory and idempotents of Burnside rings. (84g:57035)

55Q50 The J -morphisms

- Baker, Andrew (with Ray, Nigel) Some infinite families of U -hypersurfaces. 84i:55008
 Kōno, Susumu (with Tamamura, Akie) On J -groups of $S(RP(n-1)/RP(n-1))$. 84i:55023
 Liu, Zong Ze See Wu, Zhen De, 84b:55014
 Minami, Haruo On equivariant J -homomorphism for involutions. 84c:55009
 Ray, Nigel See Baker, Andrew, 84i:55008
 Tamamura, Akie See Kōno, Susumu, 84i:55023
 Wu, Zhen De (with Liu, Zong Ze) The J -groups of the complex projective spaces CP^n ($n=10,11$) and the quaternionic spaces HP^q ($q=3,4,5$). (Chinese) 84b:55014

secondary classifications:

- Al-Sabti, George On framed hypersurfaces. (84c:57028)
 Fiedorowicz, Zbigniew (with Priddy, Stewart B.) An automorphism of orthogonal algebraic K -theory. (84c:18020)
 Priddy, Stewart B. See Fiedorowicz, Zbigniew, (84c:18020)
 Smith, Donald E. The Atiyah-Singer invariant, torsion invariants, and group actions on spheres. (84b:57024)

55Q52 Homotopy groups of special spaces

- Cohen, F. R. Orders of certain compositions. 84i:55011
 Furukawa, Yasukuni Some homotopy groups of complex Stiefel manifold $W_{n,k}$. IV. 84g:55020

secondary classifications:

- Demaria, Davide Carlo A combinatorial interpretation of homotopy groups of polyhedra. (84c:55018)
 Iriye, Kouyemon Hopf r -spaces and r -homotopy groups. (84b:57032)
 Komiya, Katsuhiko (with Morimoto, Masaharu) Equivariant desuspension of G -maps. (84b:57026)
 Marchetti, P. A. (with Percacci, Roberto) On the vacuum structure of gauge differential forms. (84c:53034)
 Morimoto, Masaharu See Komiya, Katsuhiko, (84b:57026)
 Neisendorfer, Joseph (with Selick, P. S.) Some examples of spaces with or without exponents. (84b:55017)
 Percacci, Roberto See Marchetti, P. A., (84c:53034)
 Selick, P. S. See Neisendorfer, Joseph, (84b:55017)

55Q55 Cohomotopy groups

- Adams, J. F. Graeme Segal's Burnside ring conjecture. 84b:55024

55Q70 Homotopy groups of special types [See also 55N05, 55N07.]

- Demaria, Davide Carlo A combinatorial interpretation of homotopy groups of polyhedra. 84c:55018
 Guido, Cosimo The regular fundamental group of finite oriented graphs. (Italian. English summary) 84g:55021

secondary classifications:

- Petrie, Ted The equivariant J homomorphism and Smith equivalence of representations. (84b:57035)

55Q91 Equivariant homotopy groups

55Q99 None of the above, but in this section

- Hansen, Vagn Lundsgaard The homotopy groups of a space of maps between oriented closed surfaces. 84f:55012
 Selick, P. S. On conjectures of Moore and Serre in the case of torsion-free suspensions. 84f:55013

secondary classifications:

- Cohen, F. R. (with Mahowald, M. E.) Unstable properties of $\Omega^n S^{n+k}$. (84a:55006)
 Gentry, Karl R. (with Hoyle, Hughes B., III) Generalized fundamental groups of continuous loops. (84a:54020)
 Hoyle, Hughes B., III See Gentry, Karl R., (84a:54020)
 Mahowald, M. E. See Cohen, F. R., (84a:55006)

55Rxx Fiber spaces and bundles [See also 18F15, 32Lxx, 46M20, 57R20, 57R22, 57R25.]

55R05 Fiber spaces

- Berrick, A. Jon Characterisation of plus-constructive fibrations. 84m:55013
 Burghleia, Dan Converting compact ANR fibrations into locally trivial bundles with compact manifolds as fibres. 84g:55022
 Kieboom, R. W. On rather weak and very weak fibrations. 84c:55019

Meier, Willi On fibre inclusions and Kähler manifolds. 84m:55014

Meiwees, Hubertus On fibrations and nilpotency—some remarks upon two articles by I. M. James. 84g:55023

secondary classifications:

- Alonso, Juan M. Fibrations that are cofibrations. (84d:55010)
 Cheng, Chao Kun Loop multiplication on a fiber space. (84j:55003)
 Efremovich, V. A. (with Vainshtein, A. G.; Gorelik, E. M.; Loginov, E. A.) Metric fibration of Riemannian manifolds. (See 84g:53003)
 Gorelik, E. M. See Efremovich, V. A.; et al., (See 84g:53003)
 Gramellini, M. Letizia (with Tozzi, Anna) The Hurewicz isomorphism for fiber spaces. (Italian. English summary) (84c:55016)
 Hughes, C. Bruce Approximate fibrations and bundle maps on Hilbert cube manifolds. (84b:57006)
 Kolosov, V. E. Normal fibrations of polyhedra and duality. (Russian) (84c:57009)
 Loginov, E. A. See Efremovich, V. A.; et al., (See 84g:53003)
 Rakhula, M. O. Morphism of fiberings with connections. (Russian) (84c:53034)
 Shapukov, B. N. Automorphisms of fiber spaces. (Russian) (84c:53035)
 Shifrin, M. A. Linear double fibrations. (Russian) (84c:53065)
 Tozzi, Anna See Gramellini, M. Letizia, (84c:55016)
 Vainshtein, A. G. See Efremovich, V. A.; et al., (See 84g:53003)

55R10 Fiber bundles

- Bencivenga, Roberto Function spaces and immersions of bundles. (Italian. English summary) 84g:55024
 Hansen, Vagn Lundsgaard Local triviality of fiber maps and mapping space constructions. 84b:55025
 Kanitani, Jōyō Sur un espace fibré dont le groupe structural est un espace connexe topologique assujéti à certaines conditions. [A fiber bundle whose structure group is a connected topological space subject to certain conditions] 84m:55015
 Menichetti, M. (with Modugno, M.) Topological bundles with fiber structure. (Italian. English summary) 84g:55025
 Modugno, M. See Menichetti, M., 84g:55025
 Uecl, Jack On the nonexistence of Riemannian submersions from $CP(7)$ and $QP(3)$. 84j:55007

secondary classifications:

- Baker, C. W. A closed graph theorem for Banach bundles. (84b:46010)
 Chien, Mao Ting C^* -algebra fibre bundles. (84g:46082)
 Ching, Garland E. A geometrical representation of general systems: an application of fibre bundles to the formulation of general systems. (See 84f:93006b)
 Fiedorowicz, Zbigniew (with Hauschild, H.; May, J. P.) Equivariant algebraic K -theory. (84b:57023)
 Gauchman, Hillel Connection colligations on Hilbert bundles. (84i:58011)
 Haefliger, André Rational homotopy of the space of sections of a nilpotent bundle. (84a:55010)
 Harvey, D. R. A. The fundamental group in fibrations. (84i:55009)
 Hauschild, H. See Fiedorowicz, Zbigniew; et al., (84b:57023)
 Hughes, C. Bruce Approximate fibrations and bundle maps on Hilbert cube manifolds. (84b:57006)
 Kosmann-Schwarzbach, Yvette Dérivées de Lie des morphismes de fibrés. [Lie derivatives of bundle morphisms] (84d:58088)
 Krupka, Demeter Finite order liftings in principal fibre bundles. (84b:53032)
 Kumar, Shrawan A G -minimal model for principal G -bundles. (French summary) (84f:55008)
 May, J. P. See Fiedorowicz, Zbigniew; et al., (84b:57023)
 Narasimhan, M. S. (with Ramadas, T. R.) Geometry of $SU(2)$ gauge fields. (84b:58050)
 Priestaro, Agostino Spinor super-bundles of geometric objects on $Spin^c$ space-times. (Italian summary) (84c:53036)
 Gauge geometrodynamics. (84e:83045)
 Ramadas, T. R. See Narasimhan, M. S., (84b:58050)
 Schochetman, I. E. Generalized group algebras and their bundles. (84f:46094)
 Szabó, László Geometrodynamics in multidimensional unified theory. (84b:83043b)
 Geometrodynamics in multidimensional unified theories. (84b:83043a)
 Wu, Ke A new connection on principal fibre bundle and some applications. (84g:53054)

55R12 Transfer

- Prieto, Carlos Transfer and the spectral sequence of a fibration. 84e:55010

secondary classifications:

- Munkholm, Hans J. (with Pedersen, Erik K.) Transfers in algebraic K - and L -theory induced by S^1 -bundles. (84f:18020)
 (with Ranicki, Andrew A.) The projective class group transfer induced by an S^1 -bundle. (84f:18021)
 Pedersen, Erik K. See Munkholm, Hans J., (84f:18020)
 Ranicki, Andrew A. See Munkholm, Hans J., (84f:18021)

55R15 Classification

- Schön, Rolf The Brownian classification of fiber spaces. 84c:55020
 Woodward, L. M. The classification of orientable vector bundles over CW-complexes of small dimension. 84c:55021

secondary classifications:

- Bloore, F. J. $SU(n)$ bundles over the configuration space of three identical particles moving in \mathbb{R}^3 . (See 84m:81012)
 Evans, Bruce D. C^* -bundles and compact transformation groups. (84a:46148)
 Goad, R. E. Piecewise linear approximate fibrations. (84k:55015)

55R20 Spectral sequences and homology of fiber spaces [See also 55Txx.]

- Legrand, André Classes associées à un π -module différentiel. (English summary) [Classes associated with a differential π -module] 84m:55016
 Snaith, Victor Percy A K -theory e -invariant. 84b:55026

secondary classifications:

- Prieto, Carlos Transfer and the spectral sequence of a fibration. (84e:55010)
 Sawka, John Odd primary Steenrod operations in first-quadrant spectral sequences. (84h:55016)

55R25 Sphere bundles and vector space bundles

- Dibag, Ibrahim Degree theory for spherical fibrations. 84k:55014
 Fujii, Michikazu (with Kôno, Susumu) A note on the local triviality of G -vector bundles. 84a:55014
 Kôno, Susumu See Fujii, Michikazu, 84a:55014

secondary classifications:

- Dibag, Ibrahim On the Adams conjecture. (84f:55014)
 Florian, Radu Differentiable vector bundles compatible with the base of the bundle. (Romanian. French summary) (84b:58008)
 Gierz, Gerhard \star Bundles of topological vector spaces and their duality. (84c:46076)
 Hansen, Vagn Lundsgaard (with Møller, Jesper Michael) On the existence of equivariant embeddings of principal bundles into vector bundles. (84m:57002)
 Kane, Richard Finite H -spaces and the Thom map for connective K -theory. (84b:55016) (Keimel, Klaus) See Gierz, Gerhard, (84c:46076)
 Matsunaga, Hiromichi Group actions on sphere bundles over spheres. (84d:57020)
 Møller, Jesper Michael See Hansen, Vagn Lundsgaard, (84m:57002)
 Morimoto, Hiroshi On certain complex analytic cobordism between subvarieties realizing Chern classes of bundles. (84h:32035)
 Ţărină, Marian Connections and parallel sections on vector bundles. (Romanian. English summary) (84g:53053)

55R35 Classifying spaces of groups and H -spaces

- Steiner, Richard Multiplicative transfers in ordinary cohomology. 84e:55011

secondary classifications:

- Hashimoto, Shin On the connective K -homology groups of the classifying spaces $B\mathbb{Z}/p'$. (84m:55006)
 Kleiner, Samuel N. The cohomology of Chevalley groups of exceptional Lie type. (84i:20048)
 Lewis, L. G. (with May, J. P.; McClure, James E.) Classifying G -spaces and the Segal conjecture. (84d:55007a)
 Madsen, I. Remarks on normal invariants from the infinite loop space viewpoint. (84h:57018)
 May, J. P. (with McClure, James E.) A reduction of the Segal conjecture. (84d:55007b) See also Lewis, L. G.; et al., (84d:55007a)
 McClure, James E. See Lewis, L. G.; et al., (84d:55007a) and May, J. P., (84d:55007b)
 Solov'ev, Yu. P. Equivalence of two definitions of the algebraic K -theory of spaces. (Russian. English summary) (84f:18022)

55R40 Homology of classifying spaces, characteristic classes [See also 57Txx, 57R20.]

- Bahri, Anthony P. Polynomial generators for $H_*(BSO; \mathbb{Z}_2)$, $H_*(BSpin; \mathbb{Z}_2)$ and $H_*(BO(8); \mathbb{Z}_2)$ arising from the Bar construction. 84b:55027
 Baker, Andrew More homology generators for BSO and BSU . 84b:55028
 Liulevicius, Arunas Borsuk-Ulam theorems for spherical space forms. 84j:55008

secondary classifications:

- Kahn, Peter J. Steenrod's problem and k -invariants of certain classifying spaces. (84k:57030)
 Kleiner, Samuel N. The cohomology of Chevalley groups of exceptional Lie type. (84i:20048)
 Mann, Benjamin M. (with Milgram, R. James) On the Chern classes of the regular representations of some finite groups. (84c:20060)
 Milgram, R. James See Mann, Benjamin M., (84c:20060)
 Woodward, L. M. The classification of orientable vector bundles over CW-complexes of small dimension. (84c:55021)

55R45 Homology and homotopy of BO and BU ; Bott periodicity

- Kochman, Stanley O. Polynomial generators for $H_*(BSU)$ and $H_*(BSO; \mathbb{Z}_2)$. 84a:55015

secondary classifications:

- Hoffman, P. Hopf algebras from branching rules. (84b:16011)
 Kono, Akira Uniqueness of the infinite loop space structures on connective fibre spaces of BSO . (84d:55009)

55R50 Stable classes of vector space bundles, K -theory (For algebraic K -theory, see 18F25.)

- Dibag, Ibrahim On the Adams conjecture. 84f:55014
 Kawakubo, Katsuo AG -structure of G -vector bundles and groups $KO_G(X)$, $KSp_G(X)$ and $J_G(X)$. 84b:55029
 Miller, Haynes R. (with Snaith, Victor Percy) On $K_*(QRP; \mathbb{Z}/2)$. 84f:55015
 Snaith, Victor Percy See Miller, Haynes R., 84f:55015

secondary classifications:

- Baker, Andrew On weakly almost complex manifolds with vanishing decomposable Chern numbers. (84j:57027)
 Cohen, F. R. (with Cohen, R. L.; Kuhn, N. J.; Neisendorfer, J. L.) Bundles over configuration spaces. (84m:55009)
 Cohen, R. L. See Cohen, F. R.; et al., (84m:55009)
 Combes, Alain (with Moscovici, Henri) The L^2 -index theorem for homogeneous spaces of Lie groups. (84f:58108)
 Junod, Bernard Sur l'espace classifiant des fibrés vectoriels réels de dimension k , stablement complexes. (English summary) [On the classifying space of k -dimensional real vector bundles which are stably complex] (84b:57021)
 Kuhn, N. J. See Cohen, F. R.; et al., (84m:55009)
 Moscovici, Henri See Combes, Alain, (84f:58108)
 Nash, C. Gauge potentials and bundles over the 4-torus. (84f:81063)
 Neisendorfer, J. L. See Cohen, F. R.; et al., (84m:55009)
 Weiss, Michael S. Surgery and bordism invariants. (84b:57020)

55R55 Fiberings with singularities

- Brumfiel, G. W. (with Kubelka, R.) A homology transfer for a class of simplicial maps. 84e:55012
 Kubelka, R. See Brumfiel, G. W., 84e:55012

55R60 Microbundles and block bundles [See also 57N55, 57Q30.]

55R65 Generalizations of fiber spaces and bundles

- Goad, R. E. Piecewise linear approximate fibrations. 84k:55015
 Jani, Mahendra Induced shape fibrations and fiber shape equivalence. 84a:55016
 Pengelley, David J. The homotopy type of MSU . 84i:55016

secondary classifications:

- Hughes, C. Bruce Approximate fibrations and bundle maps on Hilbert cube manifolds. (84h:57006)
 Ladegallerie, Yves Les 2-catégories 1-isotopiques et le produit 2-fibré. (English summary) [1-isotopic 2-categories and 2-fibered products] (84g:18015)
 Pechanec-Dražoň, J. Sheaves of metric lattices. (Russian and Czech summaries) (84d:54017)
 Embedding of presheaves into dual unit balls. (Russian and Czech summaries) (84d:54018)
 Quinn, Frank Ends of maps. II. (84j:57011)

55R91 Equivariant fiber spaces and bundles

55R99 None of the above, but in this section

secondary classifications:

- Baues, Hans Joachim The homology sequence induced by the fibre sequence of a pinch map. (84i:55004)
 Fintushel, Ronald (with Walsh, John J.) Singularly fibered homotopy spheres. (84g:57029)
 Jezierski, Jerzy A remark on Dold's fixed-point index-homomorphism. (Russian summary) (84d:55002a)
 The Nielsen relation for fibre maps. (Russian summary) (84d:55002b)
 Kumar, Shrawan A remark on universal connections. (84d:53028)
 Meiwes, Hubertus On fibrations and nilpotency—some remarks upon two articles by I. M. James. (84g:55023)
 Shifrin, M. A. Linear double fibrations. (Russian) (84k:53065)
 Switzer, Robert M. Counting elements in homotopy sets. (84i:55006)
 Walsh, John J. See Fintushel, Ronald, (84g:57029)

55Sxx Operations and obstructions

- (Bukhshtaber, V. M.) See Steenrod, Norman E.; et al., 84f:55016
 Epstein, D. B. A. See Steenrod, Norman E., 84f:55016
 (May, J. P.) See Steenrod, Norman E.; et al., 84f:55016
 Steenrod, Norman E. (with Epstein, D. B. A.) \star Когомологические операции. (Russian) [Cohomology operations] 84f:55016

55S05 Primary cohomology operations

- Kochman, Stanley O. Integral cohomology operations. 84f:55017

secondary classifications:

- Boardman, J. M. The eightfold way to BP-operations or E_*E and all that. (84e:55004)

55S10 Steenrod algebra

Li, Hu Hsiung (with Singer, William M.) Resolutions of modules over the Steenrod algebra and the classical theory of invariants. **84g:55026**

Mahowald, M. E. (with Shick, Paul) Some root invariants in $\text{Ext}_A^{*,*}(\mathbb{Z}/2, \mathbb{Z}/2)$. **84m:55017**

Shick, Paul See **Mahowald, M. E.**, **84m:55017**

Singer, William M. See **Li, Hu Hsiung**, **84g:55026**

secondary classifications:

Arthan, R. D. (with Bullett, Shaun) The homology of $MO(1)^{\wedge \infty}$ and $MU(1)^{\wedge \infty}$. **(84a:57036)**

Bullett, Shaun See **Arthan, R. D.**, **(84a:57036)**

Lannes, Jean (with Zarati, Said) Foncteurs dérivés de la déstabilisation. (English summary) [Derived functors of destablization] **(84k:18006)**

Michelson, M. L. Decompositions of Steenrod squares. **(84b:55030)**

Sawka, John Odd primary Steenrod operations in first-quadrant spectral sequences. **(84h:55016)**

Zarati, Said See **Lannes, Jean**, **(84k:18006)**

55S12 Dyer-Lashof operations

Madsen, I. Homology operations in G/Top . **84e:55013**

McChure, James E. Dyer-Lashof operations in K -theory. **84e:55014**

secondary classifications:

Bahri, Anthony P. Polynomial generators for $H_*(BSO; \mathbb{Z}_2)$, $H_*(BSpin; \mathbb{Z}_2)$ and $H_*(BO(8); \mathbb{Z}_2)$ arising from the Bar construction. **(84b:55027)**

55S15 Symmetric products, cyclic products

55S20 Secondary and higher cohomology operations

Michelson, M. L. Decompositions of Steenrod squares. **84b:55030**

55S25 K -theory operations and generalized cohomology operations

Audin, Michèle Opérations de Steenrod en cobordisme complexe. (English summary) [Steenrod operations in complex cobordism] **84a:55017**

secondary classifications:

Hubbuck, John R. Some Pontrjagin rings. II. **(84a:55009)**

Johnson, Keith On compact cohomology theories and Pontrjagin duality. **(84m:55007)**

Junod, Bernard Sur l'espace classifiant des fibrés vectoriels réels de dimension k , stablement complexes. (English summary) [On the classifying space of k -dimensional real vector bundles which are stably complex] **(84b:57021)**

Kobayashi, Teiichi Nonimmersions and nonembeddings of quaternionic spherical space forms. **(84i:57022)**

Snaith, Victor Percy A K -theory e -invariant. **(84b:55026)**

55S30 Massey products

Khelaya, L. G. On the symmetric Massey product. (Russian. English and Georgian summaries) **84b:55031**

55S35 Obstruction theory

Switzer, Robert M. Bundles of low codimension over $\mathbb{C}P^n$. **84k:55017**

Thomas, Jean-Claude Applications rationnellement équivalentes. [Rationally equivalent mappings] **84b:55015**

secondary classifications:

Davis, Donald M. Some new immersions and nonimmersions of real projective spaces. **(84k:57016)**

Zabrodsky, A. On George Cooke's theory of homotopy and topological actions. **(84f:55018)**

55S36 Extension and compression of mappings

Goldfeather, Jay E. Certain secondary operations that detect incompressible maps. **84b:55032**

55S37 Classification of mappings

Sasao, Seiya Fibre homotopy self-equivalences. **84b:55033**

Tsukiyama, Kouzou On the group of fibre homotopy equivalences. **84e:55015**

55S40 Sectioning fiber spaces and bundles

secondary classifications:

Davis, Donald M. Some new immersions and nonimmersions of real projective spaces. **(84k:57016)**

55S45 Postnikov systems, k -invariants

secondary classifications:

Davis, Donald M. Some new immersions and nonimmersions of real projective spaces. **(84k:57016)**

Pazhitnov, A. V. Uniqueness theorems for generalized cohomology theories. (Russian) **(84m:55008)**

Pollina, Benedict J. Tangent 2-fields on even-dimensional nonorientable manifolds. **(84c:57015)**

Triantafyllou, Georgia Vitanjic Equivariant minimal models. **(84g:55017)**

55S91 Equivariant operations and obstructions

55S99 None of the above, but in this section

Zabrodsky, A. On George Cooke's theory of homotopy and topological actions. **84f:55018**

secondary classifications:

Madsen, I. Remarks on normal invariants from the infinite loop space viewpoint. **(84h:57018)**

55Txx Spectral sequences [See also 18G40, 55R20.]

Sawka, John Odd primary Steenrod operations in first-quadrant spectral sequences. **84b:55016**

55T05 General

55T10 Serre spectral sequences

McCleary, John Cartan's cohomology theories and spectral sequences. **84f:55019**

55T15 Adams spectral sequences

Bruner, Robert R. Two generalizations of the Adams spectral sequence. **84f:55020**

Lambe, Larry A. (with Priddy, Stewart B.) Cohomology of nilmanifolds and torsion-free, nilpotent groups. **84k:55018**

Priddy, Stewart B. See **Lambe, Larry A.**, **84k:55018**

secondary classifications:

Carlsson, Gunnar G. B. Segal's Burnside ring conjecture for $(\mathbb{Z}/2)^k$. **(84a:55007)**

Davis, Donald M. Some new immersions and nonimmersions of real projective spaces. **(84k:57016)**

Kochman, Stanley O. The symplectic cobordism ring. II. **(84c:55008)**

Mahowald, M. E. (with Shick, Paul) Some root invariants in $\text{Ext}_A^{*,*}(\mathbb{Z}/2, \mathbb{Z}/2)$. **(84m:55017)**

Oka, Shichirō (with Shimomura, Katsumi) On products of the β -elements in the stable homotopy of spheres. **(84b:55022)**

Shick, Paul See **Mahowald, M. E.**, **(84m:55017)**

Shimomura, Katsumi See **Oka, Shichirō**, **(84b:55022)**

Vershinin, V. V. Calculation of the symplectic cobordism ring in dimensions up to 32 and the nontriviality of the majority of ternary products of N. Ray's elements. (Russian) **(84f:57020)**

55T20 Eilenberg-Moore spectral sequences [See also 57T35.]

secondary classifications:

Bahri, Anthony P. Polynomial generators for $H_*(BSO; \mathbb{Z}_2)$, $H_*(BSpin; \mathbb{Z}_2)$ and $H_*(BO(8); \mathbb{Z}_2)$ arising from the Bar construction. **(84b:55027)**

55T25 Generalized cohomology

55T99 None of the above, but in this section

André, Michel Unité de la suite spectrale d'un fibré. (English summary) [Uniqueness of the spectral sequence of a fibration] **84b:55034**

Morava, Jack Cohomology of some improper group actions. **84b:55035**

secondary classifications:

Chan, Ken A simple proof that the unstable (co)-homology of the Brown-Peterson spectrum is torsion free. **(84c:55007)**

Kraines, David (with Lada, Thomas) Applications of the Miller spectral sequence. **(84f:55006)**

Lada, Thomas See **Kraines, David**, **(84f:55006)**

Tsujishita, Toru On variation bicomplexes associated to differential equations. **(84b:58105)**

55Uxx Applied homological algebra and category theory [See also 18Gxx.]

55U05 Abstract complexes

55U10 Semisimplicial complexes

Fritsch, Rudolf Topologische Räume, semisimpliziale Mengen und kleine Kategorien. [Topological spaces, semisimplicial sets and small categories] **84c:55022**

Golasinski, Marek On weak homotopy equivalence of simplicial and cubical nerve. (84c:55018)

secondary classifications:

André, Michel Unicité de la suite spectrale d'un fibré. (English summary) [Uniqueness of the spectral sequence of a fibration] (84b:55034)

Ladegaillerie, Yves Les 2-catégories 1-isotopiques et le produit 2-fibré. (English summary) [1-isotopic 2-categories and 2-fibered products] (84g:18015)

Sawka, John Odd primary Steenrod operations in first-quadrant spectral sequences. (84h:55016)

55U15 Chain complexes

Wong, Y. L. Chain homotopy pullbacks and pushouts. (84c:55023)

secondary classifications:

Golasinski, Marek (with Gromadzki, Grzegorz) The homotopy category of chain complexes is a homotopy category. (84k:18010)

Gromadzki, Grzegorz See Golasinski, Marek, (84k:18010)

55U20 Universal coefficient theorems, Bockstein operator

55U25 Homology of a product, Künneth formula

secondary classifications:

Liulevicius, Arunas Vector bundles on homogeneous spaces. (84b:55004)

55U30 Duality

secondary classifications:

Hain, Richard M. Twisting cochains and duality between minimal algebras and minimal Lie algebras. (84g:55016)

55U35 Abstract homotopy theory

Heller, Alex Homotopy in functor categories. 84j:55009a

Erratum to: "Homotopy in functor categories". 84j:55009b

secondary classifications:

Golasinski, Marek (with Gromadzki, Grzegorz) The homotopy category of chain complexes is a homotopy category. (84k:18010)

Gromadzki, Grzegorz See Golasinski, Marek, (84k:18010)

55U40 Topological categories

secondary classifications:

Mielke, M. V. Convenient categories for internal singular algebraic topology. (84m:54011)

Stramaccia, Luciano Monomorphisms and epimorphisms of inverse systems. (84k:18001)

55U99 None of the above, but in this section

Porter, Timothy Reduced powers, ultrapowers and exactness of limits. (84h:55017)

secondary classifications:

Bourn, Dominique A canonical action on indexed limits: an application to coherent homotopy. (84a:18013)

Gray, John W. Enriched algebras, spectra and homotopy limits. (84c:18020)

57-XX MANIFOLDS AND CELL COMPLEXES {For complex manifolds, see 32C10.}

57-01 Elementary exposition, textbooks

(Bykov, V. M.) See Kosniowski, Czes, 84m:57001

Firby, Peter A. (with Gardiner, Cyril F.) ★Surface topology. 84e:57001

Gardiner, Cyril F. See Firby, Peter A., 84e:57001

Karoubi, Max (with Leruste, Christian) ★Méthodes de géométrie différentielle en topologie algébrique. Partie I, II. (French) [Methods of differential geometry in algebraic topology. Part I, II] 84c:57001

Kosniowski, Czes ★Начальный курс алгебраической топологии. (Russian) [A first course in algebraic topology] 84m:57001

Leruste, Christian See Karoubi, Max, 84c:57001

(Sklyarenko, E. G.) See Kosniowski, Czes, 84m:57001

secondary classifications:

Blackett, Donald W. ★Elementary topology. (84g:55001)

Vrabec, Jože ★Bordism, homology, and Stiefel-Whitney numbers. (84k:57022)

57-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

Camacho, César (with Lins Neto, Alcides) ★Teoria geométrica das folheações. (Portuguese) [Geometric theory of foliations] (84m:57017)

tom Dieck, Tammo ★Группы преобразований и теория представлений. (Russian) [Transformation groups and representation theory] (84f:57028)

(Kirillov, A. A.) See tom Dieck, Tammo, (84f:57028)

Lê Dũng Tráng (with Teissier, Bernard) Report on the problem session. (84k:32002)

Lins Neto, Alcides See Camacho, César, (84m:57017)

Teissier, Bernard See Lê Dũng Tráng, (84k:32002)

Current problems in homotopy theory and related topics Current problems in homotopy theory and related topics. (84j:55001)

57-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

(Boron, Leo F.) See Reidemeister, K., (84j:57005)

(Christenson, Charles O.) See Reidemeister, K., (84j:57005)

Reidemeister, K. ★Knot theory. (84j:57005)

(Smith, Bryan A.) See Reidemeister, K., (84j:57005)

57-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

Mäntylä, Martti Computational topology: a study of topological manipulations and interrogations in computer graphics and geometric modeling. (84k:00031)

57-06 Proceedings, conferences, etc.

(Lomonaco, Samuel J., Jr.) See Low-dimensional topology, 84j:57001

Low-dimensional topology ★Low-dimensional topology. 84j:57001

Meeting:

American Mathematical Society ★Low-dimensional topology. 84j:57001

San Francisco, Calif. ★Low-dimensional topology. 84j:57001

Session:

Low-dimensional topology ★Low-dimensional topology. 84j:57001

secondary classifications:

(Aleksandrov, P. S.) See Topology, (84m:54001)

(Bing, R. H.) See Continua, decompositions, manifolds, (84h:54002)

(Eaton, William T.) See Continua, decompositions, manifolds, (84h:54002)

(Orlik, Peter) See Singularities, (84h:14004a) and (84h:14004b)

(Starbird, Michael P.) See Continua, decompositions, manifolds, (84h:54002)

(Weber, Claude) See Knots, braids and singularities, (84m:14004)

Arcata, Calif. ★Singularities. Part 1. (84h:14004a)

★Singularities. Part 2. (84h:14004b)

Austin, Tex. ★Continua, decompositions, manifolds. (84h:54002)

Conference:

Topology ★Topology. (Russian) (84m:54001)

Continua, decompositions, manifolds ★Continua, decompositions, manifolds.

(84h:54002)

Knots, braids and singularities ★Nœuds, tresses et singularités. (French) [Knots, braids and singularities] (84m:14004)

Moscow ★Topology. (Russian) (84m:54001)

Nœuds, tresses et singularités ★Nœuds, tresses et singularités. (French) [Knots, braids and singularities] (84m:14004)

Plans-sur-Bex ★Nœuds, tresses et singularités. (French) [Knots, braids and singularities] (84m:14004)

Seminar:

Knots, braids and singularities ★Nœuds, tresses et singularités. (French) [Knots, braids and singularities] (84m:14004)

Singularities ★Singularities. Part 1. (84h:14004a)

★Singularities. Part 2. (84h:14004b)

Summer Research Institute:

Singularities ★Singularities. Part 1. (84h:14004a)

★Singularities. Part 2. (84h:14004b)

Symposium:

Texas Topology ★Continua, decompositions, manifolds. (84h:54002)

Theory of Dynamical Systems and its Related Topics ★Theory of dynamical systems and its related topics. (Japanese) (84a:58008)

Topics in Foliation ★Topics in foliation. (Japanese) (84f:57017)

Topics on positions and structures in 3- and 4-manifolds ★Topics on positions and structures in 3- and 4-manifolds. (84f:57005)

Theory of dynamical systems and its related topics ★Theory of dynamical systems and its related topics. (Japanese) (84a:58008)

Topics in foliation ★Topics in foliation. (Japanese) (84f:57017)

Topics on positions and structures in 3- and 4-manifolds ★Topics on positions and structures in 3- and 4-manifolds. (84f:57005)

Topology ★Topology. (Russian) (84m:54001)

57Mxx Low-dimensional topology (old 55Axx)

secondary classifications:

(Lomonaco, Samuel J., Jr.) See Low-dimensional topology. (84j:57001)

Low-dimensional topology ★Low-dimensional topology. (84j:57001)

Meeting:

American Mathematical Society ★Low-dimensional topology. (84j:57001)

San Francisco, Calif. ★Low-dimensional topology. (84j:57001)

Session:

Low-dimensional topology ★Low-dimensional topology. (84j:57001)

57M05 Fundamental group, presentations, free differential calculus

Armstrong, Mark Anthony Lifting homotopies through fixed points. 84h:57001

Goldstein, Richard Z. (with Turner, Edward C.) Reduced forms for quadratic words and spines of 2-manifolds. 84h:57001

Gutiérrez, Mauricio Three conjectures of combinatorial topology. 84a:57001a

Erratum: "Three conjectures of combinatorial topology". 84a:57001b

Hempel, John Intersection calculus on surfaces with applications to 3-manifolds. 84g:57001

Mihalik, Michael L. Semistability at the end of a group extension. 84d:57001

Traldi, Lorenzo Linking numbers and the elementary ideals of links. 84d:57002

Turner, Edward C. See Goldstein, Richard Z., 84h:57001

Zieschang, Heiner (with Zimmermann, Bruno) Über Erweiterungen von Z und $Z_2 * Z_2$ durch nichteuklidische kristallographische Gruppen. [On extensions of Z and $Z_2 * Z_2$ by non-Euclidean crystallographic groups] 84i:57001

Zimmermann, Bruno See Zieschang, Heiner, 84i:57001

secondary classifications:

Alperin, Roger C. (with Shalen, Peter B.) Linear groups of finite cohomological dimension. (84a:20052)

Brooks, Robert The fundamental group and the spectrum of the Laplacian. (84j:58131)

Gersten, S. M. On fixed points of automorphisms of finitely generated free groups. (84g:20072)

Conservative groups, indicability, and a conjecture of Howie. (84m:20035)

Harer, John The second homology group of the mapping class group of an orientable surface. (84g:57006)

Harvey, D. R. A. The fundamental group in fibrations. (84f:55009)

Johnson, Francis E. A. Automorphisms of direct products of groups and their geometric realisations. (84g:20073)

Kaneto, Takeshi On simple loops on a solid torus of general genus. (84b:57005)

On genus 2 Heegaard diagrams for the 3-sphere. (84e:57013)

Kawauchi, Akio A test for the fundamental group of a 3-manifold. (84g:57008)

Scharlemann, Martin (with Squier, Craig) Automorphisms of the free group of rank two without finite orbits. (84k:20012)

Shalen, Peter B. See Alperin, Roger C., (84a:20052)

Shterenberg, M. I. An investigation using a computer of an equation that is connected with the representation of braid groups. (Russian) (84e:20044)

Sieradski, Allan J. Hereditary homotopy equivalences. (84j:57002)

Solopko, I. O. The Andrews-Curtis conjecture. (Russian) (84j:20026)

Squier, Craig See Scharlemann, Martin, (84k:20012)

Stillwell, John C. Efficient computation in groups and simplicial complexes. (84h:03099)

Yoshikawa, Katsuyuki A note on Levine's conditions for knot groups. (84i:57015)

57M10 Covering spaces

secondary classifications:

Greenleaf, Newcomb (with May, Coy L.) Bordered Klein surfaces with maximal symmetry. (84f:14022)

Hempel, John Intersection calculus on surfaces with applications to 3-manifolds. (84g:57001)

MacLachlan, C. On the centres of mapping class groups of surfaces. (84a:30082)

May, Coy L. See Greenleaf, Newcomb, (84f:14022)

Mihalik, Michael L. Semistability at the end of a group extension. (84d:57001)

57M12 Special coverings, e.g. branched

Hansen, Vagn Lundsgaard (with Möller, Jesper Michael) On the existence of equivariant embeddings of principal bundles into vector bundles. 84m:57002

Hilden, Hugh M. (with Lozano, M. T.; Montesinos, José María) Universal knots. 84g:57002

Lawson, Terry Splitting S^4 on RP^2 via the branched cover of CP^2 over S^4 . 84b:57002

Lozano, M. T. See Hilden, Hugh M.; et al., 84g:57002

Möller, Jesper Michael See Hansen, Vagn Lundsgaard, 84m:57002

Montesinos, José María See Hilden, Hugh M.; et al., 84g:57002

Stong, R. E. Branched coverings. I. 84g:57003a

Branched coverings. II. 84g:57003b

secondary classifications:

Asano, Kouhei (with Yoshikawa, Katsuyuki) On polynomial invariants of fibered 2-knots. (84g:57015)

Bozhöyük, Mehmet Emin Three-sheeted covering spaces of twist knots. (84m:57004)

Libgober, Anatoly S. Alexander modules of plane algebraic curves. (84k:57002)

Livingston, Charles Surfaces bounding the unlink. (84a:57017)

Mayberry, John Patterson (with Murasugi, Kunio) Torsion-groups of abelian coverings of links. (84d:57004)

Murasugi, Kunio See Mayberry, John Patterson, (84d:57004)

Ochiai, Mitsuyuki See Takahashi, Moto-o, (84c:57009)

Siebenmann, L. C. (with Van Buskirk, James M.) Construction of irreducible homology 3-spheres with orientation reversing involution. (84g:57042)

Takahashi, Moto-o (with Ochiai, Mitsuyuki) Heegaard diagrams of torus bundles over S^1 . (84c:57009)

Van Buskirk, James M. See Siebenmann, L. C., (84g:57042)

Yoshikawa, Katsuyuki See Asano, Kouhei, (84g:57015)

57M15 Relations with graph theory [See also 05Cxx.]

Fáry, István Generalized circuits. Elements of a mathematical theory. 84m:57003

Vince, Andrew Graphic matroids, shellability and the Poincaré conjecture. 84i:57002

Walker, Russell B. Oriented toral knot lattices. 84e:57002

secondary classifications:

Archdeacon, Dan The generalized genus and its applications to topological graph theory. (84d:05070)

Gagliardi, Carlo Recognizing a 3-dimensional handle among 4-coloured graphs. (Italian summary) (84m:57008)

Glukhov, A. D. Chord-critical graphs. (Russian) (84e:05048)

Guido, Cosimo The regular fundamental group of finite oriented graphs. (Italian. English summary) (84g:55021)

Liu, Yan Pei The map coloring theorem and embeddings of graphs in surfaces. I. (Chinese) (84i:05050a)

The map coloring theorem and embeddings of graphs in surfaces. II. (Chinese) (84i:05050b)

The map coloring theorem and embeddings of graphs in surfaces. III. (Chinese) (84i:05050c)

The map coloring theorem and embeddings of graphs in surfaces. IV. (Chinese) (84i:05050d)

The map coloring theorem and embeddings of graphs in surfaces. V. (Chinese) (84i:05050e)

Zaks, Joseph Extending two theorems of A. Kotzig. (84g:05059)

57M20 Two-dimensional complexes

Eckmann, Beno (with Linnell, P. A.) Poincaré duality groups of dimension two. II. 84i:57003

Ladegaillerie, Yves Les 2-catégories 1-isotopiques de surfaces à bord et de plongements de 1-complexes dans les surfaces. (English summary) [The 1-isotopic 2-categories of 2-manifolds with boundaries and of embeddings of 1-complexes into surfaces] 84e:57003

Linnell, P. A. See Eckmann, Beno, 84i:57003

Sieradski, Allan J. Hereditary homotopy equivalences. 84j:57002

A coloring test for asphericity. 84g:57004

secondary classifications:

Betke, U. (with Gritzmann, P.) A combinatorial condition for the existence of polyhedral 2-manifolds. (84f:57011)

Constantinescu, Alexandru A proof of Cartan's theorems A and B for Klein surfaces. (84i:32015)

Gritzmann, P. See Betke, U., (84f:57011)

Howie, James On locally indicable groups. (84b:20036)

57M25 Knots and links in S^3 [For higher dimensions, see 57Q45.]

Bleiler, Steven A. Realizing concordant polynomials with prime knots. 84e:57004

Doubly prime knots. 84k:57001

(Boron, Leo F.) See Reidemeister, K., 84j:57005

Bozhöyük, Mehmet Emin Three-sheeted covering spaces of twist knots. 84m:57004

Caudron, Alain ★Classification des nœuds et des enlacements. (French) [Classification of knots and links] 84f:57001

(Christenson, Charles O.) See Reidemeister, K., 84j:57005

Clark, Bradd Evans Longitudinal surgery on composite knots. 84e:57005

Dowker, C. H. (with Thistlethwaite, M. B.) On the classification of knots. 84c:57002

Dufree, Alan H. The low-dimensional topology of singularities. 84j:57003

Freedman, Michael Hartley A surgery sequence in dimension four; the relations with knot concordance. 84e:57006

Gordon, C. McA. Dehn surgery and satellite knots. 84d:57003

Hartley, Richard Lifting group homomorphisms. 84i:57004

Hass, Joel The geometry of the slice-ribbon problem. 84h:57002

Hatcher, Allen Hyperbolic structures of arithmetic type on some link complements. 84m:57005

Hillman, Jonathan A. ★Alexander ideals of links. 84j:57004

Alexander polynomials, annihilator ideals, and the Steinitz-Fox-Smythe invariant. 84a:57002

Holden, Alan ★Orderly tangles. 84i:57005

Kaplan, Steve J. Twisting to algebraically slice knots. 84e:57007

Kauffman, Louis H. Levine's theorem—a remark. 84a:57003

Levine, Jerome P. The module of a 2-component link. 84h:57003

Libgober, Anatoly S. Alexander modules of plane algebraic curves. 84k:57002

Livingston, Charles (with Melvin, Paul) Algebraic knots are algebraically dependent. 84a:57004

Matveev, S. V. Distributive groupoids in knot theory. (Russian) 84c:57008

Mayberry, John Patterson (with Murasugi, Kunio) Torsion-groups of abelian coverings of links. 84d:57004

Melvin, Paul See Livingston, Charles, 84a:57004

Morikawa, Osamu A class of 3-bridge knots. II. 84a:57005

- Morton, H. R. An irreducible 4-string braid with unknotted closure. **84m:57006**
- Murasugi, Kunio Signatures and Alexander polynomials of two-bridge knots. **84e:57009**
See also Mayberry, John Patterson, **84d:57004**
- Ohkawa, Tetsusuke The pure braid groups and the Milnor $\bar{\mu}$ -invariants of links. **84e:57010**
- Osborne, R. P. An algorithm for checking property P for knots with complements of Heegaard genus 2. **84f:57002**
- Otal, Jean-Pierre Présentations en points du nœud trivial. (English summary) [Bridge presentations of the trivial knot] **84a:57006**
- Perko, Kenneth A., Jr. On 10-crossing knots. **84e:57011**
- Perron, Bernard Le nœud "huit" est algébrique réel. [The figure-eight knot is real algebraic] **84d:57005**
- Pohl, William F. The probability of linking of random closed curves. **84a:57007**
- Quach thi Cam Van On a realization of prime tangles and knots. **84i:57006**
On a theorem on partially summing tangles by Lickorish. **84c:57003**
- Reidemeister, K. ★Knot theory. **84j:57005**
- Riley, R. Seven excellent knots. **84a:57008**
- Rudolph, Lee Braided surfaces and Seifert ribbons for closed braids. **84j:57006**
Algebraic functions and closed braids. **84e:57012**
- Sakuma, Makoto On regular coverings of links. **84j:57007**
- Shibuya, Tetsuo On knot types of compound knots. **84j:57008**
- (Smith, Bryan A.) See Reidemeister, K., **84j:57005**
- Teleman, Andrei-Dumitru An application of the fundamental group. (Romanian. French summary) **84g:57005**
- Thistlethwaite, M. B. See Dowker, C. H., **84c:57002**
- Traldi, Lorenzo The determinantal ideals of link modules. I. **84h:57004**
- Turaev, V. G. Multiplice generalizations of the Seifert form of a classical knot. (Russian) **84h:57003**
- Van Buskirk, James M. A class of negative-amphicheiral knots and their Alexander polynomials. **84m:57007**

secondary classifications:

- Aizawa, Yōji See Uezu, Tatsuya, (**84i:58099**)
- Birman, Joan S. (with Williams, R. F.) Knotted periodic orbits in dynamical systems. I. Lorenz's equations. (**84c:58138**)
- Bremermann, Hans-J. Unlinked strands as a topological constraint on chromosomal DNA, plasmid integration, and DNA repair. (**84a:92036**)
- Duplantier, Bertrand Linking numbers, contacts, and mutual inductances of a random set of closed curves. (**84h:53094**)
- Frank-Kamenetskii, M. D. (with Vologodskii, A. V.) Topological aspects of the physics of polymers: the theory and its biophysical applications. (**84a:92038**)
- Hilden, Hugh M. (with Lozano, M. T.; Montesinos, José Maria) Universal knots. (**84g:57002**)
- Johnson, David Lawrence ★Topics in the theory of group presentations. (**84f:20003**)
Towards a characterization of smooth braids. (**84c:20048**)
- Livingston, Charles Surfaces bounding the unlink. (**84c:57017**)
- Lozano, M. T. See Hilden, Hugh M.; et al., (**84g:57002**)
- Montesinos, José Maria See Hilden, Hugh M.; et al., (**84g:57002**)
- Ochiai, Mitsuyuki See Takahashi, Moto-o, (**84c:57009**)
- Pohl, William F. (with Roberts, George W.) Topological considerations in the theory of replication of DNA. (**84a:92029**)
- Roberts, George W. See Pohl, William F., (**84a:92029**)
- Rudolph, Lee Embeddings of the line in the plane. (**84h:14019**)
- Siebenmann, L. C. (with Van Buskirk, James M.) Construction of irreducible homology 3-spheres with orientation reversing involution. (**84g:57042**)
- Silver, Daniel S. Embedding 2-spheres topologically in smooth 4-manifolds. (**84g:57011**)
- Takahashi, Moto-o (with Ochiai, Mitsuyuki) Heegaard diagrams of torus bundles over S^1 . (**84c:57009**)
- Traldi, Lorenzo Linking numbers and the elementary ideals of links. (**84d:57002**)
- Uezu, Tatsuya (with Aizawa, Yōji) Topological character of a periodic solution in three-dimensional ordinary differential equation system. (**84i:58099**)
- Van Buskirk, James M. See Siebenmann, L. C., (**84g:57042**)
- Vologodskii, A. V. See Frank-Kamenetskii, M. D., (**84a:92038**)
- Walker, Russell B. Oriented toral knot lattices. (**84c:57002**)
- (Weber, Claude) See Knots, braids and singularities, (**84m:14004**)
- Williams, R. F. See Birman, Joan S., (**84c:58138**)
- Knots, braids and singularities ★Nœuds, tresses et singularités. (French) [Knots, braids and singularities] (**84m:14004**)
- Nœuds, tresses et singularités ★Nœuds, tresses et singularités. (French) [Knots, braids and singularities] (**84m:14004**)
- Plans-sur-Bex ★Nœuds, tresses et singularités. (French) [Knots, braids and singularities] (**84m:14004**)
- Seminar:
Knots, braids and singularities ★Nœuds, tresses et singularités. (French) [Knots, braids and singularities] (**84m:14004**)
- Symposium:
Topics on positions and structures in 3- and 4-manifolds ★Topics on positions and structures in 3- and 4-manifolds. (**84f:57005**)
- Topics on positions and structures in 3- and 4-manifolds ★Topics on positions and structures in 3- and 4-manifolds. (**84f:57005**)

57M30 Wild knots and surfaces, etc., wild imbeddings

57M35 Dehn's lemma, sphere theorem, loop theorem, asphericity

Freedman, Michael Hartley A conservative Dehn's lemma. **84c:57003**

secondary classifications:

- Lacher, R. C. See Repovš, Dušan, (**84m:57012**)
- Meeks, William H., III (with Yau, Shing Tung) The classical Plateau problem and the topology of three-dimensional manifolds. The embedding of the solution given by Douglas-Morrey and an analytic proof of Dehn's lemma. (**84g:53016**)
- Repovš, Dušan (with Lacher, R. C.) A disjoint disks property for 3-manifolds. (**84m:57012**)
- Yau, Shing Tung See Meeks, William H., III, (**84g:53016**)
- 57M40 Characterizations of E^3 and S^3 (Poincaré conjecture) [See also 57N12.]

Kaneto, Takeshi On genus 2 Heegaard diagrams for the 3-sphere. **84c:57013**

secondary classifications:

- Lacher, R. C. See Repovš, Dušan, (**84m:57012**)
- Ochiai, Mitsuyuki 2-sided embeddings of projective planes into 3-manifolds. (**84c:57006**)
- Repovš, Dušan (with Lacher, R. C.) A disjoint disks property for 3-manifolds. (**84m:57012**)
- Vince, Andrew Graphic matroids, shellability and the Poincaré conjecture. (**84i:57002**)

57M99 None of the above, but in this section

- Culler, Marc (with Jaco, W.; Rubinstein, H.) Incompressible surfaces in once-punctured torus bundles. **84a:57010**
- Donati, Anna (with Grasselli, Luigi) Color groups and standard crystallizations of lens spaces. (Italian. English summary) **84i:57007**
- Gazolaz, Maria del Carmen Fibrés de Seifert: classification et existence de feuilletages. (English summary) [Seifert bundles: classification and existence of foliations] **84a:57009**
- Grasselli, Luigi See Donati, Anna, **84i:57007**
- Harer, John The second homology group of the mapping class group of an orientable surface. **84g:57006**
- Jaco, W. See Culler, Marc; et al., **84a:57010**
- Rubinstein, H. See Culler, Marc; et al., **84a:57010**
- Zhang, Su Cheng On A_2 -polyhedra. (Chinese summary) **84g:57007**

secondary classifications:

- Adams, J. F. Maps from a surface to the projective plane. (**84h:58042**)
- Cowan, Thaddeus M. Turning a Penrose triangle inside out. (**84h:92043**)
- Maskit, Bernard Pannelled web groups. (**84f:30056**)

57Nxx Topological manifolds

57N05 Topology of E^2 , 2-manifolds

- Kulkarni, Ravi S. Surface-symmetries, holomorphic maps, and tessellations. (See **84d:53002**)
- Mather, John N. Topological proofs of some purely topological consequences of Carathéodory's theory of prime ends. **84c:57004**
- Sprows, David J. Isotopy groups of bounded 2-manifolds. **84h:57005**
- Tondra, Richard J. Homeotopy groups of surfaces whose boundary is the union of 1-spheres. **84b:57004**
- secondary classifications:
- Birman, Joan S. (with Kidwell, Mark E.) Fixed points of pseudo-Anosov diffeomorphisms of surfaces. (**84h:58090**)
- Fenn, Roger What is the geometry of a surface? (**84i:51027**)
- Firby, Peter A. (with Gardiner, Cyril F.) ★Surface topology. (**84c:57001**)
- Gardiner, Cyril F. See Firby, Peter A., (**84c:57001**)
- Goldstein, Richard Z. (with Turner, Edward C.) Reduced forms for quadratic words and spines of 2-manifolds. (**84b:57001**)
- Hempel, John Intersection calculus on surfaces with applications to 3-manifolds. (**84g:57001**)
- Kidwell, Mark E. See Birman, Joan S., (**84h:58090**)
- Ladegaillerie, Yves Les 2-catégories 1-isotopiques de surfaces à bord et de plongements de 1-complexes dans les surfaces. (English summary) [The 1-isotopic 2-categories of 2-manifolds with boundaries and of embeddings of 1-complexes into surfaces] (**84c:57003**)
- Levitt, Gilbert Foliations and laminations on hyperbolic surfaces. (**84h:57015**)
- MacLachlan, C. On the centres of mapping class groups of surfaces. (**84a:30082**)
- Mather, John N. Foliations of surfaces. I. An ideal boundary. (French summary) (**84j:57021**)
- Rosenberg, Harold Labyrinths in the disc and surfaces. (**84h:57016**)
- Schmidt, Hans-Jürgen Concerning the projective plane. (**84c:51015**)
- Series, Caroline The infinite word problem and limit sets in Fuchsian groups. (**84d:30084**)
- Sipe, Patricia L. Roots of the canonical bundle of the universal Teichmüller curve and certain subgroups of the mapping class group. (**84a:32034**)
- Turner, Edward C. See Goldstein, Richard Z., (**84b:57001**)

57N10 Topology of general 3-manifolds [See also 57Mxx.]

- Culler, Marc (with Shalen, Peter B.) Varieties of group representations and splittings of 3-manifolds. **84c:57005**
- Freedman, Michael Hartley (with Yau, Shing Tung) Homotopically trivial symmetries of Haken manifolds are toral. **84d:57006**

- Gagliardi, Carlo Recognizing a 3-dimensional handle among 4-coloured graphs. (Italian summary) 84m:57008
- Heil, Wolfgang (with Tollefson, Jeffrey L.) Deforming homotopy involutions of 3-manifolds to involutions. II. 84c:57004
- Ikeda, Hiroshi Finding simpler spines for acyclic 3-manifolds. 84c:57005
- Kaneto, Takeshi On simple loops on a solid torus of general genus. 84b:57005
- Kawauchi, Akio A test for the fundamental group of a 3-manifold. 84g:57008
- Kojima, Sadaoyoshi On the "monster theorem" of Thurston. (Japanese) 84c:57014
- Ochiai, Mitsuyuki 2-sided embeddings of projective planes into 3-manifolds. 84c:57006
- See also Takahashi, Moto-o, 84c:57009
- Rassias, George M. On the monotone union and monotone intersection properties of topological manifolds. 84a:57011
- Rubinstein, J. H. Nonorientable surfaces in some non-Haken 3-manifolds. 84c:57007
- Scott, Peter There are no fake Seifert fibre spaces with infinite π_1 . 84c:57008
- The geometries of 3-manifolds. 84m:57009
- Shalen, Peter B. See Culler, Marc, 84c:57005
- Takahashi, Moto-o (with Ochiai, Mitsuyuki) Heegaard diagrams of torus bundles over S^1 . 84c:57009
- Tollefson, Jeffrey L. See Heil, Wolfgang, 84c:57004
- Turner, V. G. Cohomology rings, linking coefficient forms and invariants of spin structures in three-dimensional manifolds. (Russian) 84g:57009
- Yau, Shing Tung See Freedman, Michael Hartley, 84d:57006

secondary classifications:

- Cerf, Jean 1-formes fermées non singulières sur les variétés compactes de dimension 3. [Nonsingular closed 1-forms on compact manifolds of dimension 3] (84f:57025)
- Clark, Bradd Evans Longitudinal surgery on composite knots. (84c:57005)
- Craggs, Robert (with Nagase, Teruo) On the signature of involutions on an oriented closed 3-manifold. (84h:57011)
- Culler, Marc (with Jacob, W.; Rubinstein, H.) Incompressible surfaces in once-punctured torus bundles. (84a:57010)
- Durfee, Alan H. The low-dimensional topology of singularities. (84j:57003)
- Ferri, Massimo (with Gagliardi, Carlo) On the genus of 4-dimensional products of manifolds. (Italian summary) (84m:57010)
- Gabai, David Foliations and the topology of 3-manifolds. (84h:57014)
- Gagliardi, Carlo See Ferri, Massimo, (84m:57010)
- Garolaz, Maria del Carmen Fibrés de Seifert: classification et existence de feuilletages. (English summary) [Seifert bundles: classification and existence of foliations] (84c:57009)
- Gordon, C. McA. Dehn surgery and satellite knots. (84d:57003)
- Hempel, John Intersection calculus on surfaces with applications to 3-manifolds. (84g:57001)
- Hilden, Hugh M. (with Lozano, M. T.; Montesinos, José Maria) Universal knots. (84g:57002)
- Jaco, W. See Culler, Marc; et al., (84a:57010)
- Lacher, R. C. See Repovš, Dušan, (84m:57012)
- Lozano, M. T. See Hilden, Hugh M.; et al., (84g:57002)
- Maskit, Bernard A locally free Kleinian group. (84h:30076)
- Meeks, William H., III (with Yau, Shing Tung) The classical Plateau problem and the topology of three-dimensional manifolds. The embedding of the solution given by Douglas-Morrey and an analytic proof of Dehn's lemma. (84g:53016)
- Montesinos, José Maria See Hilden, Hugh M.; et al., (84g:57002)
- Nagase, Teruo See Craggs, Robert, (84c:57011)
- Nelson, Roger B. Some fiber preserving involutions of orientable 3-dimensional handlebodies. (84k:57029)
- Neumann, Walter D. A calculus for plumbing applied to the topology of complex surface singularities and degenerating complex curves. (84a:32015)
- Palmeira, Carlos Frederico Borges Foliations by closed cylinders in 3-dimensional manifolds. (84j:57022)
- Repovš, Dušan (with Lacher, R. C.) A disjoint disks property for 3-manifolds. (84m:57012)
- Rubinstein, H. See Culler, Marc; et al., (84a:57010)
- Sakuma, Makoto On regular coverings of links. (84j:57007)
- Winslow, David G. Cyclic actions on $S^2 \times (0, 1)$. (84d:57021)
- Yau, Shing Tung See Meeks, William H., III, (84g:53016)
- Symposium:
Topics on positions and structures in 3- and 4-manifolds ★Topics on positions and structures in 3- and 4-manifolds. (84f:57005)
Topics on positions and structures in 3- and 4-manifolds ★Topics on positions and structures in 3- and 4-manifolds. (84f:57005)

57N12 Topology of E^3 and S^3 [See also 57M40.]

- Daverman, Robert J. (with Garity, Dennis J.) Intrinsically $(n-2)$ -dimensional cellular decompositions of E^n . 84f:57003
- Denman, Richard (with Starbird, Michael P.) Shrinking countable decompositions of S^3 . 84f:57004
- Freedman, Michael Hartley The topology of four-dimensional manifolds. 84b:57006
- Garity, Dennis J. See Daverman, Robert J., 84f:57003
- Loveland, L. D. Double tangent ball embeddings of curves in E^3 . 84c:57015
- McMillan, D. R., Jr. Heegaard splittings of homology three-spheres and homotopy three-spheres. 84j:57009
- Starbird, Michael P. See Denman, Richard, 84f:57004

secondary classifications:

- Armentrout, Steve Saturated 2-sphere boundaries in Bing's straight-line segment example. (84j:54003)
- Starbird, Michael P. The Alexander linear isotopy theorem in E^3 . (84j:57017)

57N13 Topology of E^4 , 4-manifolds [See also 14Jxx, 32Jxx.]

- Donaldson, S. K. Self-dual connections and the topology of smooth 4-manifolds. 84c:57016
- Kuga, Ken'ichi See Ue, Masaaki, 84c:57006
- Matsumoto, Yukio On the bounding genus of homology 3-spheres. 84g:57010
- On 4-manifolds fibered by tori. 84j:57010a
- On 4-manifolds fibered by tori. II. 84j:57010b
- Quinn, Frank Ends of maps. III. Dimensions 4 and 5. 84j:57012
- Silver, Daniel S. Embedding 2-spheres topologically in smooth 4-manifolds. 84g:57011
- Ue, Masaaki (with Kuga, Ken'ichi) On Freedman's solution to the 4-dimensional Poincaré conjecture. (Japanese) 84k:57006

Symposium:

- Topics on positions and structures in 3- and 4-manifolds ★Topics on positions and structures in 3- and 4-manifolds. 84f:57005
- Topics on positions and structures in 3- and 4-manifolds ★Topics on positions and structures in 3- and 4-manifolds. 84f:57005

secondary classifications:

- (Jeanquartier, P.) See de Rham, Georges, (84d:01081)
- (Kervaire, M.) See de Rham, Georges, (84d:01081)
- de Rham, Georges ★(Œuvres mathématiques. (French) [Mathematical works] (84d:01081)
- Silver, Daniel S. Finding stable-boundaries for open five-dimensional manifolds. (84m:57022)

57N15 Topology of E^n , n -manifolds ($4 < n < \infty$)

- Doyle, Patrick H. See Hocking, J., 84g:57012
- Ferri, Massimo (with Gagliardi, Carlo) On the genus of 4-dimensional products of manifolds. (Italian summary) 84f:57010
- (with Gagliardi, Carlo) The only genus zero n -manifold is S^n . 84c:57017
- Gagliardi, Carlo See Ferri, Massimo, 84c:57017 and 84m:57010
- Hocking, J. (with Doyle, Patrick H.) Strongly reversible manifolds. 84g:57012
- McAuley, Louis F. (with Robinson, Eric E.) On Newman's theorem for finite-to-one open mappings on manifolds. 84d:57007
- Mitchell, W. J. R. Another note on closed N -cells in \mathbb{R}^N . 84b:57007
- Piergallini, Riccardo Some homogeneity properties of Banach spaces and topological manifolds. (Italian. English summ.) 84f:57006
- Quinn, Frank Ends of maps. II. 84j:57011
- Robinson, Eric E. See McAuley, Louis F., 84d:57007

secondary classifications:

- Daverman, Robert J. (with Garity, Dennis J.) Intrinsically $(n-2)$ -dimensional cellular decompositions of E^n . (84f:57003)
- (with Singh, Sukhjot) Arcs in the Hilbert cube (S^n) whose complements have different fundamental groups. (84h:57008)
- Garity, Dennis J. See Daverman, Robert J., (84f:57003)
- Singh, Sukhjot See Daverman, Robert J., (84h:57008)
- Walsh, John J. (with Wright, David G.) Taming compacta in E^4 . (84a:57014)
- Wright, David G. Geometric taming of compacta in E^n . (84a:57013)
- See also Walsh, John J., (84a:57014)

57N17 Topology of topological vector spaces

- Dobrowolski, T. An extension of a theorem of Klee. 84d:57008

secondary classifications:

- Heinrich, Stefan (with Mankiewicz, P.) Some open problems in the nonlinear classification of Banach spaces. (See 84h:46001)
- Kriegel, A. Die richtigen Räume für Analysis im Unendlich-Dimensionalen. (English summary) [The "right" spaces for analysis in infinite dimensions] (84c:46044)
- Mankiewicz, P. See Heinrich, Stefan, (See 84h:46001)

57N20 Topology of infinite-dimensional manifolds [See also 58Bxx.]

- Chapman, T. A. A controlled boundary theorem for Hilbert cube manifolds. 84c:57018
- Heisey, Richard E. Manifolds modelled on the direct limit of lines. 84d:57009
- Hughes, C. Bruce Approximate fibrations and bundle maps on Hilbert cube manifolds. 84h:57006
- Lay, Terry L. (with Walsh, John J.) Characterizing Hilbert cube manifolds by their homological structure. 84h:57007
- Montejano, P., Luis Locally flat embeddings of contractible Hilbert cube manifolds are flat. 84c:57019
- Sakai, Katsuro Homeomorphisms of infinite-dimensional fibre bundles. 84f:57007
- Boundaries and complements of infinite-dimensional manifolds in the model space. 84b:57008
- Vo Thanh Liem Triviality of simple fiber-preserving actions of tori on Hilbert-cube-fiber bundles. 84m:57011
- Walsh, John J. See Lay, Terry L., 84h:57007

secondary classifications:

- Daverman, Robert J. (with Singh, Sukhjot) Arcs in the Hilbert cube (S^n) whose complements have different fundamental groups. (84h:57008)
- Fathi, A. Existence de systèmes dynamiques minimaux sur l'espace de Hilbert séparable. [Existence of minimal dynamical systems on a separable Hilbert space] (84c:54046)

Hattori, Yasunao On questions of Z. Shmuel concerning infinite-dimensional spaces. (84g:54045)

Karube, Takashi Homeomorphism groups of homogeneous spaces. (84j:57028)

Martin, Jorge M. A characterization of inverse limits of Q -bundle maps. (84m:54017)

Piergallini, Riccardo Some homogeneity properties of Banach spaces and topological manifolds. (Italian. English summary) (84i:57006)

Singh, Sukhjit See Daverman, Robert J., (84h:57008)

Toruńczyk, H. (with West, James E.) A Hilbert space limit for the iterated hyperspace functor. (84m:54010)

Vo Thanh Liem Concordance classes of free actions of compact Lie groups on infinite-dimensional manifolds. (84g:57032)

West, James E. See Toruńczyk, H., (84m:54010)

Zarichnyi, M. M. Free topological groups of absolute neighborhood retracts and infinite-dimensional manifolds. (Russian) (84f:54047)

57N25 Shapes [See also 54C56, 54F43, 55P55, 55Q07.]

secondary classifications:

Duvall, Paul F. (with Husch, L. S.) Embedding coverings into bundles with applications. (84c:57021)

Husch, L. S. See Duvall, Paul F., (84c:57021)

57N30 Engulfing

57N35 Imbeddings and immersions

Daverman, Robert J. (with Singh, Sukhjit) Arcs in the Hilbert cube (S^∞) whose complements have different fundamental groups. (84h:57008)

Disk-pastings of crumpled cubes. (84k:57007)

Husch, L. S. UV^k maps and embeddings. (84g:57013)

Lawson, Terry Splitting spheres as codimension r doubles. (84c:57012)

Montejano, Luis β -homotopy equivalences have α -cross sections. (84i:57008)

Singh, Sukhjit See Daverman, Robert J., (84h:57008)

Walsh, John J. (with Wright, David G.) Taming compacta in E^4 . (84a:57014)

Wright, David G. Geometric taming of compacta in E^n . (84a:57013)

See also Walsh, John J., (84a:57014)

secondary classifications:

Duvall, Paul F. (with Husch, L. S.) Embedding coverings into bundles with applications. (84c:57021)

Husch, L. S. See Duvall, Paul F., (84c:57021)

Luukkainen, Jouni Topologically, quasiconformally or Lipschitz locally flat embeddings in codimension one. (84i:57010)

McMillan, D. R., Jr. Heegaard splittings of homology three-spheres and homotopy three-spheres. (84j:57009)

Sakai, Katsuro Boundaries and complements of infinite-dimensional manifolds in the model space. (84b:57008)

Scott, Peter There are no fake Seifert fibre spaces with infinite π_1 . (84c:57008)

Wright, David G. Ambiently universal sets in E^n . (84m:54014)

57N37 Isotopy and pseudo-isotopy

secondary classifications:

Rubinstein, J. H. Nonorientable surfaces in some non-Haken 3-manifolds. (84c:57007)

Wagoner, J. B. A picture description of the boundary map in algebraic K -theory. (84d:18013)

57N40 Neighborhoods of submanifolds

secondary classifications:

Montejano, P., Luis Locally flat embeddings of contractible Hilbert cube manifolds are flat. (84b:57019)

57N45 Flatness and tameness

Burgess, C. E. (with Loveland, L. D.) Wild double tangent ball embeddings of spheres in E^n . (84i:57009)

Loveland, L. D. See Burgess, C. E., (84i:57009)

Luukkainen, Jouni Topologically, quasiconformally or Lipschitz locally flat embeddings in codimension one. (84i:57010)

secondary classifications:

Loveland, L. D. Double tangent ball embeddings of curves in E^3 . (84c:57015)

Walsh, John J. (with Wright, David G.) Taming compacta in E^4 . (84a:57014)

Wright, David G. Geometric taming of compacta in E^n . (84a:57013)

See also Walsh, John J., (84a:57014)

57N50 $S^{n-1} \subset E^n$, Schoenflies problem

secondary classifications:

Burgess, C. E. (with Loveland, L. D.) Wild double tangent ball embeddings of spheres in E^n . (84i:57009)

Daverman, Robert J. Disk-pastings of crumpled cubes. (84k:57007)

Loveland, L. D. See Burgess, C. E., (84i:57009)

Mather, John N. Topological proofs of some purely topological consequences of Carathéodory's theory of prime ends. (84k:57004)

57N55 Microbundles and block bundles [See also 55R60, 57Q50.]

57N60 Cellularity

Garity, Dennis J. General position properties related to the disjoint discs property. (84j:57013)

secondary classifications:

Bordoni, Manlio Homology of the manifold V_4 of second-order differential elements of $P_2(R)$. (Italian. English summary) (84k:53010)

Henderson, James P. A discussion of results and problems related to cellularity in polyhedra. (84i:57016)

57N65 Algebraic topology of manifolds

Fáry, István Some results on Poincaré duality. (84j:57014)

Massey, W. S. A generalization of the Alexander duality theorem. II. (84i:57011)

secondary classifications:

Calder, Allan (with Siegel, Jerrold; Williams, Frank) The width of homotopies into spheres. (84a:55011)

Hausmann, Jean-Claude Fundamental group problems related to Poincaré duality. (84f:57008)

Lawson, Terry Splitting spheres as codimension r doubles. (84a:57012)

Siegel, Jerrold See Calder, Allan; et al., (84a:55011)

Williams, Frank See Calder, Allan; et al., (84a:55011)

57N70 Cobordism and concordance

secondary classifications:

Hsiang, W. C. (with Jahren, B.) The rigid handlebody theory. I. (84i:57019)

Jahren, B. See Hsiang, W. C., (84i:57019)

Stong, R. E. Branched coverings. I. (84g:57003a)

Branched coverings. II. (84g:57003b)

57N75 General position and transversality

secondary classifications:

Walsh, John J. (with Wright, David G.) Taming compacta in E^4 . (84a:57014)

Wright, David G. Geometric taming of compacta in E^n . (84a:57013)

See also Walsh, John J., (84a:57014)

57N80 Stratifications

Goresky, R. Mark (with MacPherson, Robert D.) Intersection homology. II. (84i:57012)

MacPherson, Robert D. See Goresky, R. Mark, (84i:57012)

secondary classifications:

Evans, Bruce D. C^* -bundles and compact transformation groups. (84a:46148)

Fukuda, Takuo (with Kobayashi, Takao) A local isotopy lemma. (84c:58007)

Kobayashi, Takao See Fukuda, Takuo, (84c:58007)

57N99 None of the above, but in this section

Farrell, F. T. (with Hsiang, W. C.) A structure set analogue of Chapman-Ferry-Quinn theory. (84k:57008)

Hsiang, W. C. See Farrell, F. T., (84k:57008)

Karube, Takashi Topological types of paracompact connected 1-manifolds. (84c:57020)

Weinberger, Shmuel Homotopy equivalent manifolds by pasting. (84b:57009)

secondary classifications:

Armstrong, Mark Anthony Lifting homotopies through fixed points. (84h:57001)

Burghelen, Dan Converting compact ANR fibrations into locally trivial bundles with compact manifolds as fibres. (84g:55022)

Gallo, Daniel M. A 3-dimensional hyperbolic collar lemma. (84f:30055)

Massey, W. S. A generalization of the Alexander duality theorem. II. (84i:57011)

Mitchell, W. J. R. General position properties of ANRs. (84c:54017)

Singh, Sukhjit Generalized manifolds (ANRs and ARs) and null decompositions of manifolds. (84k:57010)

Zieschang, Heiner (with Zimmermann, Bruno) Über Erweiterungen von Z und $Z_2 * Z_2$ durch nichteuklidische kristallographische Gruppen. [On extensions of Z and $Z_2 * Z_2$ by non-Euclidean crystallographic groups] (84i:57001)

Zimmermann, Bruno See Zieschang, Heiner, (84i:57001)

57Pxx Generalized manifolds [See also 18F15.]

57P05 Local properties

Veljan, Darko Axioms for Stiefel-Whitney homology classes of some singular spaces. (84d:57010)

secondary classifications:

Buoncrisiano, Sandro (with Hacon, Derek) Resolving homologies in BPL and PL characteristic numbers. (84m:57013)

Daverman, Robert J. (with Walsh, John J.) Acyclic decompositions of manifolds. (84m:54007)

Hacon, Derek See Buoncristiano, Sandro, (84m:57013)

Walsh, John J. See Daverman, Robert J., (84m:54007)

57P10 Poincaré duality spaces

Hausmann, Jean-Claude Fundamental group problems related to Poincaré duality. (84f:57008)

Poincaré spaces with the homology of a sphere. (84j:57015)

Koloso, V. E. Normal fibrations of polyhedra and duality. (Russian) (84c:57009)

Vogel, Pierre On the obstruction group in homology surgery. (84c:57021)

secondary classifications:

Bieri, Robert ★Homological dimension of discrete groups. (84b:20047)

Chang, C. N. (with Su, J. C.) Group actions on a product of two projective spaces. (84c:57037)

Eckmann, Beno (with Linnell, P. A.) Poincaré duality groups of dimension two. II. (84c:57003)

Linnell, P. A. See Eckmann, Beno, (84c:57003)

Sklyarenko, E. G. Poincaré duality and correlations between the functors Ext and Tor. (Russian) (84c:18017)

Su, J. C. See Chang, C. N., (84b:57037)

57P99 None of the above, but in this section

Anderson, Gerald A. Unlinking Λ -homology spheres. (84b:57015)

Bandieri, Paola (with Gagliardi, Carlo) Generating all orientable n -manifolds from $(n-1)$ -complexes. (Italian summary) (84b:57010)

Gagliardi, Carlo See Bandieri, Paola, (84b:57010)

Lacher, R. C. See Repovš, Dušan, (84c:57012)

Repovš, Dušan (with Lacher, R. C.) A disjoint disks property for 3-manifolds. (84c:57012)

Singh, Sukhjot Generalized manifolds (ANRs and ARs) and null decompositions of manifolds. (84c:57010)

secondary classifications:

Ance, Fredric D. (with Duvall, Paul F.; Singh, Sukhjot) Rigid 3-dimensional compacta whose squares are manifolds. (84m:54039)

Duvall, Paul F. See Ance, Fredric D.; et al., (84m:54039)

Mitchell, W. J. R. General position properties of ANRs. (84c:54017)

Singh, Sukhjot See Ance, Fredric D.; et al., (84m:54039)

57Qxx PL-topology

57Q05 The general topology of complexes

Tognoli, Alberto Le problème d'algebraisation des polyèdres est local. [The problem of the algebraization of polyhedra is local] (84c:57010)

secondary classifications:

Björner, Anders (with Wachs, Michelle L.) On lexicographically shellable posets. (84f:06004)

Brown, Ronald (with Higgins, Philip J.) Crossed complexes and nonabelian extensions. (84b:18009)

Higgins, Philip J. See Brown, Ronald, (84b:18009)

Mai, Jie Hua (with Tang, Yun) An injective metrization for collapsible polyhedra. (84g:54036)

Mayer, Jean Le théorème des quatre couleurs: notice historique et aperçu technique. [The four-color theorem: historical note and technical outline] (84b:05047a)

Erratum: "The four-color theorem: historical note and technical outline". (French) (84b:05047b)

Tang, Yun See Mai, Jie Hua, (84g:54036)

Wachs, Michelle L. See Björner, Anders, (84f:06004)

57Q10 Simple homotopy type, Whitehead torsion, Reidemeister-Franz torsion, etc.

Jajodia, Sushil (with Magurn, Bruce) Realizing units as Whitehead torsions in low dimension. (84c:57011)

Kreher, Reinhold (with Metzler, Wolfgang) Simpliciale Transformationen von Polyedern und die Zeeman-Vermutung. [Simplicial transformations of polyhedra and the Zeeman conjecture] (84c:57022)

Magurn, Bruce See Jajodia, Sushil, (84c:57011)

Metzler, Wolfgang See Kreher, Reinhold, (84c:57022)

Neme, A. (with Sánchez, C.) Simple homotopy type of pseudolens spaces. (84j:57016)

Sánchez, C. See Neme, A., (84j:57016)

secondary classifications:

Fried, David Homological identities for closed orbits. (84g:58088)

Hastings, Harold M. Suspensions of strong shape equivalences are CE equivalences. (84c:55015)

Madsen, I. Reidemeister torsion, surgery invariants and spherical space forms. (84c:57019)

Quinn, Frank Ends of maps. II. (84j:57011)

Sudin, A. A. Algebraic K -theory. (Russian) (84b:18006)

Turaev, V. G. Cohomology rings, linking coefficient forms and invariants of spin structures in three-dimensional manifolds. (Russian) (84g:57009)

Waldhausen, Friedhelm Operations in the algebraic K -theory of spaces. (84d:55006)

57Q12 Wall finiteness obstruction for CW-complexes

secondary classifications:

Munkholm, Hans J. (with Ranicki, Andrew A.) The projective class group transfer induced by an S^1 -bundle. (84f:18021)

Ranicki, Andrew A. See Munkholm, Hans J., (84f:18021)

57Q15 Triangulating manifolds

Barnette, David Generating the triangulations of the projective plane. (84f:57009)

All triangulations of the projective plane are geometrically realizable in E^4 . (84f:57010)

Cavicchioli, Alberto A three-manifold invariant independent of the homotopy type. (Italian summary) (84g:57014)

Sarkaria, K. S. On neighbourly triangulations. (84i:57013)

secondary classifications:

Connelly, Robert (with Henderson, David W.; Ho, Chung Wu; Starbird, Michael P.) On the problems related to linear homeomorphisms, embeddings, and isotopies. (84i:57014)

Ferri, Massimo (with Gagliardi, Carlo) The only genus zero n -manifold is S^n . (84c:57017)

Gagliardi, Carlo See Ferri, Massimo, (84c:57017)

Henderson, David W. See Connelly, Robert; et al., (84i:57014)

Ho, Chung Wu See Connelly, Robert; et al., (84i:57014)

Starbird, Michael P. See Connelly, Robert; et al., (84i:57014)

57Q20 Cobordism

Buoncristiano, Sandro (with Hacon, Derek) Resolving homologies in BPL and PL characteristic numbers. (84m:57013)

Hacon, Derek See Buoncristiano, Sandro, (84m:57013)

secondary classifications:

Hsiang, W. C. (with Jahren, B.) The rigid handlebody theory. I. (84f:57019)

Jahren, B. See Hsiang, W. C., (84f:57019)

Madsen, I. Remarks on normal invariants from the infinite loop space viewpoint. (84i:57018)

57Q25 Comparison of PL-structures: classification, Hauptvermutung

Levitt, Norman Immersions of homotopy-equivalent manifolds. (84b:57011)

Meadows, Douglas Explicit PL self-knottings and the structure of PL homotopy complex projective spaces. (84b:57009)

Tukia, P. (with Väisälä, Jussi) Lipschitz and quasiconformal approximation and extension. (84c:57016)

Väisälä, Jussi See Tukia, P., (84c:57016)

secondary classifications:

Balcerak, W. (with Hajduk, B.) Homotopy type of automorphism groups of manifolds. (84i:57030)

Cavicchioli, Alberto A three-manifold invariant independent of the homotopy type. (Italian summary) (84g:57014)

Hajduk, B. See Balcerak, W., (84i:57030)

Ochiai, Mitsuyuki 2-sided embeddings of projective planes into 3-manifolds. (84c:57006)

57Q30 Engulfing

secondary classifications:

Tukia, P. (with Väisälä, Jussi) Lipschitz and quasiconformal approximation and extension. (84c:57016)

Väisälä, Jussi See Tukia, P., (84c:57016)

57Q35 Imbeddings and immersions

Connelly, Robert (with Henderson, David W.; Ho, Chung Wu; Starbird, Michael P.) On the problems related to linear homeomorphisms, embeddings, and isotopies. (84i:57014)

Henderson, David W. See Connelly, Robert; et al., (84i:57014)

Ho, Chung Wu See Connelly, Robert; et al., (84i:57014)

Starbird, Michael P. See Connelly, Robert; et al., (84i:57014)

secondary classifications:

Duvall, Paul F. (with Husch, L. S.) Embedding coverings into bundles with applications. (84c:57021)

Hansen, Vagn Lundsgaard (with Møller, Jesper Michael) On the existence of equivariant embeddings of principal bundles into vector bundles. (84m:57002)

Husch, L. S. UV^k maps and embeddings. (84g:57013)

See also Duvall, Paul F., (84c:57021)

Levitt, Norman Immersions of homotopy-equivalent manifolds. (84b:57011)

Møller, Jesper Michael See Hansen, Vagn Lundsgaard, (84m:57002)

Seyama, Shiro A note on embedding dimensions and ends of complexes and polyhedra. (Japanese) (84e:57029)

57Q37 Isotopy

- Livingston, Charles Surfaces bounding the unlink. **84a:57017**
 Starbird, Michael P. The Alexander linear isotopy theorem in E^3 . **84j:57017**

secondary classifications:

- Connelly, Robert (with Henderson, David W.; Ho, Chung Wu; Starbird, Michael P.) On the problems related to linear homeomorphisms, embeddings, and isotopies. **(84i:57014)**
 Henderson, David W. See Connelly, Robert; et al., **(84i:57014)**
 Ho, Chung Wu See Connelly, Robert; et al., **(84i:57014)**
 Starbird, Michael P. See Connelly, Robert; et al., **(84i:57014)**

57Q40 Regular neighborhoods

57Q45 Knots and links (in high dimensions) {For the low-dimensional case, see 57M25.}

- Asano, Kouhei (with Yoshikawa, Katsuyuki) On polynomial invariants of fibered 2-knots. **84g:57015**
 Farber, M. Sh. A stable classification of spherical knots. (Russian. English and Georgian summaries) **84e:57023**
 Giller, Cole A. Towards a classical knot theory for surfaces in \mathbb{R}^4 . **84c:57011**
 Hillman, Jonathan A. Corrigendum to: "Aspherical four-manifolds and the centres of two-knot groups" [Comment. Math. Helv. **56** (1981), no. 3, 465–473; MR **83d:57017**]. **84d:57011**
 Kearton, C. Spinning, factorisation of knots, and cyclic group actions on spheres. **84h:57010**
 Some nonfibered 3-knots. **84m:57014**
 An algebraic classification of certain simple even-dimensional knots. **84g:57016**
 Kobelskii, V. L. Isotopy classification of odd-dimensional simple links of codimension two. (Russian) **84d:57012**
 Lee, Youn W. Contractibly embedded 2-spheres in $S^2 \times S^2$. **84c:57012**
 Lomonaco, Samuel J., Jr. Five-dimensional knot theory. **84c:57012**
 Michel, Françoise (with Weber, Claude) Nœuds algébriques décomposables. (English summary) [Decomposable algebraic knots] **84a:57018**
 Nezhinskii, V. M. Some calculations in the theory of multidimensional links. (Russian) **84m:57015**
 Ocken, Stanley Embeddings of $S^n \times M$ in $S^{n+2} \times M$ form a group. **84a:57019**
 Plotnick, Steven P. Infinitely many disk knots with the same exterior. **84d:57013**
 Weber, Claude See Michel, Françoise, **84a:57018**
 Yoshikawa, Katsuyuki A note on Levine's conditions for knot groups. **84i:57015**
 See also Asano, Kouhei, **84g:57015**

secondary classifications:

- Hillman, Jonathan A. ★ Alexander ideals of links. **(84j:57004)**
 Kearton, C. (with Wilson, S. M. J.) Cyclic group actions on odd-dimensional spheres. **(84a:57040)**
 Wilson, S. M. J. See Kearton, C., **(84a:57040)**
 Yoshinaga, Etsuo Topological types of isolated singularities defined by weighted homogeneous polynomials. **(84k:32009)**

57Q50 Microbundles and block bundles [See also 55R60, 57N55.]

57Q55 Approximations

- Henderson, James P. Approximating cellular maps between low-dimensional polyhedra. **84b:57012**
 A discussion of results and problems related to cellularity in polyhedra. **84i:57016**
 Luukkainen, Jouni (with Tukia, P.) Quasisymmetric and Lipschitz approximation of embeddings. **84a:57020**
 Tukia, P. See Luukkainen, Jouni, **84a:57020**

secondary classifications:

- Ivanov, N. V. Sharpening of the Nash-Tognoli theorem. (Russian. English summary) **(84a:58009)**
 Montejano, Luis β -homotopy equivalences have α -cross sections. **(84i:57008)**

57Q60 Cobordism and concordance

secondary classifications:

- Madsen, I. Homology operations in G/Top . **(84c:55013)**

57Q65 General position and transversality

secondary classifications:

- Anderson, Gerald A. Unlinking A -homology spheres. **(84a:57015)**

57Q91 Equivariant PL-topology

57Q99 None of the above, but in this section

- Betke, U. (with Gritzmann, P.) A combinatorial condition for the existence of polyhedral 2-manifolds. **84f:57011**
 Gritzmann, P. See Betke, U., **84f:57011**

secondary classifications:

- Bacławski, Kenneth Combinatorial decompositions of rings and almost Cohen-Macaulay complexes. **(84k:13021)**
 Bandieri, Paola (with Gagliardi, Carlo) Generating all orientable n -manifolds from $(n-1)$ -complexes. (Italian summary) **(84b:57010)**
 Barnette, David Nonconvex vertices of polyhedral 2-manifolds. **(84g:52008)**
 Brumfiel, G. W. (with Kubelka, R.) A homology transfer for a class of simplicial maps. **(84c:55012)**
 Dragotti, Sara (with Esposito, Rosa; Magro, Gaetano; Parlato, Lucio) q -smoothings. (Italian. English summary) **(84f:57012)**
 Esposito, Rosa See Dragotti, Sara; et al., **(84f:57012)**
 Ferri, Massimo (with Gagliardi, Carlo) The only genus zero n -manifold is S^n . **(84c:57017)**
 Gagliardi, Carlo See Bandieri, Paola, **(84b:57010)** and Ferri, Massimo, **(84c:57017)**
 Konnully, Augustine O. Pivot theorems in n -space. **(84j:52006)**
 Kubelka, R. See Brumfiel, G. W., **(84c:55012)**
 Lewis, Steve M. Three-dimensional Regge quantum gravity and $6j$ symbols. **(84j:83037)**
 Magro, Gaetano See Dragotti, Sara; et al., **(84f:57012)**
 Mazzocco, Renzo On the direct computation of the cohomology ring of a polyhedron by means of block complexes. (Italian. English summary) **(84g:55009)**
 McCullough, Darryl Homotopy equivalences of punctured manifolds. **(84c:55010)**
 McMullen, P. (with Schulz, Christoph; Wills, Jörg M.) Polyhedral 2-manifolds in E^3 with unusually large genus. **(84m:52011)**
 Parlato, Lucio See Dragotti, Sara; et al., **(84f:57012)**
 Plakhta, L. P. Structural problems of systems of classification of objects. (Russian) **(84m:05071)**
 Schulz, Christoph Nicht-polytopale 3-Sphären mit 8 Ecken. [Nonpolytopal 3-spheres with 8 vertices] **(84m:52013)**
 See also McMullen, P.; et al., **(84m:52011)**
 Sontag, Eduardo D. Remarks on piecewise-linear algebra. **(84c:52015)**
 Wills, Jörg M. See McMullen, P.; et al., **(84m:52011)**
 Yu, Yan Lin Combinatorial Gauss-Bonnet-Chern formula. **(84b:57012)**
 Zhang, Su Cheng On A_2^3 -polyhedra. (Chinese summary) **(84g:57007)**

57Rxx Differential topology {For foundational questions of differentiable manifolds, see 58Axx; for infinite-dimensional manifolds, see 58Bxx.}

- Dieudonné, Jean ★ Éléments d'analyse. Tome IX. Chapitre XXIV. (French) [Elements of analysis. Vol. IX. Chapter XXIV] **84a:57021**
 Gauld, David B. ★ Differential topology. **84c:57013**

57R05 Triangulating

secondary classifications:

- Johnson, Francis E. A. On the triangulation of stratified sets and singular varieties. **(84c:58007)**

57R10 Smoothing

- Dragotti, Sara (with Esposito, Rosa; Magro, Gaetano; Parlato, Lucio) q -smoothings. (Italian. English summary) **84f:57012**
 Esposito, Rosa See Dragotti, Sara; et al., **84f:57012**
 Magro, Gaetano See Dragotti, Sara; et al., **84f:57012**
 Morlet, C. Structures différentiables sur une variété. [Differentiable structures on manifolds] (See **84j:00005**)
 Parlato, Lucio See Dragotti, Sara; et al., **84f:57012**

secondary classifications:

- Connelly, Robert (with Henderson, David W.; Ho, Chung Wu; Starbird, Michael P.) On the problems related to linear homeomorphisms, embeddings, and isotopies. **(84i:57014)**
 Didierjean, André Cobordisme fibré et approximation d'une sous-variété singulière par des sous-variétés C^∞ . [Fibered cobordism and approximation of a singular submanifold by C^∞ submanifolds] **(84f:57018)**
 Emis, Christopher Sufficient conditions for smoothing codimension one foliations. **(84g:57017)**
 Henderson, David W. See Connelly, Robert; et al., **(84i:57014)**
 Ho, Chung Wu See Connelly, Robert; et al., **(84i:57014)**
 Starbird, Michael P. See Connelly, Robert; et al., **(84i:57014)**

57R12 Smooth approximations

57R15 Specialized structures on manifolds (spin manifolds, frame manifolds, etc.)

- Epstein, D. B. A. Geometric structures on manifolds. **84b:57013**
 Kato, Mitsuyoshi On combinatorial space forms. **84c:57014**
 Martinelli, Enzo Quaternions: classical algebra, modern geometry. (Italian) **84j:57018**

secondary classifications:

- Fintushel, Ronald (with Walsh, John J.) Singularly fibered homotopy spheres. **(84g:57029)**
 Goldman, William M. (with Hirsch, Morris W.) Polynomial forms on affine manifolds. **(84f:53026)**
 Hirsch, Morris W. See Goldman, William M., **(84f:53026)**

- Kulkarni, Ravi S. (with Raymond, Frank) Three-dimensional Lorentz space forms and Seifert fiber spaces. (See 84d:53002)
- Meckert, Christiane Forme de contact sur la somme connexe de deux variétés de contact de dimension impaire. (English summary) [Contact form on the connected sum of two contact manifolds of odd dimension] (84f:53031)
- Raymond, Frank See Kulkarni, Ravi S. (See 84d:53002)
- Séade, José A. On the η -function of the Dirac operator on $\Gamma \backslash S^2$. (84i:58116)
A cobordism invariant for surface singularities. (84i:14028)
- Sullivan, Dennis (with Thurston, William) Manifolds with canonical coordinate charts: some examples. (84i:53035)
- Thurston, William See Sullivan, Dennis. (84i:53035)
- Turaev, V. G. Cohomology rings, linking coefficient forms and invariants of spin structures in three-dimensional manifolds. (Russian) (84g:57009)
- Walsh, John J. See Fintushel, Ronald. (84g:57029)

57R19 Algebraic topology of manifolds

secondary classifications:

- Barthel, Gottfried (with Kaup, Ludger) Topologie des surfaces complexes compactes singulières. [Topology of singular compact complex surfaces] (84j:32035)
- Farrell, F. T. (with Hsiang, W. C.) The stable topological-hyperbolic space form problem for complete manifolds of finite volume. (84c:57027)
- Hsiang, W. C. See Farrell, F. T. (84c:57027)
- Karoubi, Max (with Leruste, Christian) ★Méthodes de géométrie différentielle en topologie algébrique. Partie I, II. (French) [Methods of differential geometry in algebraic topology. Part I, II] (84c:57001)
- Kaup, Ludger See Barthel, Gottfried. (84j:32035)
- Kazhdan, David (with Lusztig, George) Schubert varieties and Poincaré duality. (84i:14054)
- Leruste, Christian See Karoubi, Max. (84c:57001)
- Lusztig, George See Kazhdan, David. (84i:14054)
- Turaev, V. G. Cohomology rings, linking coefficient forms and invariants of spin structures in three-dimensional manifolds. (Russian) (84g:57009)
- Unwin, S. D. PCT invariance and the orientability of Kaluza-Klein manifolds. (84d:83034)
- Warszauer, Max L. ★The Witt group of degree k maps and asymmetric inner product spaces. (84k:10017)

57R20 Characteristic classes and numbers

- Audin, Michèle Remarques sur les nombres caractéristiques entiers de certaines immersions lagrangiennes. (English summary) [Remarks on integral characteristic numbers of some Lagrangian immersions] (84m:57016)
- Back, Allen Pontryagin forms on homogeneous spaces. (84c:57013)
- Becker, James C. (with Schultz, Reinhard E.) The real semicharacteristic of a fibered manifold. (84c:57022)
- Craggs, Robert (with Nagase, Teruo) On the signature of involutions on an oriented closed 3-manifold. (84c:57011)
- Damiano, David B. Vanishing of characteristic forms on the orbits of the Cartan subgroup. (84b:57015)
- Gelfand, I. M. (with MacPherson, Robert D.) Geometry in Grassmannians and a generalization of the dilogarithm. (84b:57014)
- Gilkey, Peter B. Secondary characteristic classes of locally flat bundles over lens spaces in dimension 3. (84j:57019)
- Guillou, Lucien (with Marin, Alexis) Une extension d'un théorème de Rohlin sur la signature. [An extension of a theorem of Rohlin on the signature] (84i:57017)
- Karoubi, Max Connexions, courbures et classes caractéristiques en K -théorie algébrique. [Connections, curvatures and characteristic classes in algebraic K -theory] (84f:57013)
- MacPherson, Robert D. See Gelfand, I. M. (84b:57014)
- Marin, Alexis See Guillou, Lucien. (84i:57017)
- Nagase, Teruo See Craggs, Robert. (84b:57011)
- Ogawa, Yōsuke (with Tachibana, Shun-ichi) Parallel vector fields and the Betti number. (84j:57020)
- Pengelly, David J. The mod two homology of MSO and MSU as A comodule algebras, and the cobordism ring. (84i:57018)
- Schultz, Reinhard E. See Becker, James C. (84c:57022)
- Sharma, Banwari Lal ★Classes caractéristiques topologiquement invariantes. (French) [Topologically invariant characteristic classes] (84c:57014)
Multiples des classes de Pontryagin entières qui sont topologiquement invariantes. (English summary) [Multiples of the integral Pontryagin classes that are topologically invariant] (84c:57023)
- Sivera, Rafael A geometric interpretation of the Chern classes. (84b:57016)
- Tachibana, Shun-ichi See Ogawa, Yōsuke. (84j:57020)
- Yu, Yan Lin Combinatorial Gauss-Bonnet-Chern formula. (84b:57012)

secondary classifications:

- (Albert, Claude) See Cornu, Philippe; et al. (84i:53031)
- Ando, Yoshifumi Elimination of certain Thom-Boardman singularities of order two. (84f:58018)
- Berline, Nicole (with Vergne, Michèle) Zéros d'un champ de vecteurs et classes caractéristiques équivariantes. [Zeros of a vector field and equivariant characteristic classes] (84i:58114)
- Borcea, Ciprian The Chern class of a divisor. (Romanian. English summary) (84c:32008)
- Brooks, Robert The A -genus of complex hypersurfaces and complete intersections. (84i:53062)
- Cornu, Philippe (with Monna, Gilbert) ★Variétés b -plates. (French) [b -flat manifolds] (84i:53031)

- Coste, Michel (with Coste-Roy, Marie-Françoise) Le spectre réel et la topologie des variétés algébriques sur un corps réel clos. [The real spectrum and the topology of algebraic varieties over a real-closed field] (See 84c:14002)
- Coste-Roy, Marie-Françoise See Coste, Michel. (See 84c:14002)
- Derdziński, Andrzej (with Shen, Chun Li) Codazzi tensor fields, curvature and Pontryagin forms. (84b:53048)
- Ferrer, J. (with Panyella, F.) Homology and Chern classes of smooth hypersurfaces in multiple-projective spaces. (Spanish. English summary) (84g:14005)
- Gazolaz, Maria del Carmen Fibrés de Seifert: classification et existence de feuilletages. (English summary) [Seifert bundles: classification and existence of foliations] (84c:57009)
- Gromov, Mikhael L. Hyperbolic manifolds (according to Thurston and Jørgensen). (84b:53046)
- Hurder, Steven Exotic classes for measured foliations. (84a:57027)
(Jørgensen, Troels) See Gromov, Mikhael L. (84b:53046)
- Kahn, Steven M. The Conner-Miller classes of periodic maps and an equivariant point index. (84b:57033)
- Li, Bang He On classification of immersions of n -manifolds in $(2n-1)$ -manifolds. (84c:57023)
- Lin, Tsau Young On generalization of Conner-Miller classes to Z_2 -actions. I. (84b:57034)
- Lomonaco, Samuel J., Jr. Five-dimensional knot theory. (84b:57012)
- Martinelli, Enzo Quaternions: classical algebra, modern geometry. (Italian) (84j:57018)
- Matsushita, Yasuo Thorpe-Hitchin inequality for compact Einstein 4-manifolds of metric signature $(+ + - -)$ and the generalized Hirzebruch index formula. (84f:53039)
- Monna, Gilbert See Cornu, Philippe. (84i:53031)
- Morimoto, Hiroshi On certain complex analytic cobordism between subvarieties realizing Chern classes of bundles. (84b:32035)
- Mutō, Yosio The Pontryagin class of a Sasakian submersion. (84c:53045)
- Osborn, Howard Orientable products in \mathcal{U} . (84m:57023)
- Panyella, F. See Ferrer, J. (84g:14005)
- Papastavridis, Stavros An algebraic proof of a theorem of D. Pengelly on the structure of $H_*(MSO; Z_2)$. (84b:57025a)
- Pengelly, David J. The A -algebra structure of Thom spectra: MSO as an example. (84b:57025b)
- Pervushin, V. N. Spinors in the self-dual Yang-Mills field in Minkowski space. (84b:81075)
- Schlaflly, Roger A Chern number for gauge fields on \mathbb{R}^4 . (84b:53039)
- Schwartz, Marie-Hélène Classes et caractères de Chern-Mather des espaces linéaires. (English summary) [Chern-Mather classes and characters of linear spaces] (84h:32011)
- Shen, Chun Li See Derdziński, Andrzej. (84b:53048)
- Shiota, Masahiro Real algebraic realization of characteristic classes. (84g:14023)
- Smith, Larry Invariants for immersions with applications to covering spaces. (84i:57023)
- Stacey, Richard $U(1)$: a new approach. (84b:81116)
- Suzuki, Haruo Foliation preserving Lie group actions and characteristic classes. (84g:57024)
- (Thurston, William) See Gromov, Mikhael L. (84b:53046)
- Tóth, Gábor On the Atiyah-Singer index theorem. III. Singular homology and cohomology. (Hungarian) (84b:58213)
- Vergne, Michèle See Berline, Nicole. (84i:58114)
- Vrabec, Jozse ★Bordism, homology, and Stiefel-Whitney numbers. (84k:57022)
- Yang, Shu Wen Self-intersection number of immersed n -manifold in $2n$ -manifold. (84i:57021)

57R22 Topology of vector bundles and fiber bundles [See also 55Rxx.]

Vassiliou, Efsthios Flat bundles and holonomy homomorphisms. (84c:57024)

secondary classifications:

- Becker, James C. (with Schultz, Reinhard E.) The real semicharacteristic of a fibered manifold. (84c:57022)
- Boya, Luis J. (with Mateos, Juan) The vortex: complex Hopf bundle and Morse theory. (84c:81035)
- De Wilde, Marc (with Lecomte, Pierre B. A.) Algebraic characterizations of the algebra of functions and of the Lie algebra of vector fields of a manifold. (84b:58012)
- Dodson, C. T. J. (with Radicevici, M. S.) Tangent and frame bundles of order two. (84c:53032)
- Gancarzewicz, Jacek Relèvements des champs de vecteurs aux fibrés naturels. (English summary) [Liftings of vector fields to natural bundles] (84c:58006)
- Heitsch, James L. Linearity and residues for foliations. (84g:57020)
- Ilori, Samuel A. Subvarieties of flag bundles. (Italian summary) (84k:14040)
- Lecomte, Pierre B. A. See De Wilde, Marc. (84b:58012)
- Mateos, Juan See Boya, Luis J. (84c:81035)
- Ogawa, Yōsuke (with Tachibana, Shun-ichi) Parallel vector fields and the Betti number. (84j:57020)
- Radicevici, M. S. See Dodson, C. T. J. (84c:53032)
- Schultz, Reinhard E. See Becker, James C. (84c:57022)
- Tachibana, Shun-ichi See Ogawa, Yōsuke. (84j:57020)
- Vogt, Elmar The first cohomology group of leaves and local stability of compact foliations. (84a:57029)
- Woodward, L. M. The classification of orientable vector bundles over CW-complexes of small dimension. (84c:55021)

57R25 Vector fields, frame fields, etc.

- Leite, Maria Luiza Vector fields on Grassmann manifolds. (Portuguese) (See 84b:00011)
- Pollina, Benedict J. Tangent 2-fields on even-dimensional nonorientable manifolds. (84c:57015)
- Randall, Duane Index of vector fields with finite singularities. (See 84b:00011)

- Schwänzl, Roland Äquivalente 2-Felder auf Mannigfaltigkeiten mit Involution. [Equivariant 2-fields on manifolds with involution] **84d:57014**
 Valdivia G., Oscar Vector s -products: algebraic and topological theory. (Spanish) **84c:57016**

secondary classifications:

- Abe, Kōjun Pursell-Shanks type theorem for orbit spaces of G -manifolds. **(84g:57033)**
 Akyildiz, Ersan (with Carrell, James B.; Lieberman, D. I.; Sommes, Andrew John) On the graded rings associated to holomorphic vector fields with exactly one zero. **(84i:14029)**
 Albert, Claude Invariants riemanniens des champs de plans. (English summary) [Riemannian invariants of plane fields] **(84d:53039)**
 Carrell, James B. See Akyildiz, Ersan; et al., **(84i:14029)**
 De Wilde, Marc (with Lecomte, Pierre B. A.) Isomorphisms of Lie algebras of vector fields. **(84d:17016)**
 Fialovski, A. Deformations of the Lie algebra of vector fields on the line. (Russian) **(84m:17011)**
 Ganczarczyk, Jacek Complete lifts of tensor fields of type $(1, k)$ to natural bundles. **(84b:53030)**
 Hazewinkel, Michiel (with Marcus, Steven I.; Sussmann, Hector J.) Nonexistence of finite-dimensional filters for conditional statistics of the cubic sensor problem. **(84k:93067)**
 Lecomte, Pierre B. A. See De Wilde, Marc, **(84d:17016)**
 Lieberman, D. I. See Akyildiz, Ersan; et al., **(84i:14029)**
 Marcus, Steven I. See Hazewinkel, Michiel; et al., **(84k:93067)**
 Sommes, Andrew John See Akyildiz, Ersan; et al., **(84i:14029)**
 Sussmann, Hector J. See Hazewinkel, Michiel; et al., **(84k:93067)**
 Takens, Floris Moduli of singularities of vector fields. **(84k:58042)**
 Tsujishita, Toru Continuous cohomology of the Lie algebra of vector fields. **(84b:17015)**

- 57R27 Controllability of vector fields on C^∞ and real-analytic manifolds [See also 49E15, 49F15.]

secondary classifications:

- (Brockett, Roger W.) See Differential geometric control theory, **(84f:93003)**
 Hazewinkel, Michiel (with Marcus, Steven I.; Sussmann, Hector J.) Nonexistence of finite-dimensional filters for conditional statistics of the cubic sensor problem. **(84k:93067)**
 Hunt, Louis R. Control theory for nonlinear systems. (See **84g:93005c**)
 Kaloupekis, Nicholas (with Tsiniias, J., **(84f:93014)**)
 Marcus, Steven I. See Hazewinkel, Michiel; et al., **(84k:93067)**
 (Millman, Richard S.) See Differential geometric control theory, **(84f:93003)**
 Sussmann, Hector J. See Hazewinkel, Michiel; et al., **(84k:93067)** and Differential geometric control theory, **(84f:93003)**
 Tsiniias, J. (with Kaloupekis, Nicholas) Output feedback design and controllable cascade connections of nonlinear systems. **(84f:93014)**
 Willems, Jan C. System theoretic models for the analysis of physical systems. **(84c:58075)**
 Conference:
 Differential Geometric Control Theory ★ Differential geometric control theory. **(84f:93003)**
 Differential geometric control theory ★ Differential geometric control theory. **(84f:93003)**
 Houghton, Mich. ★ Differential geometric control theory. **(84f:93003)**

57R30 Foliations; geometric theory

- (Bel'skii, A. A.) See Tamura, Itiro, **84a:57028b**
 Camacho, César (with Lins Neto, Alcides) ★ Teoria geométrica das folheações. (Portuguese) [Geometric theory of foliations] **84m:57017**
 Cantwell, John (with Conlon, Lawrence) Endsets of leaves. **84f:57014**
 (with Conlon, Lawrence) Nonexponential leaves at finite level. **84h:57013**
 Conlon, Lawrence See Cantwell, John, **84f:57014** and **84h:57013**
 Dippolito, Paul R. Corrections to: "Codimension one foliations of closed manifolds" [Ann. of Math. (2) **107** (1978), no. 3, 403-453; MR **58** #24288]. **84c:57025**
 Duminy, Gérard (with Sergiescu, Vlad) Sur la nullité de Godbillon-Vey. (English summary) [On the Godbillon-Vey vanishing] **84a:57024**
 Ennis, Christopher Sufficient conditions for smoothing codimension one foliations. **84g:57017**
 Escobales, Richard H., Jr. The integrability tensor for bundle-like foliations. **84b:57017**
 Farran, Hani Foliations by suspensions. **84f:57015**
 Fukui, Kazuhiko (with Tomita, Naoto) Lie algebra of foliation preserving vector fields. **84g:57018**
 Perturbations of compact foliations. **84a:57025**
 Gabai, David Foliations and the topology of 3-manifolds. **84h:57014**
 Girbau, Joan Sur le théorème de stabilité de feuilletages de Hamilton, Epstein et Rosenberg. (English summary) [On the Hamilton-Epstein-Rosenberg stability theorem for foliations] **84c:57017**
 Giry, Michel Étude de feuilletages non transversalement complets dans un cas régulier. (English summary) [Study of nontransversally complete foliations in a regular case] **84g:57019**
 Godbillon, Claude ★ Dynamical systems on surfaces. **84b:57018**
 Goldman, William M. (with Hirsch, Morris W.; Levitt, Gilbert) Invariant measures for affine foliations. **84a:57026**
 Hector, G. On the classification of manifolds foliated by the action of a nilpotent Lie group. (See **84d:53003**)
 Heitsch, James L. Linearity and residues for foliations. **84g:57020**
 (Helfenstein, H. G.) See Godbillon, Claude, **84b:57018**
 Hené, Damir Transverse intersections and stability of foliations. **84f:57016**
 Hirsch, Morris W. See Goldman, William M.; et al., **84a:57026**

- Hurder, Steven Exotic classes for measured foliations. **84a:57027**
 Inaba, Takashi C^2 Reeb stability of noncompact leaves of foliations. **84m:57018**
 Reeb stability for noncompact leaves. **84d:57015**
 Lazarov, Connor (with Shulman, Herbert) Obstructions to foliation-preserving vector fields. **84c:57018**
 Levitt, Gilbert Feuilletages des surfaces. (English summary) [Foliations of surfaces] **84g:57021**
 Foliations and laminations on hyperbolic surfaces. **84b:57015**
 See also Goldman, William M.; et al., **84a:57026**
 Lins Neto, Alcides See Camacho, César, **84m:57017**
 Mather, John N. Foliations of surfaces. I. An ideal boundary. (French summary) **84j:57021**
 Miyoshi, Shigeaki On the placement problem of Reeb components. **84c:57026**
 Montesinos, Angel Conformal curvature for the normal bundle of a conformal foliation. (French summary) **84c:57019**
 Palmeira, Carlos Frederico Borges Foliations by closed cylinders in 3-dimensional manifolds. **84j:57022**
 Pitiş, Gheorghe Une classe de complexes de chaînes d'une variété feuilletée. [A class of chain complexes of a foliated manifold] **84j:57023**
 Plante, J. F. Stability of codimension one foliations by compact leaves. **84g:57022**
 Rosenberg, Harold Labyrinths in the disc and surfaces. **84h:57016**
 Sergiescu, Vlad See Duminy, Gérard, **84a:57024**
 Shulman, Herbert See Lazarov, Connor, **84c:57018**
 Solodov, V. V. Foliations on manifolds with a special fundamental group. (Russian) **84g:57023**
 Homeomorphisms of a straight line and foliations. (Russian) **84c:57027**
 Suzuki, Haruo Foliation preserving Lie group actions and characteristic classes. **84g:57024**
 Tamura, Itiro ★ Yōsō no toporoji. (Japanese) [Topology of foliations] **84a:57028a**
 ★ Tōmōgaku no cōron. (Russian) [Topology of foliations] **84a:57028b**
 Tomita, Naoto See Fukui, Kazuhiko, **84g:57018**
 Tsuboi, Takashi On 2-cycles of $B\text{Diff}(S^1)$ which are represented by foliated S^1 -bundles over T^2 . (French summary) **84b:57019**
 Tsuchiya, Nobuo The Nishimori decompositions of codimension-one foliations and the Godbillon-Vey classes. **84c:57028**
 Ver Eecke, Paul ★ Introduction à la théorie des variétés feuilletées. (French) [Introduction to the theory of foliated manifolds] **84d:57016**
 Vogt, Elmar The first cohomology group of leaves and local stability of compact foliations. **84a:57029**
 Winkelnkemper, H. E. The number of ends of the universal leaf of a Riemannian foliation. **84i:57019**
 Symposium:
 Topics in Foliation ★ Topics in foliation. (Japanese) **84f:57017**
 Topics in foliation ★ Topics in foliation. (Japanese) **84f:57017**

secondary classifications:

- Bivens, Irl Orthogonal geodesic and minimal distributions. **(84d:53031)**
 Blumenthal, Robert A. Basic connections with vanishing curvature and parallel torsion. (French summary) **(84g:53055)**
 (with Hebda, James J.) de Rham decomposition theorems for foliated manifolds. **(84j:53042)**
 Riemannian foliations with parallel curvature. **(84h:53040)**
 Brooks, Robert Some Riemannian and dynamical invariants of foliations. **(84j:58098)**
 Caldeco, Renzo On the torsional cohomology of Molino for an almost complex manifold. (Italian. French summary) **(84j:53045)**
 Connes, Alain A survey of foliations and operator algebras. **(84m:58140)**
 Craioveanu, M. (with Puta, Mircea) de Rham-type currents on Riemannian foliated manifolds. (See **84g:53003**)
 Dazord, Pierre Sur l'existence de feuilles sphériques. (English summary) [On the existence of spherical leaves] **(84i:58096)**
 Escobales, Richard H., Jr. Bundle-like foliations with Kählerian leaves. **(84m:53043)**
 Fack, Thierry (with Skandalis, Georges) Some properties of the C^* -algebra associated with a foliation. **(84a:58077)**
 (with Skandalis, Georges) Sur les représentations et idéaux de la C^* -algèbre d'un feuilletage. [On the representations and ideals of the C^* -algebra of a foliation] **(84d:46101)**
 Fried, David Transitive Anosov flows and pseudo-Anosov maps. **(84j:58095)**
 Gazolaz, Maria del Carmen Fibrés de Seifert: classification et existence de feuilletages. (English summary) [Seifert bundles: classification and existence of foliations] **(84a:57009)**
 Girbau, Joan (with Haefliger, André; Sundaraman, D.) On deformations of transversely holomorphic foliations. **(84j:32026)**
 Gluck, Herman (with Warner, Frank W.) Great circle fibrations of the three-sphere. **(84g:53056)**
 Haefliger, André See Girbau, Joan; et al., **(84j:32026)**
 Harvey, Reese (with Lawson, H. Blaine, Jr.) Calibrated foliations (foliations and mass-minimizing currents). **(84h:53095)**
 Hebda, James J. See Blumenthal, Robert A., **(84j:53042)**
 Kamber, Franz W. (with Tondeur, Philippe) Harmonic foliations. **(84h:58044)**
 (with Tondeur, Philippe) Infinitesimal automorphisms and second variation of the energy for harmonic foliations. **(84g:53057)**
 Langevin, Rémi (with Levitt, Gilbert) Courbure totale des feuilletages des surfaces. (English summary) [Total curvature of foliations of surfaces] **(84c:53031)**
 Lawson, H. Blaine, Jr. See Harvey, Reese, **(84h:53095)**
 Levitt, Gilbert See Langevin, Rémi, **(84c:53031)**
 Lichnerowicz, André Variétés de Poisson et feuilletages. (English summary) [Poisson manifolds and foliations] **(84m:58042)**
 (with Tran Van Tan) Feuilletages, géométrie riemannienne et géométrie symplectique. (English summary) [Foliations, Riemannian geometry and symplectic geometry] **(84c:53032)**

- Marinucci, Rosa Anna Pseudoconnections on foliated manifolds. (Italian. English summary) (84a:53035)
- Molino, Pierre Géométrie globale des feuilletages riemanniens. [Global geometry of Riemannian foliations] (84j:53043)
- Motreanu, Dumitru A characterization of transversality to distributions. (84i:58010)
- Moussa, Robert Feuilletages singuliers. [Singular foliations] (84e:58005)
- Natsume, Hiroko (with Natsume, Toshikazu) On a theorem of Bott and Haefliger. (84i:58243)
- Natsume, Toshikazu See Natsume, Hiroko, (84i:58243)
- Oshikiri, Gen-ichi Jacobi fields and the stability of leaves of codimension-one minimal foliations. (84c:53033)
- Totally geodesic foliations and Killing fields. (84j:53044)
- Patrizio, Giorgio (with Wong, Pit Mann) Stability of the Monge-Ampère foliation. (84f:32020)
- Plante, J. F. Diffeomorphisms without periodic points. (84j:58102)
- Pop, I. On the concept of shape for spaces with two topologies. (See 84f:53001)
- Pradines, Jean Exemples de feuilletages et d'ombrages associés aux variétés à bord anguleux. [Examples of foliations and shadings associated with manifolds with an angular boundary] (84f:58009)
- Pută, Mircea See Craioveanu, M. (See 84g:53003)
- Renault, Jean N. C^* -algebras of groupoids and foliations. (84c:46068)
- Rugină, Andrei Foliations of almost affine spaces. (84m:51008)
- Salhi, Ezzeddine Sur les ensembles minimaux locaux. (English summary) [On local minimal sets] (84i:58117)
- Skandalis, Georges See Fack, Thierry, (84a:58077) and (84d:46101)
- Stormark, Ole On the theorem of Frobenius for complex vector fields. (84c:58082)
- Sundarsaram, D. See Girbau, Joan; et al., (84j:32026)
- Tondeur, Philippe See Kamber, Franz W., (84g:53057) and (84h:58044)
- Tran Van Tan See Lichnerowicz, André, (84c:53032)
- Warner, Frank W. See Gluck, Herman, (84g:53056)
- Wong, Pit Mann See Patrizio, Giorgio, (84f:32020)
- Yorozu, Shinsuke Behavior of geodesics in foliated manifolds with bundle-like metrics. (84i:53041)
- Zimmer, Robert J. Ergodic theory, semisimple Lie groups, and foliations by manifolds of negative curvature. (84h:22022)
- Curvature of leaves in amenable foliations. (84k:58178)

57R32 Classifying spaces for foliations; Gel'fand-Fuks cohomology

- Haefliger, André (with Sthanantham, K.) A proof that $B\Gamma_1^C$ is 2-connected. 84c:57020
- Roger, C. R. Foliations with a symplectic or contact transverse structure. 84c:57015
- Sthanantham, K. See Haefliger, André, 84c:57020

secondary classifications:

- Albert, Claude Classes caractéristiques des connexions sans torsion. [Characteristic classes of torsion-free connections] (See 84a:53001)
- Duminy, Gérard (with Sergiescu, Vlad) Sur la nullité de Godbillon-Vey. (English summary) [On the Godbillon-Vey vanishing] (84a:57024)
- Molino, Pierre Cohomologie partielle et équations différentielles. [Partial cohomology and differential equations] (See 84a:53001)
- Sergiescu, Vlad See Duminy, Gérard, (84a:57024)
- Tsuchiya, Nobuo The Nishimori decompositions of codimension-one foliations and the Godbillon-Vey classes. (84c:57028)
- Tsujishita, Toru On variation bicomplexes associated to differential equations. (84h:58105)
- Vanzura, Jifi A note on product structures and the Gel'fand-Fuks cohomology. (84i:58244)

57R35 Differentiable mappings

- Church, P. T. Differential maps with small critical set. 84m:57019
- Timourian, J. G. Local triviality of families of maps. 84m:57020

secondary classifications:

- Hefter, Harald Dehnungsuntersuchungen an Sphärenabbildungen. [Investigations of dilation in mappings of spheres] (84a:55012)
- Ishikawa, Goo Families of functions dominated by distributions of \mathcal{C} -classes of mappings. (84g:58014)
- Marakulin, V. M. Equilibrium inefficiency in smooth economies with utility functions of a general type. (Russian) (84k:90017)
- Zangwill, W. L. Nonconvexities in univalence. (84j:58029)

57R40 Imbeddings

- Chaltn, Hendrik "Avaler", une relation engendrant une relation d'ordre sur les éléments de trois types de partitions d'une sphère plongée. (English summary) ["Swallowing", a relation generating an order relation on the elements of three types of partitions of an embedded sphere] 84a:57030
- Dacach, Janey A. Embedding lens spaces in a homotopy type of $CP(2)$. 84a:57031
- Duvall, Paul F. (with Hirsch, L. S.) Embedding coverings into bundles with applications. 84c:57021
- Hirsch, L. S. See Duvall, Paul F., 84c:57021
- Kawauchi, Akio (with Shibuya, Tetsuo; Suzuki, Shin'ichi) Descriptions on surfaces in four-space. I. Normal forms. 84d:57017
- Lannes, Jean La conjecture des immersions (d'après R. L. Cohen, E. H. Brown, F. P. Peterson et al.). [The immersion conjecture (after R. L. Cohen, E. H. Brown, F. P. Peterson et al.)] 84c:57020
- Lee, Youn W. Handle attaching on generic maps. 84j:57024

- Plotnick, Steven P. Embedding homology 3-spheres in S^5 . 84b:57020
- Seyama, Shiro A note on embedding dimensions and ends of complexes and polyhedra. (Japanese) 84e:57029
- Shibuya, Tetsuo See Kawauchi, Akio; et al., 84d:57017
- Smith, Justin R. Complements of codimension-two submanifolds. III. Cobordism theory. 84a:57032
- Suzuki, Shin'ichi See Kawauchi, Akio; et al., 84d:57017
- Yang, Shu Wen Self-intersection number of immersed n -manifold in $2n$ -manifold. 84c:57021
- Zhou, Xue Guang Some imbedding theorem of almost closed manifolds. 84a:57033

secondary classifications:

- Aminov, Yu. A. Imbedding problems: geometric and topological aspects. (Russian) (84c:53072)
- Kobayashi, Teiichi Nonimmersions and nonembeddings of quaternionic spherical space forms. (84i:57022)
- Teufel, Michael Abstract prestratified sets are (b) -regular. (84f:58010)
- Thom, René Sur le problème des normales à une sphère convexe, et l'approximation des applications "collapsantes". [On the problem of the normals to a convex sphere, and the approximation of "collapsing" mappings] (84c:58011)

57R42 Immersions

- Davis, Donald M. Some new immersions and nonimmersions of real projective spaces. 84c:57016
- Herbert, Ralph J. Multiple points of immersed manifolds. 84c:57022
- Junod, Bernard Sur l'espace classifiant des fibrés vectoriels réels de dimension k , stablement complexes. (English summary) [On the classifying space of k -dimensional real vector bundles which are stably complex] 84b:57021
- Kobayashi, Teiichi Nonimmersions and nonembeddings of quaternionic spherical space forms. 84i:57022
- Komiya, Katsuhiko Equivariant immersions and embeddings of smooth G -manifolds. 84m:57021
- Li, Bang He On classification of immersions of n -manifolds in $(2n-1)$ -manifolds. 84c:57023
- On immersions of manifolds in manifolds. 84c:57024
- Smith, Larry Invariants for immersions with applications to covering spaces. 84i:57023
- Yasui, Tsutomu Immersion groups of complex projective spaces. 84i:57024

secondary classifications:

- Audin, Michèle Remarques sur les nombres caractéristiques entiers de certaines immersions lagrangiennes. (English summary) [Remarks on integral characteristic numbers of some Lagrangian immersions] (84m:57016)
- Back, Allen Pontryagin forms on homogeneous spaces. (84c:57013)
- Lee, Youn W. Handle attaching on generic maps. (84j:57024)
- Weinstein, Alan Removing intersections of Lagrangian immersions. (84j:58054)

57R45 Singularities of differentiable mappings

- Didierjean, André Cobordisme fibré et approximation d'une sous-variété singulière par des sous-variétés C^∞ . [Fibered cobordism and approximation of a singular submanifold by C^∞ submanifolds] 84f:57018
- Izumiya, Shyūichi (with Kogo, Y.) Smooth mappings of bounded codimensions. 84g:57025
- Kogo, Y. See Izumiya, Shyūichi, 84g:57025

secondary classifications:

- Arnold, V. I. Some open problems in the theory of singularities. (84j:32011)
- Bruce, J. W. (with Giblin, P. J.) Generic geometry. (84m:58017)
- Chaltn, Hendrik Embedded 2-spheres in \mathbb{R}^4 . (84i:58026)
- Church, P. T. Differential maps with small critical set. (84m:57019)
- Combet, Edmond ★Intégrales exponentielles. Développements asymptotiques, propriétés lagrangiennes. (French) [Exponential integrals. Asymptotic expansions, Lagrangian properties] (84m:58143)
- Damon, James Topological triviality in versal unfoldings. (84k:58033)
- Dimca, Alexandru (with Gibson, C. G.) Contact germs from the plane to the plane. (84j:32012)
- Durfee, Alan H. The low-dimensional topology of singularities. (84j:57003)
- Gaffney, Terence The Thom polynomial of Σ^{111} . (84k:58035)
- Giblin, P. J. See Bruce, J. W., (84m:58017)
- Gibson, C. G. See Dimca, Alexandru, (84j:32012)
- Goresky, R. Mark (with MacPherson, Robert D.) Stratified Morse theory. (84k:58017)
- Greuel, Gert-Martin (with Stenbrink, J. H. M.) On the topology of smoothable singularities. (84m:14006)
- Hauser, Herwig An algorithm of construction of the semiuniversal deformation of an isolated singularity. (84k:32029)
- Iarrobino, Anthony Deforming complete intersection Artin algebras. Appendix: Hilbert function of $\mathbb{C}[x,y]/I$. (84j:14010)
- MacPherson, Robert D. See Goresky, R. Mark, (84k:58017)
- Malikov, Kh. M. Over-determination of a system of differential equations for versal integrals of type A, D, E. (Russian) (84m:58146)
- Porteous, Ian R. Probing singularities. (84k:58038)
- Sedykh, V. D. Functional moduli of singularities of convex hulls of manifolds of codimension 1 and 2. (Russian) (84b:58019)
- Steenbrink, J. H. M. See Greuel, Gert-Martin, (84m:14006)
- Teissier, Bernard Polyèdre de Newton jacobien et équisingularité. [Jacobian Newton polyhedra and equisingularity] (84k:14007)

- Verona, Andrei Les applications topologiquement stables sont triangulables. (English summary) [Topologically stable maps are triangulable] (84c:58013)
 Wall, C. T. C. Pencils of real binary cubics. (84m:14011)

57R50 Diffeomorphisms

- Frame, Michael Inertial properties of stably diffeomorphic manifolds. 84b:57022
 Hsiang, W. C. (with Jahren, B.) A note on the homotopy groups of the diffeomorphism groups of spherical space forms. 84b:57017
 Jahren, B. See Hsiang, W. C., 84b:57017

secondary classifications:

- Field, M. J. Isotopy and stability of equivariant diffeomorphisms. (84m:58128)
 Jones, Lowell Edwin Locally strange hyperbolic sets. (84b:58085)
 Lee, Kyung Bai Geometric realization of $\pi_0(M)$. (84m:57026)
 Mascaro, Francisca Normal subgroups of $\text{Diff}^0(\mathbb{R}^n)$. (84f:58024)
 McDuff, Dusa Some canonical cohomology classes on groups of volume preserving diffeomorphisms. (84b:58154)
 Morrison, Kent Symplectic flows on the open ball. (84a:58024)

57R52 Isotopy

- Cerf, Jean 1-formes fermées non singulières sur les variétés compactes de dimension 3. [Nonsingular closed 1-forms on compact manifolds of dimension 3] 84i:57025

secondary classifications:

- Chaltin, Hendrik Embedded 2-spheres in \mathbb{R}^3 . (84i:58026)
 Dennis, R. Keith (with Igusa, Kiyoshi) Hochschild homology and the second obstruction for pseudoisotopy. (84m:18014)
 Igusa, Kiyoshi See Dennis, R. Keith, (84m:18014)
 Wagoner, J. B. A picture description of the boundary map in algebraic K-theory. (84d:18013)
 Waldhausen, Friedhelm Algebraic K-theory of spaces, a manifold approach. (84f:18025)

57R55 Differentiable structures

- Mostow, Mark A. The differentiable space structures of Milnor classifying spaces, simplicial complexes, and geometric realizations. 84c:57030

secondary classifications:

- Balcerak, W. (with Hajduk, B.) Homotopy type of automorphism groups of manifolds. (84i:57030)
 Frame, Michael Inertial properties of stably diffeomorphic manifolds. (84b:57022)
 Hajduk, B. See Balcerak, W., (84i:57030)

57R60 Homotopy spheres, Poincaré conjecture

secondary classifications:

- Lee, Youn W. Contractibly embedded 2-spheres in $S^2 \times S^2$. (84c:57012)
 Schultz, Reinhard E. Differential group actions on homotopy spheres. III. Invariant subspheres and smooth suspensions. (84c:57030)

57R65 Surgery and handlebodies

- Dovermann, Karl Heinz (with Petrie, Ted) G surgery. II. 84c:57025
 Hsiang, W. C. (with Jahren, B.) The rigid handlebody theory. I. 84i:57019
 Jahren, B. See Hsiang, W. C., 84i:57019
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- Cantor, Murray (with Kulkarni, Anil D.) Physical distinctions between normalized solutions of the two-body problem of general relativity. (84f:83028)
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 Perron, Bernard " μ constant" implique "type topologique constant" en dimension complexe trois. (English summary) [" μ constant" implies "constant topological type" in complex dimension three] (84g:32020)
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57R67 Surgery obstructions, Wall groups [See also 18F25.]

- Farrell, F. T. (with Hsiang, W. C.) The stable topological-hyperbolic space form problem for complete manifolds of finite volume. 84c:57027
 (with Hsiang, W. C.) Topological characterization of flat and almost flat Riemannian manifolds M^n ($n \neq 3, 4$). 84b:57017

- Hambleton, Ian Projective surgery obstructions on closed manifolds. 84g:57026
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- Baker, Andrew On weakly almost complex manifolds with vanishing decomposable Chern numbers. 84j:57027
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- Baker, Andrew (with Ray, Nigel) Some infinite families of U-hypersurfaces. (84i:55008)
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- Freedman, Michael Hartley The topology of four-dimensional manifolds. (84b:57006)
 Quinn, Frank The stable topology of 4-manifolds. (84b:57023)

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- Kawanami, Yasuki (with Tsuchida, Kisuke) Wall bordism and maps of odd prime period. (84a:57035)
 Khare, S. S. Stationary points set and *G*-bordism. (84c:57023)
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- Al-Sabti, George On framed hypersurfaces. (84c:57028)
 Arthan, R. D. (with Bullett, Shaun) The homology of $MO(1)^\infty$ and $MU(1)^\infty$. (84a:57036)
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 Vershinin, V. V. Calculation of the symplectic cobordism ring in dimensions up to 32 and the nontriviality of the majority of ternary products of N. Ray's elements. (Russian) (84f:57020)
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 Dedò, Maria See Buoncrisiano, Sandro, (84c:58014)
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 Kochman, Stanley O. The symplectic cobordism ring. II. (84c:55008)
 Livingston, Charles (with Melvin, Paul) Algebraic knots are algebraically dependent. (84c:57004)
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 Smith, Justin R. Complements of codimension-two submanifolds. III. Cobordism theory. (84c:57032)
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secondary classifications:

- Dovermann, Karl Heinz (with Petrie, Ted) *G* surgery. II. (84c:57025)
 Petrie, Ted See Dovermann, Karl Heinz, (84c:57025)

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secondary classifications:

- Bochnak, Jacek Topology of real analytic sets—some open problems. (84a:32014)
 Morimoto, Hiroshi On the generic existence of holomorphic sections and complex analytic bordism. (84c:32009)
 Papadima, Ștefan Homotopie rationnelle des espaces de Thom et problèmes de lissage. (English summary) [Rational homotopy of Thom spaces and smoothing problems] (84c:55012)
 Rubinstein, J. H. Nonorientable surfaces in some non-Haken 3-manifolds. (84c:57007)
 Schiemann, Günther Berechnung der Homologiegruppen singularitätenfreier algebraischer Hyperflächen und Konstruktion von Repräsentanten ihrer Erzeugenden. [Computation of the homology groups of nonsingular algebraic hypersurfaces and construction of representatives of their generators] (84b:14016)
 Séade, José A. (with Steer, Brian) The elements of π_j^* represented by invariant framings of quotients of $(SL_2)(\mathbb{R})$ by certain discrete subgroups. (84b:14001)
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- Benedetti, Riccardo (with Tognoli, Alberto) Théorèmes d'approximation en géométrie algébrique réelle. [Approximation theorems in real algebraic geometry] (See 84c:14002)
 Fintushel, Ronald (with Walsh, John J.) Singularly fibered homotopy spheres. (84g:57029)
 Ivanov, N. V. Approximation of smooth manifolds by real algebraic sets. (Russian) (84c:57029)
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- Ball, Robin Christopher See des Cloizeaux, J., (84j:53076)
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 Cass, Anna Topological properties of the $O(3)$ nonlinear σ model in two dimensions. (84f:81053)
 des Cloizeaux, J. (with Ball, Robin Christopher) Rigid curves at random positions and linking numbers. (84j:53076)
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Morimoto, Masaharu A splitting property of oriented homotopy equivalence for a hyperbolic group. 84f:57031

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Wu, Ch'ing Mu On $U_n(Z_p)$ -module structure on $\hat{U}_n(Z_p)$. 84c:57032

secondary classifications:

Adams, J. F. Graeme Segal's Burnside ring conjecture. (84b:55024)

Anderson, Douglas R. Steenrod's equivariant Moore space problem for cohomologically trivial modules. (84d:18011)

Becker, James C. (with Schultz, Reinhard E.) The real semicharacteristic of a fibered manifold. (84a:57022)

Bowszyc, C. On the winding number and equivariant homotopy classes of maps of manifolds with some finite group actions. (84b:55002)

Craggs, Robert (with Nagase, Terao) On the signature of involutions on an oriented closed 3-manifold. (84b:57011)

Dotzel, Ronald M. Semifree finite group actions on homotopy spheres. (84f:57027)

Dovermann, Karl Heinz (with Petrie, Ted) G surgery. II. (84c:57025)

Freeman, Michael Hartley (with Yau, Shing Tung) Homotopically trivial symmetries of Haken manifolds are toral. (84d:57006)

Furushima, Mikio Finite groups of polynomial automorphisms in the complex affine plane. I. (84m:14016)

Gottlieb, Daniel Henry The Lefschetz number and Borsuk-Ulam theorems. (84m:55003)

Hansen, Vagn Lundsgaard (with Möller, Jesper Michael) On the existence of equivariant embeddings of principal bundles into vector bundles. (84m:57002)

Heil, Wolfgang (with Tollefson, Jeffrey L.) Deforming homotopy involutions of 3-manifolds to involutions. II. (84c:57004)

Jiang, Bo Ju ★ Lectures on Nielsen fixed point theory. (84f:55002)

Kawanami, Yasuki (with Tsuchida, Kisuke) Wall bordism and maps of odd prime period. (84c:57035)

Kearton, C. (with Wilson, S. M. J.) Cyclic group actions on odd-dimensional spheres. (84a:57040)

Spinning, factorisation of knots, and cyclic group actions on spheres. (84b:57010)

Madsen, I. Reidemeister torsion, surgery invariants and spherical space forms. (84b:57019)

McAuley, Louis F. (with Robinson, Eric E.) On Newman's theorem for finite-to-one open mappings on manifolds. (84d:57007)

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Nagase, Terao See Craggs, Robert, (84b:57011)

Neme, A. (with Sánchez, C.) Simple homotopy type of pseudolens spaces. (84j:57016)

Orlik, Peter (with Solomon, Louis) Arrangements defined by unitary reflection groups. (84b:14006)

Petrie, Ted One fixed point actions on spheres. I, II. (84b:57027)

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Quinn, Frank Ends of maps. II. (84j:57011)

de Rham, Georges Homéomorphie des rotations de S^n . Évolution d'un problème, souvenirs. [Homeomorphism of the rotations of S^n . Recollections of the evolution of a problem] (84b:01042)

Robinson, Eric E. See McAuley, Louis F., (84d:57007)

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Schultz, Reinhard E. Differential group actions on homotopy spheres. III. Invariant subspaces and smooth suspensions. (84c:57030)

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Schwänzl, Roland Äquivalente 2-Felder auf Mannigfaltigkeiten mit Involution.

[Equivariant 2-fields on manifolds with involution] (84d:57014)

Solomon, Louis See Orlik, Peter, (84b:14006)

Tollefson, Jeffrey L. See Heil, Wolfgang, (84c:57004)

Triantafyllou, Georgia Vissjé Equivariant minimal models. (84g:55017)

Rationalization for Hopf G -spaces. (84b:55008)

Tsuchida, Kisuke See Kawanami, Yasuki, (84a:57035)

Turaev, V. G. Cohomology rings, linking coefficient forms and invariants of spin structures in three-dimensional manifolds. (Russian) (84g:57009)

- Wilson, S. M. J. See Kearton, C., (84c:57040)
 Winslow, David G. Cyclic actions on $S^2 \times (0, 1)$. (84d:57021)
 Yau, Shing Tung See Freedman, Michael Hartley, (84d:57006)

57S20 Noncompact Lie groups of transformations

- Abels, Herbert Some topological aspects of proper group actions; noncompact dimension of groups. 84b:57036
 De Wilde, Marc (with Lecomte, Pierre B. A.) On Lie group actions of order one. 84g:57039
 Lecomte, Pierre B. A. See De Wilde, Marc, 84g:57039
 Magnus, R. J. Some properties of wild orbits of infinite-dimensional transformation groups. 84g:57040
 Simen, David \mathbb{R}^n actions on manifolds. 84g:57041

secondary classifications:

- Kapustinov, A. A. Nonlinear realization of Einstein supergravity. (Russian. English summary) (84a:83033)

57S25 Groups acting on specific manifolds

- Chang, C. N. (with Su, J. C.) Group actions on a product of two projective spaces. 84b:57037
 tom Dieck, Tammo ★Группы преобразований и теория пространств. (Russian) [Transformation groups and representation theory] 84f:57028
 Dotzel, Ronald M. Semifree finite group actions on homotopy spheres. 84f:57027
 Hussein, S. Y. Zeros of equivariant S^1 -maps. 84a:57039
 Kearton, C. (with Wilson, S. M. J.) Cyclic group actions on odd-dimensional spheres. 84a:57040
 (Kirillov, A. A.) See tom Dieck, Tammo, 84f:57028
 Lee, Kyung Bai (with Raymond, Frank) Topological, affine and isometric actions on flat Riemannian manifolds. 84c:57027
 (with Raymond, Frank) Topological, affine and isometric actions on flat Riemannian manifolds. II. 84c:57028
 Liulevicius, Arunas Flag manifolds and homotopy rigidity of linear actions. 84a:57042
 Line bundles, cohomology automorphisms, and homotopy rigidity of linear actions. 84a:57041
 Madsen, I. (with Thomas, C. B.; Wall, C. T. C.) Topological spherical space form problem. III. Dimensional bounds and smoothing. 84i:57032
 Masuda, Mikiya Integral weight system of torus actions on cohomology complex projective spaces. 84m:57027
 Matsunaga, Hiromichi Group actions on sphere bundles over spheres. 84d:57020
 Nelson, Roger B. Some fiber preserving involutions of orientable 3-dimensional handlebodies. 84c:57029
 Raymond, Frank See Lee, Kyung Bai, 84c:57027 and 84c:57028
 Smith, Donald E. The Atiyah-Singer invariant, torsion invariants, and group actions on spheres. 84c:57024
 Su, J. C. See Chang, C. N., 84b:57037
 Szenthe, J. Sur les voisinages invariants des orbites d'actions orthogonales. [On invariant neighborhoods of orbits of orthogonal actions] 84b:57038
 Thomas, C. B. See Madsen, I.; et al., 84i:57032
 Wall, C. T. C. See Madsen, I.; et al., 84i:57032
 Wilson, S. M. J. See Kearton, C., 84a:57040
 Winslow, David G. Cyclic actions on $S^2 \times (0, 1)$. 84d:57021

secondary classifications:

- Assadi, Amir H. Extensions of finite group actions from submanifolds of a disk. (84f:57022)
 Boyom, Michel Nguiro B. Sur une ex-conjecture de L. Auslander. [On a former conjecture of L. Auslander] (84j:22010)
 Browder, William (with Katz, Nicholas M.) Free actions of finite groups on varieties. I. (84f:57023a)
 (with Katz, Nicholas M.) Free actions of finite groups on varieties. II. (84f:57023b)
 (with Katz, Nicholas M.) Erratum: "Free actions of finite groups on varieties. II". (84f:57023c)
 Carlsson, Gunnar On the rank of abelian groups acting freely on $(S^n)^k$. (84c:57033)
 Cusick, Larry W. Elementary abelian 2-groups that act freely on products of real projective spaces. (84f:57024)
 Dejer, Italo José On equivariant homotopy equivalences. (84c:57026)
 Dovermann, Karl Heinz Dihedral group actions on homotopy spheres. (84b:57030)
 (with Petrie, Ted) G surgery. II. (84c:57025)
 Fathi, A. Existence de systèmes dynamiques minimaux sur l'espace de Hilbert séparable. [Existence of minimal dynamical systems on a separable Hilbert space] (84c:54046)
 Fintushel, Ronald (with Stern, Ronald J.) An exotic free involution on S^4 . (84g:57036)
 (with Stern, Ronald J.) Smooth free involutions on homotopy $4k$ -spheres. (84f:57025)
 Hambleton, Ian (with Madsen, I.) Semifree actions on \mathbb{R}^n with one fixed point. (84f:57026)
 Illman, Sören Representations at fixed points of actions of finite groups on spheres. (84b:57031)
 Kato, Mitsuyoshi On combinatorial space forms. (84c:57014)
 Katz, Nicholas M. See Browder, William, (84f:57023a); and (84f:57023c)
 Liulevicius, Arunas Vector bundles on homogeneous spaces. (84b:55004)
 Borsuk-Ulam theorems for spherical space forms. (84j:55008)
 Madsen, I. See Hambleton, Ian, (84f:57026)
 Petrie, Ted The equivariant J homomorphism and Smith equivalence of representations. (84b:57035)
 See also Dovermann, Karl Heinz, (84c:57025)

- Schultz, Reinhard E. Differentiability and the P. A. Smith theorems for spheres. I. Actions of prime order groups. (84d:57019)
 Differential group actions on homotopy spheres. III. Invariant subspheres and smooth suspensions. (84c:57030)
 Stern, Ronald J. See Fintushel, Ronald, (84f:57025) and (84g:57036)
 Uchida, Fumiaki Actions of special unitary groups on a product of complex projective spaces. (84c:57025)
 Wang, McKenzie Y. Some regularity theorems for smooth actions on complex Stiefel manifolds. (84f:57021)
 Wilker, J. B. Topologically equivalent n -dimensional isometries. (84m:51018)
 Wu, Ch'ing Mu Some special elements in $U_n(\mathbb{Z}_p)$. (84m:57024a)

57S30 Discontinuous groups of transformations

- Kahn, Peter J. Steenrod's problem and k -invariants of certain classifying spaces. 84c:57030

secondary classifications:

- Bass, Hyman (with Lubotzky, Alexander) Automorphisms of groups and of schemes of finite type. (84c:14031)
 Kulkarni, Ravi S. Proper actions and pseudo-Riemannian space forms. (84b:53047)
 Pseudofree actions and Hurwitz's $8(g-1)$ theorem. (84c:57034)
 Lubotzky, Alexander See Bass, Hyman, (84c:14031)

57S99 None of the above, but in this section

- Elmendorf, A. D. Systems of fixed point sets. 84f:57029
 Siebenmann, L. C. (with Van Buskirk, James M.) Construction of irreducible homology 3-spheres with orientation reversing involution. 84g:57042
 Traczyk, Paweł Cancellation law for homotopy equivalent representations of groups of odd order. 84d:57022
 Van Buskirk, James M. See Siebenmann, L. C., 84g:57042

secondary classifications:

- Dejer, Italo José Coefficients of paracyclic polynomials. (See 84b:00011)
 Fried, David (with Goldman, William M.) Three-dimensional affine crystallographic groups. (84d:20047)
 Fujii, Michikazu (with Kōno, Susumu) A note on the local triviality of G -vector bundles. (84a:55014)
 Goldman, William M. See Fried, David, (84d:20047)
 Izumiya, Shyūichi Notes on stable equivariant maps. (84d:58011)
 (Jeanquartier, P.) See de Rham, Georges, (84d:01081)
 (Kervaire, M.) See de Rham, Georges, (84d:01081)
 Kōno, Susumu See Fujii, Michikazu, (84a:55014)
 Kosmann-Schwarzbach, Yvette Dérivées de Lie des morphismes de fibrés. [Lie derivatives of bundle morphisms] (84d:58088)
 Magasumov, G. S. See Rozenfel'd, B. A., (84g:14055)
 Morava, Jack Cohomology of some improper group actions. (84b:55035)
 Nestke, A. Cohomology of elliptic complexes and the fixed point formula of Atiyah and Bott. (84f:58106)
 Plante, J. F. Diffeomorphisms without periodic points. (84j:58102)
 de Rham, Georges ★Œuvres mathématiques. (French) [Mathematical works] (84d:01081)
 Rozenfel'd, B. A. (with Magasumov, G. S.) Cell decompositions of manifolds of forms of simplicity. (Russian) (84g:14055)
 Vo Thanh Liem Triviality of simple fiber-preserving actions of tori on Hilbert-cube-fiber bundles. (84m:57011)
 Wu, Ch'ing Mu A convenient formula for Kasparov's $\alpha_*(k_1, \dots, k_n)$. (84g:57030)
 Yano, Koichi Gromov invariant and S^1 -actions. (84g:53072)

57Txx Homology and homotopy of topological groups and related structures

57T05 Hopf algebras [See also 16A24.]

secondary classifications:

- Hubbuck, John R. Decomposing Hopf algebras over a field of nonzero characteristic. (84b:16012)
 Kochman, Stanley O. Polynomial generators for $H_*(BSU)$ and $H_*(BSO; \mathbb{Z}_2)$. (84a:55015)
 Sjödin, Gunnar Hopf algebras and derivations. (84a:16016)

57T10 Homology and cohomology of Lie groups

- Cathelineau, Jean-Louis Remarques sur l'homologie de $SO(n, \mathbb{R})$ considéré comme groupe discret. (English summary) [Remarks on the homology of $SO(n, \mathbb{R})$ viewed as a discrete group] 84a:57043

secondary classifications:

- Blanc, Philippe (with Wigner, David) Homologie des groupes de Lie et dualité de Poincaré. [Homology of Lie groups and Poincaré duality] (84c:22013)
 Casselman, W. A new nonunitarity argument for p -adic representations. (84c:22018)
 Smith, Larry A note on the realization of graded complete intersection algebras by the cohomology of a space. (84a:57044a)
 Wigner, David See Blanc, Philippe, (84c:22013)

57T15 Homology and cohomology of homogeneous spaces of Lie groups

- Đào Văn Trà On cohomology of homogeneous space. **84j:57031**
 Rader, Cary The Betti numbers of Grassmannians. **84i:57033**
 Smith, Larry A note on the realization of graded complete intersection algebras by the cohomology of a space. **84a:57044a**
 On the realization and classification of symmetric algebras as cohomology rings. **84a:57044b**
 Wu, Zhen De The KO-groups of Stiefel manifolds O_n/k . (Chinese) **84h:57025**

secondary classifications:

- (Bernstein, Joseph N.) See Segal, Graeme, (84h:14029)
 (Gel'fand, I. M.) See Segal, Graeme, (84h:14029)
 (Gel'fand, S. I.) See Segal, Graeme, (84h:14029)
 Lulevicius, Arunas Vector bundles on homogeneous spaces. (84b:55004)
 Segal, Graeme An introduction to the paper: "Schubert cells, and the cohomology of the spaces G/P " [Uspekhi Mat. Nauk **28** (1973), no. 3(171), 3-26; MR **55** #2941] by I. N. Bernstein [Joseph N. Bernstein], I. M. Gel'fand and S. I. Gel'fand. (84b:14029)
 Zhong, Jia Qing The cohomology on the extension spaces of classical domains. (Chinese) (84g:32049)
 A note on Schubert calculus. (84m:14062)

57T20 Homotopy groups of topological groups and homogeneous spaces

- Furukawa, Yasukuni Whitehead products in the complex Stiefel manifolds. **84k:57031**
 Gorbatshev, V. V. On a fibering of a compact homogeneous space. (Russian) **84a:57045**

secondary classifications:

- Carrell, James B. Vector fields and cohomology of G/B . (84k:32038)
 Meier, Willi Some topological properties of Kähler manifolds and homogeneous spaces. (84j:55005)
 Ringwood, G. A. (with Woodward, L. M.) Monopoles admit Fermi statistics. (84h:81079)
 Woodward, L. M. See Ringwood, G. A., (84h:81079)

57T25 Homology and cohomology of H -spaces

secondary classifications:

- Aguadé, J. (with Zabrodsky, A.) Algebraic and geometric models for H_0 -spaces. (84b:55015)
 Baues, Hans Joachim The homology sequence induced by the fibre sequence of a pinch map. (84i:55004)
 Kleiner, Samuel N. The cohomology of Chevalley groups of exceptional Lie type. (84i:20048)
 Zabrodsky, A. See Aguadé, J., (84b:55015)

57T30 Bar and cobar constructions [See also 18G55, 55Uxx.]

57T35 Applications of Eilenberg-Moore spectral sequences [See also 55R20, 55T20.]

secondary classifications:

- Bahri, Anthony P. Polynomial generators for $H_*(BSO; \mathbb{Z}_2)$, $H_*(BSpin; \mathbb{Z}_2)$ and $H_*(BO(8); \mathbb{Z}_2)$ arising from the Bar construction. (84h:55027)

57T99 None of the above, but in this section

- Markl, M. On the G -spaces having an S - G -CW-approximation by a G -CW-complex of finite G -type. **84m:57028**

secondary classifications:

- Hangan, Théodor Sur la structure tangente des grassmanniennes. [On the tangent structure of Grassmannians] (84j:53058)
 McDuff, Dusa Some canonical cohomology classes on groups of volume preserving diffeomorphisms. (84h:58154)

58-XX GLOBAL ANALYSIS, ANALYSIS ON MANIFOLDS [See also 32Cxx, 32Fxx, 46-XX, 47Hxx, 53Cxx; for geometric integration theory, see 49F20, 49F22.]

58-01 Elementary exposition, textbooks

- Abraham, Ralph H. (with Shaw, Christopher D.) ★Dynamics—the geometry of behavior. Part I. **84m:58001**
 (with Marsden, Jerrold E.; Ratiu, Tudor) ★Manifolds, tensor analysis, and applications. **84h:58001**
 Banchoff, Thomas (with Gaffney, Terence; McCrory, Clint) ★Cusps of Gauss mappings. **84a:58001**
 Choquet-Bruhat, Yvonne (with DeWitt-Morette, Cécile; Dillard-Bleick, Margaret) ★Analysis, manifolds and physics. **84a:58002**
 DeWitt-Morette, Cécile See Choquet-Bruhat, Yvonne; et al., **84a:58002**
 Dillard-Bleick, Margaret See Choquet-Bruhat, Yvonne; et al., **84a:58002**
 Ewald, Günter ★Probleme der geometrischen Analysis. (German) [Problems of geometric analysis] **84g:58001**
 Gaffney, Terence See Banchoff, Thomas; et al., **84a:58001**
 Guckenheimer, John Persistent properties of bifurcations. (See **84c:58002**)

- (Manning, Anthony) See Palis, Jacob, Jr.; et al., **84a:58004**
 Marsden, Jerrold E. See Abraham, Ralph H.; et al., **84h:58001**
 McCrory, Clint See Banchoff, Thomas; et al., **84a:58001**
 de Melo, Wellington See Palis, Jacob, Jr., **84a:58004**
 Of'shanskii, M. A. A short guide to modern geometry for physicists. **84a:58003**
 Palis, Jacob, Jr. (with de Melo, Wellington) ★Geometric theory of dynamical systems. **84a:58004**
 Ratiu, Tudor See Abraham, Ralph H.; et al., **84h:58001**
 Shaw, Christopher D. See Abraham, Ralph H., **84m:58001**
 Warner, Frank W. ★Foundations of differentiable manifolds and Lie groups. **84k:58001**

secondary classifications:

- Alsharnejad, Zahra General theory of Mathieu's equation and transversality of the map Φ to S_1 and S_2 . (84m:58069)
 Arnol'd, V. I. ★Теория равновесных точек. (Polish) [Theory of differential equations] (84k:58065)
 Braun, Martin ★Differential equations and their applications. (84g:34001a)
 ★Differential equations and their applications. (84g:34001b)
 Cherenack, Paul See Fortune, Barry, (84m:58018)
 Dieudonné, Jean ★Éléments d'analyse. Tome IX. Chapitre XXIV. (French) [Elements of analysis. Vol. IX. Chapter XXIV] (84a:57021)
 Dodson, M. M. Thom's catastrophe theorem. (See **84m:00013**)
 Fortune, Barry ★The geometry of the second hyperbolic umbilic catastrophe. (84m:58018)
 Garrido, Luis (with Simó, Carles) Some ideas about strange attractors. (84j:58076)
 Gauld, David B. ★Differential topology. (84k:57013)
 Gravesen, Jens Catastrophe theory and caustics. (84c:58044)
 Griffiths, Phillip ★Exterior differential systems and the calculus of variations. (84h:58007)
 Guckenheimer, John An introduction to chaotic motion and strange attractors. (84k:58145)
 Ikeda, Mineo Differentiable manifolds and economic structures. (84g:90005)
 Iooss, Gérard (with Joseph, Daniel D.) ★Элементарная теория устойчивости и бифуркации. (Russian) [Elementary stability and bifurcation theory] (84j:34001)
 Joseph, Daniel D. See Iooss, Gérard, (84j:34001)
 Kuo, Tree Char Some viewpoints on algebraic geometry and singularity theory. (84c:58036)
 (Moiseev, N. N.) See Iooss, Gérard; et al., (84j:34001)
 Olver, Peter J. ★Applications of Lie groups to differential equations. (84k:58197)
 Poenaru, Valentin On ergodic theory (from a topologist's standpoint). (See **84m:82009**)
 (Rubanovskii, V. N.) See Iooss, Gérard; et al., (84j:34001)
 Series, Caroline Non-Euclidean geometry, continued fractions, and ergodic theory. (84h:58086)
 Simó, Carles See Garrido, Luis, (84j:58076)
 Sinha, Dilip Kumar Catastrophe theory. (84h:58025)
 Stewart, I. N. Catastrophe theory in physics. (84h:58026)
 Sundermeyer, Kurt ★Constrained dynamics. (84f:58051)
 Szlenk, Wiesław ★Wstęp do teorii gładkich układów dynamicznych. (Polish) [Introduction to the theory of smooth dynamical systems] (84c:58066)
 Triebel, Hans ★Analysis und mathematische Physik. (German) [Analysis and mathematical physics] (84c:00003)
 (Wojtkowski, Maciej) See Arnol'd, V. I., (84k:58065)

58-02 Advanced exposition (research surveys, monographs, etc.)

- Marsden, Jerrold E. Four applications of nonlinear analysis to physics and engineering. **84a:58005**

secondary classifications:

- Abraham, Ralph H. (with Marsden, Jerrold E.; Ratiu, Tudor) ★Manifolds, tensor analysis, and applications. (84h:58001)
 Arnol'd, V. I. (with Varchenko, A. N.; Gusein-Zade, S. M.) ★Особенности дифференцируемых отображений. (Russian) [Singularities of differentiable mappings] (84m:58016)
 Singularities of ray system's. (Russian) (84m:58037)
 Avez, André Symplectic group, quantum mechanics and Anosov's systems. (84c:58027)
 (Azé, Dominique) See Blot, Joël, (84i:58041)
 Banchoff, Thomas (with Gaffney, Terence; McCrory, Clint) ★Cusps of Gauss mappings. (84a:58001)
 Baum, Helga ★Spin-Strukturen und Dirac-Operatoren über pseudoriemannschen Mannigfaltigkeiten. (German) [Spin structures and Dirac operators on pseudo-Riemannian manifolds] (84m:58160)
 Berger, Mel S. (with Church, P. T.; Timourian, J. G.) An application of singularity theory to nonlinear elliptic partial differential equations. (84c:58031)
 Blot, Joël ★Systèmes hamiltoniens: leurs solutions périodiques. (French) [Hamiltonian systems: their periodic solutions] (84i:58041)
 Borisovich, Yu. G. Global analysis and some problems for differential equations. (Russian) (84c:58020)
 Brooks, Robert Some Riemannian and dynamical invariants of foliations. (84j:58098)
 Browder, Felix E. Fixed point theory and nonlinear problems. (84c:58027)
 Bruce, J. W. (with Giblin, P. J.) Generic geometry. (84m:58017)
 Brumovsky, Pavol (with Medved', Milan) Bifurcations of nongradient dynamic systems. (Slovak) (84a:58065)
 Campbell, Patrick A review of recent developments in the theory and applications of geometric quantisation. (84c:58096)
 Chow, Shui Nee (with Hale, Jack K.) ★Methods of bifurcation theory. (84c:58019)
 Church, P. T. See Berger, Mel S.; et al., (84c:58031)

- Dufour, Jean-Paul Singularités d'applications différentiables. [Singularities of differentiable mappings] (84c:58009)
- Eckmann, Jean-Pierre Routes to chaos with special emphasis on period doubling. (See 84j:58005)
- Eells, J. Variational theory in fibre bundles: examples. (84c:58048)
- Elworthy, K. David ★Stochastic differential equations on manifolds. (84d:58000)
- Farmer, J. Doyno Information dimension and the probabilistic structure of chaos. (84c:58095)
- Flockerzi, D. See Knobloch, H. W., (84i:58087)
- Franks, John M. ★Homology and dynamical systems. (84f:58067)
- Fukuda, Takuo Theory of singular points of differentiable mappings. (Japanese) (84j:58032)
- Gaffney, Terence See Banchoff, Thomas; et al., (84c:58001)
- Giblin, P. J. See Bruce, J. W., (84m:58017)
- Gusein-Zade, S. M. See Arnol'd, V. I.; et al., (84m:58016)
- Hale, Jack K. See Chow, Shui Nee, (84c:58019)
- Haraux, Alain Remarks on Hamiltonian systems. (84g:58040)
- Hénon, Michel Numerical exploration of Hamiltonian systems. (84c:58074)
- Klingenberg, Wilhelm ★Riemannian geometry. (84j:53001)
- Knobloch, H. W. (with Flockerzi, D.) Invariante Mannigfaltigkeiten, Stabilität und Verzweigung bei gewöhnlichen Differentialgleichungen. [Invariant manifolds, stability and bifurcation in ordinary differential equations] (84i:58087)
- Kozlov, V. V. Integrability and nonintegrability in Hamiltonian mechanics. (Russian) (84c:58076)
- Lieberman, M. A. (with Tennyson, Jeffrey L.) Chaotic motion along resonance layers in near-integrable Hamiltonian systems with three or more degrees of freedom. (84c:58061)
- (Lighthill, James) See Thompson, J. M. T., (84g:58022)
- Liu, Wang Jin The study of topological entropy in dynamical systems. (Chinese) (84m:58075)
- Malomed, B. A. See Zel'dovich, Ya. B., (84m:58101)
- Marsden, Jerrold E. See Abraham, Ralph H.; et al., (84h:58001)
- McCoy, Clint See Banchoff, Thomas; et al., (84c:58001)
- Medved', Milan See Brunovsky, Pavol, (84c:58065)
- Nacinovich, Mauro On the solvability of systems of differential equations. (Italian) (84m:58133)
- Nottrot, Roel ★Optimal processes on manifolds. (84h:49044)
- Pérez, Rafael Strange attractors. (Spanish. English summary) (84d:58055)
- Prisastro, Agostino Gauge geometrodynamics. (84c:83045)
- Rajtu, Tudor See Abraham, Ralph H.; et al., (84c:58001)
- Rogers, Colin (with Shadwick, W. F.) ★Bäcklund transformations and their applications. (84c:58002)
- Saperstone, Stephen H. ★Semidynamical systems in infinite-dimensional spaces. (84m:58024)
- Shadwick, W. F. See Rogers, Colin, (84c:58002)
- Sternheimer, D. Deformation theory applied to quantization and group representations. (84i:58100)
- Stewart, I. N. Catastrophe theory in physics. (84h:58026)
- Tennyson, Jeffrey L. See Lieberman, M. A., (84c:58061)
- Thompson, J. M. T. ★Instabilities and catastrophes in science and engineering. (84g:58022)
- Timourian, J. G. See Berger, Mel S.; et al., (84c:58031)
- Tineo, Antonio ★Introducción a los sistemas dinámicos diferenciables. (Spanish) [Introduction to differentiable dynamical systems] (84c:58067)
- Troger, H. Über chaotisches Verhalten einfacher mechanischer Systeme. [On chaotic behavior of simple mechanical systems] (84f:58085)
- Trotman, David Comparing regularity conditions on stratifications. (84j:58021)
- Uhlenbeck, Karen K. Conservation laws and their application in global differential geometry. (84c:58057)
- Varchenko, A. N. See Arnol'd, V. I.; et al., (84m:58016)
- Whitley, David Discrete dynamical systems in dimensions one and two. (84h:58079)
- Woodhouse, Nicholas ★Geometric quantization. (84j:58058)
- Yu, Shu Xiang Some problems of dynamical systems on 2-manifolds. (Chinese) (84c:58068)
- Zeeman, E. Christopher Bifurcation and catastrophe theory. (84j:58036)
- Zel'dovich, Ya. B. (with Malomed, B. A.) Complex wave regimes in distributed dynamical systems (review). (84m:58101)
- 58-03 Historical (must also be assigned at least one classification number from Section 01)
- secondary classifications:
- Fufaev, N. A. See Neimark, Yu. I., (84i:93002)
- Martinet, Jean A propos d'un travail de Christoffel sur les équations différentielles. (English summary) [On a work of Christoffel concerning differential equations] (84d:01036)
- Neimark, Yu. I. (with Fufaev, N. A.) The work of A. A. Andronov's Gor'kii school on the dynamics of nonholonomic systems. (84i:93002)
- Rassias, Themistocles M. Morse theory and Plateau's problem. (84h:58040)
- Weinstein, Alan Sophus Lie and symplectic geometry. (84c:01040)
- 58-04 Explicit machine computation and programs (not the theory of computation or programming)
- Doedel, Eusebius J. AUTO: a program for the automatic bifurcation analysis of autonomous systems. 84b:58001
- Ganzha, V. G. (with Meleshko, S. V.; Murzin, F. A.; Shapeev, V. P.; Yanenko, N. N.) Computer realization of an algorithm for investigating the compatibility of systems of partial differential equations. (Russian) 84d:58001
- Meleshko, S. V. See Ganzha, V. G.; et al., 84d:58001
- Murzin, F. A. See Ganzha, V. G.; et al., 84d:58001
- Shapeev, V. P. See Ganzha, V. G.; et al., 84d:58001
- Yanenko, N. N. See Ganzha, V. G.; et al., 84d:58001
- secondary classifications:
- Alexandrowicz, Zeev See Termonia, Yves, (84c:58155)
- All, M. K. (with Somorjai, R. L.) Reappearance of ordered motion in nonintegrable Hamiltonian systems. The strong coupling case. (84f:58075)
- Arter, Wayne Ergodic stream-lines in steady convection. (84k:76060)
- Bartlett, James H. Limits of stability for an area-preserving polynomial mapping. (84g:58041)
- Batalova, Z. S. (with Dubrovina, I. A.; Neimark, Yu. I.; Orlova, E. E.) On the structure of the phase space and bifurcations in the discrete Lorenz model of convective turbulence. (84j:58068)
- Beiersdorfer, Peter (with Wersinger, Jean-Marie; Trève, Yvain M.) Topology of the invariant manifolds of period-doubling attractors for some forced nonlinear oscillators. (84c:58134)
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- Kuz'minov, V. I. See Gol'dshtein, V. M.; et al., 84g:58003
- Lee, Sung J. Index and nonhomogeneous conditions for linear manifolds. 84e:58002
- Mukhiddinov, S. R. Determination of a differential form from its integrals along geodesics. (Russian) (See 84m:35003)
- Obădeanu, Virgil ★Aplicații ale formelor diferențiale exterioare în mecanică și electrodinamică. (Romanian) [Applications of exterior differential forms in mechanics and electrodynamics] 84h:58005
- Applications of exterior differential forms in the electrodynamics of continuous inhomogeneous media. (See 84g:53003)
- Pelov, Ts. R. A class of mappings preserving a closed differential form on a smooth manifold. 84f:58003
- Shvedov, I. A. See Gol'dshtein, V. M.; et al., 84g:58003
- Sikorav, Jean-Claude Formes différentielles fermées non singulières sur le n -torus. [Nonsingular closed differential forms on the n -torus] 84d:58002
- Turiel, Francisco Javier Some remarks concerning the transitive geometric structures defined by exterior forms. (Spanish) 84e:58003
- Varela, Fernando See Gonzalo, Jesús, 84i:58004
- Zhitomirskii, M. Ya. A criterion for linearization of differential forms. (Russian) 84j:58009

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- Arens, Richard The conserved currents for the Maxwellian field. (84m:78006)
- Bauderon, Michel Le problème inverse du calcul des variations. (English summary) [The inverse problem of the calculus of variations] (84i:58038)

- Berline, Nicole (with Vergne, Michèle) Zéros d'un champ de vecteurs et classes caractéristiques équivariantes. [Zeros of a vector field and equivariant characteristic classes] (84i:58114)
- Bonan, Edmond Sur l'algèbre extérieure d'une variété presque hermitienne quaternionique. (English summary) [Exterior algebra of a quaternionic almost Hermitian manifold] (84e:53077)
- Burke, William L. Manifestly parity invariant electromagnetic theory and twisted tensors. (84e:78001)
- Cerf, Jean 1-formes fermées non singulières sur les variétés compactes de dimension 3. [Nonsingular closed 1-forms on compact manifolds of dimension 3] (84i:57025)
- Chernenko, V. N. Typical $(n-1)$ -stable germs of Pfaffian equations in \mathbb{R}^n . (Russian) (84j:58011)
- (Claussen, Carsten) See Felsager, Bjorn, (84k:81006)
- Damiano, David B. Vanishing of characteristic forms on the orbits of the Cartan subgroup. (84b:57015)
- Diosi, L. Comments on the nonabelian Stokes theorem. (84k:81072)
- Dufresnoy, Alain Un exemple de champ magnétique dans \mathbb{R}^n . [Example of a magnetic field in \mathbb{R}^n] (84k:78005)
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- Gelfand, I. M. (with MacPherson, Robert D.) Geometry in Grassmannians and a generalization of the dilogarithm. (84b:57014)
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- Gutt, Simone Invariance of Maxwell's equations. (See 84d:53003)
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- Hills, Michel Opérateurs de signature sur une variété lipschitzienne et modules de Kasparov non bornés. (English summary) [Signature operators on Lipschitz manifolds and unbounded Kasparov modules] (84k:58215)
- Hirsch, Morris W. See Goldman, William M., (84f:53026)
- Joly, Jean-Luc See Hanouz, B., (84f:46050)
- Klein, J. Projective sprays and connections. (See 84g:53003)
- Łojasiewicz, Stanisław, Jr. (with Tomassini, Giuseppe) Valeurs au bord des formes holomorphes. [Boundary values of holomorphic forms] (84a:32013)
- MacPherson, Robert D. See Gelfand, I. M., (84b:57014)
- Marchetti, P. A. (with Percacci, Roberto) On the vacuum structure of gauge differential forms. (84a:53034)
- Message, A. Duality transformation in statistical mechanics as Poincaré duality in differential geometry. Some applications to vortices' configurations. (84j:82050)
- van Nieuwenhuizen, P. Supergravity. (84e:83057)
- Nikolaenko, V. M. (with Stanyukovich, K. P.) Gravitational pseudoparticles: quantum and classical problems in the gauge theory of gravitation. (Russian) (84j:83056)
- Percacci, Roberto See Marchetti, P. A., (84a:53034)
- Shmelyer, G. S. Invariant operators on a symplectic supermanifold. (Russian) (84j:17007)
- Stanyukovich, K. P. See Nikolaenko, V. M., (84j:83056)
- Tomassini, Giuseppe See Łojasiewicz, Stanisław, Jr., (84a:32013)
- Trostel, Robert Geometrical treatment of nonpotential interactions: the exterior variational calculus, dynamical systems, physical 1-forms and variational selfadjointness. (84a:70012)
- Vergne, Michèle See Berline, Nicole, (84i:58114)
- Zhitomirskii, M. Ya. Finite determinacy of differential forms. (Russian) (84c:58012)

58A12 de Rham theory [See also 14Fxx.]

- Falcitelli, Maria (with Pastore, Anna Maria) Cohomology on an integrable manifold in the generalized sense and projectively equivalent pseudoconnections. (Italian. English summary) (84i:58005)
- Pastore, Anna Maria See Falcitelli, Maria, (84i:58005)
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- Hebda, James J. See Blumenthal, Robert A., (84j:53042)
- (Jeanquartier, P.) See de Rham, Georges, (84d:01081)
- Karoubi, Max (with Leruste, Christian) ★Méthodes de géométrie différentielle en topologie algébrique. Partie I, II. (French) [Methods of differential geometry in algebraic topology. Part I, II] (84c:57001)
- (Kervaire, M.) See de Rham, Georges, (84d:01081)
- Lambe, Larry A. (with Priddy, Stewart B.) Cohomology of nilmanifolds and torsion-free, nilpotent groups. (84k:55018)
- Leruste, Christian See Karoubi, Max, (84c:57001)
- McCleary, John Cartan's cohomology theories and spectral sequences. (84f:55019)
- Morvan, Jean-Marie Quelques invariants topologiques en géométrie symplectique. (English summary) [Some topological invariants in symplectic geometry] (84j:58050)
- Nagase, Masayoshi de Rham-Hodge theory on a manifold with cone-like singularities. (84h:58006)
- Priddy, Stewart B. See Lambe, Larry A., (84k:55018)
- de Rham, Georges ★Œuvres mathématiques. (French) [Mathematical works] (84d:01081)

58A14 Hodge theory [See also 14C30, 14Fxx, 32Cxx.]

- Baker, Garth A. Combinatorial Laplacians and Sullivan-Whitney forms. (84m:58005)
- Cheeger, Jeff (with Goresky, R. Mark; MacPherson, Robert D.) L^2 -cohomology and intersection homology of singular algebraic varieties. (84f:58005)

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Egele, U. See Sharma, C. S., (84c:58004)

Goresky, R. Mark See Cheeger, Jeff; et al., (84f:58005)

MacPherson, Robert D. See Cheeger, Jeff; et al., (84f:58005)

Nagase, Masayoshi de Rham-Hodge theory on a manifold with cone-like singularities. (84h:58006)

L^2 -cohomology and intersection homology of stratified spaces. (84m:58006)

Picard, Rainer Ein Hodge-Satz für Mannigfaltigkeiten mit nicht-glatten Rand. (English summary) [A Hodge theorem for manifolds with nonsmooth boundary] (84i:58006)

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- Dothan, Y. See Banks, T.; et al., (84k:81096)
- Glaser, Moses Stokes' theorem and parabolicity of Riemannian manifolds. (84c:31007)
- Horn, David See Banks, T.; et al., (84k:81096)
- Ihrig, Edwin Hodge theory used to produce finite self-energy models of the electron. (84h:78004)
- Lewandowski, Jerzy (with Tafel, Jacek; Trautman, Andrzej) Geometrical aspects of gauge conditions. (84m:58032)
- Manabe, Shojiro Stochastic intersection number and homological behaviors of diffusion processes on Riemannian manifolds. (84b:58110)
- Shaw, Mei Chi Hodge theory on domains with conic singularities. (84c:58078)
- Steenbrink, J. H. M. Hodge theory: analysis or geometry? (84c:58012)
- Tafel, Jacek See Lewandowski, Jerzy; et al., (84m:58032)
- Trautman, Andrzej See Lewandowski, Jerzy; et al., (84m:58032)
- Warner, N. P. Green functions on CP^n . (84g:81045)

58A15 Exterior differential systems (Cartan theory)

- Aminov, Yu. A. A multidimensional analogue of the "sine-Gordon" equation and the motion of a rigid body. (Russian) (84j:58010a)
- Correction: "A multidimensional analogue of the 'sine-Gordon' equation and the motion of a rigid body". (Russian) (84j:58010b)
- Bilchev, S. I. Generalized stream functions for the asymmetric case of systems of two first-order partial differential equations. (Russian) (See 84c:34002)
- Boiti, M. (with Tu, Gui Zhang) Bäcklund transformations via gauge transformations. (Italian and Russian summaries) (84c:58001)
- Cavalleri, V. Groupe d'invariance de couples de 1-formes holomorphes. [Invariance group of pairs of holomorphic 1-forms] (84f:58007)
- Edelen, Dominic G. B. Horizontal distributions on spaces of fibers. (84m:58008)
- Forgács, Peter (with Horváth, Zsolt; Palla, László) Generating multimonoles by soliton theoretic method. (84a:58010)
- Griffiths, Phillip ★Exterior differential systems and the calculus of variations. (84h:58007)
- Guo, Han Ying (with Wu, Ke; Xiang, Yan Yu) $SL(2, \mathbb{R})$ principal prolongation structures of soliton equations and their conservation laws. (84g:58005)
- Hermann, Robert Geometric construction and properties of some families of solutions of nonlinear partial differential equations. I. (84c:58006)
- Horváth, Zsolt See Forgács, Peter; et al., (84c:58006)
- Libermann, Paulette Sur le problème d'équivalence des systèmes de Pfaff non complètement intégrables. [On the equivalence problem for not completely integrable Pfaffian systems] (84g:58006)
- Makeev, G. N. Some criteria of involutivity of systems of Pfaffian equations. (Russian) (84b:58002)
- Molino, Pierre Systèmes différentiels extérieurs et équations d'évolution. [Exterior differential systems and evolution equations] (84c:58007)
- Palla, László See Forgács, Peter; et al., (84c:58010)
- Rogers, Colin (with Shadwick, W. F.) ★Bäcklund transformations and their applications. (84c:58002)
- Shadwick, W. F. See Rogers, Colin, (84c:58002)
- Steeb, Willi-Hans (with Strampp, W.) Diffusion equations and Lie and Lie-Bäcklund transformation groups. (84a:58011)
- Strampp, W. See Steeb, Willi-Hans, (84a:58011)
- Trèves, François ★Approximation and representation of functions and distributions annihilated by a system of complex vector fields. (84c:58008)
- Tu, Gui Zhang See Boiti, M., (84c:58001)
- Wu, Ke See Guo, Han Ying; et al., (84g:58005)
- Xiang, Yan Yu See Guo, Han Ying; et al., (84g:58005)
- Yamaguchi, Keizo On involutive systems of second order of codimension 2. (84c:58003)

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- Ablovitz, Mark J. (with Segur, Harvey) ★Solitons and the inverse scattering transform. (84a:35251)
- Bonora, L. (with Cotta-Ramusino, P.) Some remarks on BRS transformations, anomalies and the cohomology of the Lie algebra of the group of gauge transformations. (84g:81030)
- Chudnovsky, D. V. (with Chudnovsky, Gregory V.) Bäcklund transformations for linear differential equations and Padé approximations. I. (84a:58046)
- Chudnovsky, Gregory V. See Chudnovsky, D. V., (84a:58046)
- Cotta-Ramusino, P. See Bonora, L., (84g:81030)
- Edelen, Dominic G. B. A four-dimensional formulation of defect dynamics and some of its consequences. (84c:73078)
- Ermolaev, Yu. B. On the question of Cartan prolongations. (Russian) (84h:17003)

- (Fey, B.) See Höder, Ernst, (84c:35076)
- Gautrin, Henri-François Bäcklund transformation according to Gerdzikov and Kullish for the Korteweg-de Vries equation. (84a:35258)
- Gheorghiev, Gh. On deformations in Riemannian category. (84i:53032)
- Grushko, P. Ya. Conjugately transitive structures. (Russian) (84i:53034)
- Guo, Han Ying (with Wu, Ke; Xiang, Yan Yu; Wang, Shi Kun) Prolongation structure approach to the group-theoretical technique for generating stationary axisymmetric space-times. (84i:83041)
- Höder, Ernst Approximation von Extremalflächenstücken (hyperbolischen Typs) durch charakteristische räumliche Vierecke. (English summary) [Approximation of pieces of extremal surfaces (of hyperbolic type) by characteristic spatial quadrangles] (84c:35076)
- Kaloupekides, Nicholas Prolongations and Lyapunov functions in control systems. (84m:58129)
- Khabirov, S. V. Motion of an ideal fluid with a free boundary with a nonlinear velocity field. (Russian) (84i:35014)
- Kimura, Toshihisa On the isomonodromic deformation for linear ordinary differential equations of the second order. II. (84i:34021)
- Kingston, J. G. (with Rogers, Colin) Reciprocal Bäcklund transformations of conservation laws. (84b:35107)
- Kumpera, A. (with Ruiz, Ceferino) Sur l'équivalence locale des systèmes de Pfaff en drapeau. [On the local equivalence of Pfaffian systems in flags] (84i:58011)
- Kuranishi, Masatake On a construction of the normal Cartan connections for CR-structures. (See 84i:35006)
- Leibbrandt, George (with Wang, Shein Shion; Zamani, Nader) Bäcklund generated solutions of Liouville's equation and their graphical representations in three spatial dimensions. (84a:35265)
- Leo, M. (with Leo, R. A.; Soliani, G.; Solombrino, L.; Martina, L.) Nonlinear evolution equations and nonabelian prolongations. (84j:35146)
- Leo, R. A. See Leo, M.; et al., (84j:35146)
- Lopatkin, A. K. On the question of constructing an integral manifold of a Pfaffian system in involution. (Russian) (84c:58013)
- Asymptotic splitting of almost nonlinear systems. (Russian) (84c:58039)
- (Marmi, M.) See Höder, Ernst, (84c:35076)
- Martina, L. See Leo, M.; et al., (84j:35146)
- Mori, Yasuko On τ functions of a class of Painlevé type equations. I. (84b:34019)
- Papadopoulos, Demetrios (with Witten, Louis) Generating solutions of self-dual SU(3) gauge fields. (84b:81074)
- Rogers, Colin See Kingston, J. G., (84b:35107)
- Ruiz, Ceferino See Kumpera, A., (84c:58011)
- Schwarz, Fritz Franz Symmetries of the two-dimensional Korteweg-de Vries equation. (84a:35273)
- Segur, Harvey See Ablowitz, Mark J., (84a:35251)
- Soliani, G. See Leo, M.; et al., (84j:35146)
- Solombrino, L. See Leo, M.; et al., (84j:35146)
- Ueno, Kimio Monodromy preserving deformation and its application to soliton theory. II. (84i:58136)
- Wang, Shein Shion See Leibbrandt, George; et al., (84a:35265)
- Wang, Shi Kun See Guo, Han Ying; et al., (84i:83041)
- Witten, Louis See Papadopoulos, Demetrios, (84b:81074)
- Wu, Guang Lei Generalization of Cartan's lemma. (84j:15028)
- Wu, Ke See Guo, Han Ying; et al., (84i:83041)
- Xiang, Yan Yu See Guo, Han Ying; et al., (84i:83041)
- Zamani, Nader See Leibbrandt, George; et al., (84a:35265)
- 58A17 Pfaffian systems
- Chernenko, V. N. Typical $(n-1)$ -stable germs of Pfaffian equations in \mathbb{R}^n . (Russian) 84j:58011
- Gardner, Robert B. Differential geometric methods interfacing control theory. 84c:58009
- Gerard, Raymond Meromorphic forms solutions of completely integrable Pfaffian systems with regular singularities. 84a:58012
- Grudo, E. I. On the theory of stability of ordinary differential systems and Pfaffian systems. (Russian) 84m:58009
- Hsiao, Sherman Hsing-Chung Reduction of Pfaff systems with structural equations. 84c:58010
- Kumpera, A. (with Ruiz, Ceferino) Sur l'équivalence locale des systèmes de Pfaff en drapeau. [On the local equivalence of Pfaffian systems in flags] 84i:58011
- Lasyi, P. G. On the theory of stability in the first approximation of completely integrable Pfaffian systems. (Russian) 84c:58012
- Lopatkin, A. K. On the question of constructing an integral manifold of a Pfaffian system in involution. (Russian) 84c:58013
- Luk'yanov, A. G. (with Utkin, V. I.) Methods of reducing equations for dynamic systems to a regular form. 84c:58004
- Molino, Pierre Cohomologie partielle et équations différentielles. [Partial cohomology and differential equations] (See 84a:53001)
- Moussu, Robert Feuilletages singuliers. [Singular foliations] 84c:58005
- Pneumatikos, Spyros N. Sur les formes de Pfaff et les structures de contact singulières génériques. (English summary) [On Pfaffian differential forms and generic singular contact structures] 84b:58003
- Ruiz, Ceferino See Kumpera, A., 84c:58011
- Turiel, Francisco Javier Classification locale d'une 2-forme transitive de rang 4 sur une 4-variété. (English summary) [Local classification of a transitive 2-form of rank 4 on a 4-manifold] 84c:58014
- Utkin, V. I. See Luk'yanov, A. G., 84c:58004
- Vasilievich, N. D. Linear Pfaffian equations. (Russian) 84c:58005
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- Colautti, Maria Pia Eigenvalue problems for incompressible elastic bodies. (84b:73022)
- Dodd, Roger K. Prolongation structure techniques for the new hierarchy of Korteweg-de Vries equations. (See 84c:35001)
- van den Essen, A. R. P. (with Levelt, A. H. M.) Irregular singularities in several variables. (84c:13031)
- Estabrook, Frank B. Moving frames and prolongation algebras. (84c:58065)
- Ganzha, V. G. (with Meleshko, S. V.; Murzin, F. A.; Shapeev, V. P.; Yanenko, N. N.) Computer realization of an algorithm for investigating the compatibility of systems of partial differential equations. (Russian) (84d:58001)
- Guo, Han Ying (with Wu, Ke; Xiang, Yan Yu; Wang, Shi Kun) On the prolongation structure of Ernst equation. (84b:58004)
- Hermann, Robert The theory of equivalence of Pfaffian systems and input systems under feedback. (84g:93010)
- The differential geometric structure of general mechanical systems from the Lagrangian point of view. (84f:70024)
- Geometric construction and properties of some families of solutions of nonlinear partial differential equations. I. (84c:58006)
- Jimbo, Michio (with Miwa, Tetsuji) Deformation of linear ordinary differential equations. I, II. (84i:14009)
- See also Sato, Mikio; et al., (84m:81124)
- Klarès, Bernard (with Sadler, Charles) Systèmes de Pfaff et algèbres de Lie libres. Étude d'une singularité polaire normale. (English summary) [Pfaffian forms and free Lie algebras. Study of a normal polar singularity] (84g:17022)
- Levelt, A. H. M. See van den Essen, A. R. P., (84c:13031)
- Libermann, Paulette Sur le problème d'équivalence des systèmes de Pfaff non complètement intégrables. [On the equivalence problem for not completely integrable Pfaffian systems] (84g:58006)
- Lychagin, V. V. Characteristic classes of solutions of differential equations. (Russian) (84c:58241)
- Makeev, G. N. Some criteria of involutivity of systems of Pfaffian equations. (Russian) (84b:58002)
- Martinet, Jean (with Ramis, Jean-Pierre) Problèmes de modules pour des équations différentielles non linéaires du premier ordre. [Moduli problems for first-order nonlinear differential equations] (84c:34011)
- Meleshko, S. V. See Ganzha, V. G.; et al., (84d:58001)
- Miwa, Tetsuji See Jimbo, Michio, (84i:14009) and Sato, Mikio; et al., (84m:81124)
- Molino, Pierre Systèmes différentiels extérieurs et équations d'évolution. [Exterior differential systems and evolution equations] (84c:58007)
- Murzin, F. A. See Ganzha, V. G.; et al., (84d:58001)
- Pisanelli, Domingos The second Lie theorem in the group $Gh(n, C)$. (84a:22033)
- Ramis, Jean-Pierre See Martinet, Jean, (84c:34011)
- Sadler, Charles See Klarès, Bernard, (84g:17022)
- Sato, Mikio (with Miwa, Tetsuji; Jimbo, Michio) Holonomic quantum fields. II. The Riemann-Hilbert problem. (84m:81124)
- Senashov, S. I. Group classification of equations of the plane inhomogeneous theory of elasticity. (Russian) (84g:35008)
- Shapeev, V. P. See Ganzha, V. G.; et al., (84d:58001)
- Strampp, W. Bäcklund transformations for diffusion equations. (84d:58087)
- Valanis, K. C. Partial integrability as the basis for the existence of entropy in irreversible systems. (German and Russian summaries) (84g:73013)
- Wang, Shi Kun See Guo, Han Ying; et al., (84b:58004)
- Wojciechowski, Stefan The analogue of the Bäcklund transformation for integrable many-body systems. (84g:58098a)
- Corrigendum: "The analogue of the Bäcklund transformation for integrable many-body systems". (84g:58098b)
- Wu, Ke See Guo, Han Ying; et al., (84b:58004)
- Xiang, Yan Yu See Guo, Han Ying; et al., (84b:58004)
- Yanenko, N. N. See Ganzha, V. G.; et al., (84d:58001)
- 58A20 Jets
- Dhooghe, P. F. J. Contact transformations, contact algebras and lifts on a jet bundle. 84f:58008
- Ferraris, Marco (with Francaviglia, Mauro; Reina, Cesare) Sur les fibrés d'objets géométriques et leurs applications physiques. (English summary) [Bundles of geometric objects and their physical applications] 84c:58015
- (with Francaviglia, Mauro; Reina, Cesare) A constructive approach to bundles of geometric objects on a differentiable manifold. 84c:58006
- Francaviglia, Mauro See Ferraris, Marco; et al., 84c:58006 and 84c:58015
- Ganczarszewicz, Jacek Des relevements des fonctions aux fibres naturelles. (English summary) [Liftings of functions to natural bundles] 84d:58003
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- Guo, Han Ying (with Wu, Ke; Xiang, Yan Yu; Wang, Shi Kun) On the prolongation structure of Ernst equation. 84b:58004
- Janyška, Josef (with Kolář, Ivan) Lie derivatives on vector bundles. 84b:58005a
- On the Lie algebra of vertical prolongation operators. 84j:58012
- Klein, Tomáš Connections on higher order tangent bundles. (Czech summary) 84b:58006
- Kolář, Ivan Lie derivatives and higher order Lagrangians. 84b:58005b
- See also Janyška, Josef, 84b:58005a
- Pavliková, Elena A remark on semiholonomic jets. (Slovak. English, German and Russian summaries) 84a:58013
- Reina, Cesare See Ferraris, Marco; et al., 84c:58006 and 84c:58015
- Vosylus, R. Geometry of systems of differential equations. III. Intrinsic formalization of differential-geometric structures. (Russian) 84j:58013a
- Geometry of systems of differential equations. IV. The Lie-Bäcklund determining system. (Russian) 84j:58013b
- Wang, Shi Kun See Guo, Han Ying; et al., 84b:58004

- White, James Enrico ★The method of iterated tangents with applications in local Riemannian geometry. **84i:58007**
 Wu, Ke See Guo, Han Ying; et al. **84b:58004**
 Xiang, Yan Yu See Guo, Han Ying; et al. **84b:58004**
 Yamaguchi, Keizo Geometrization of jet bundles. **84i:58008**

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- Asano, Nariyoshi Semicommutative operators for nonlinear evolution equations. **(84i:58102)**
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 Brodersen, Hans A note on sufficient and nonsufficient jets. **(84i:58021)**
 Dodson, C. T. J. (with Radivoević, M. S.) On the structure of the frame bundle of order two. **(84d:53026)**
 (with Radivoević, M. S.) Tangent and frame bundles of order two. **(84a:53032)**
 Fava, Franco Classical transformations and jet bundles. (Italian) **(84m:58118)**
 Gravesen, Jens Whitney C^∞ -topologies and the Baire property. **(84g:58013)**
 Hermann, Robert The differential geometric structure of general mechanical systems from the Lagrangian point of view. **(84f:70024)**
 Leiko, S. G. Linear P -geodesic diffeomorphisms of tangent bundles of higher orders and higher degrees. (Russian) **(84m:53055)**
 Radivoević, M. S. See Dodson, C. T. J., **(84a:53032)** and **(84d:53026)**

58A25 Currents

- Craioveanu, M. (with Puta, Mircea) de Rham-type currents on Riemannian foliated manifolds. (See **84g:53003**)
 (with Puta, Mircea) A chain homotopy theorem for a class of first order linear differential operators. **84j:58014**
 Puta, Mircea Currents on tangent manifolds and generalized mechanical systems. **84j:58015**
 Remarks on the de Rham's division theorem. **84h:58008**
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 Some remarks on the wave front of a de Rham current. **84j:58016**
 On the stability of de Rham currents. **84j:58017**
 See also Craioveanu, M., **84j:58014** and (See **84g:53003**)

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- Burke, William L. Manifestly parity invariant electromagnetic theory and twisted tensors. **(84c:78001)**
 Harvey, Reese (with Lawson, H. Blaine, Jr.) Calibrated foliations (foliations and mass-minimizing currents). **(84h:53095)**
 Laville, Guy Spectre d'opérateurs sur certaines variétés de Cauchy-Riemann et champ magnétique. (Italian summary) [Spectrum of operators on certain Cauchy-Riemann manifolds and magnetic field] **(84k:32027)**
 Lawson, H. Blaine, Jr. See Harvey, Reese, **(84h:53095)**
 Talyshev, A. A. Higher-order tangent transformations of partial differential systems. (Russian) **(84i:58137)**

58A30 Vector distributions (subbundles of the tangent bundles)

- Byrnes, Christopher I. (with Krener, Arthur J.) On the existence of globally (f, g) -invariant distributions. **84j:58018**
 Crampin, M. Generalized Bianchi identities for horizontal distributions. **84i:58009**
 Dragomir, Sorin p -distributions on differentiable manifolds. **84m:58010**
 Krener, Arthur J. See Byrnes, Christopher I., **84j:58018**
 Măcevei, Elena Applications of the differential form method in the geometry of real Δ^n -structures on a manifold. **84j:58019**
 Motreanu, Dumitru A characterization of transversality to distributions. **84i:58010**
 Osipenko, G. S. Integration of fields of planes and branching foliations. (Ukrainian. Russian summary) **84j:58020**
 Integrability of invariant plane fields, separation and partial hyperbolicity. (Russian) **84i:58016**
 Pradines, Jean Exemples de feuillages et d'ombrages associés aux variétés à bord anguleux. [Examples of foliations and shadings associated with manifolds with an angular boundary] **84f:58009**
 Rawnsley, J. H. On the rank of horizontal maps. **84b:58007**

secondary classifications:

- Andrzejczak, Grzegorz On regular tangent covectors, regular differential forms, and smooth vector fields on a differential space. **(84g:58007)**
 Barros, Manuel (with Urbano, Francisco) Topology of quaternion CR-submanifolds. (Italian summary) **(84h:53071)**
 Bronshtein, R. F. A class of multidimensional distributions in conformal space. (Russian) **(84b:53013)**
 Camacho, César (with Lins Neto, Alcides) The topology of integrable differential forms near a singularity. **(84g:58017)**
 Cihodariu, Gh. (with Smaranda, D.) Semi-invariant submanifolds of a manifold with Sasakian (f, g, u, v) -structure. **(84h:53042)**
 Edelen, Dominic G. B. Horizontal distributions on spaces of fibers. **(84m:58008)**
 Ermakov, Yu. I. On the theory of integrability of tensor structures. (Russian) **(84f:53025)**
 Henč, Damir Transverse intersections and stability of foliations. **(84f:57016)**
 Ivanov, V. G. Doubly fibred generalized parallelisms. (Russian) **(84f:53026)**
 Lins Neto, Alcides See Camacho, César, **(84g:58017)**
 Mirzoyan, V. A. Submanifolds with commuting normal vector field. (Russian. Armenian summary) **(84e:53066)**
 Molino, Pierre Géométrie globale des feuilletages riemanniens. [Global geometry of Riemannian foliations] **(84j:53043)**

- Nijmeijer, Henk Controllability distributions for nonlinear control systems. **(84i:93013)**
 Nurpeisov, Zh. On the geometry of integrable distributions in E_n . (Russian) **(84m:53008)**
 Smaranda, D. See Cihodariu, Gh., **(84h:53042)**
 Steudel, H. Solitons in stimulated Raman scattering and resonant two-photon propagation. **(84j:81148b)**
 Tsarev, S. P. Which 2-forms are locally curvature forms? (Russian) **(84e:53043)**
 Urbano, Francisco See Barros, Manuel, **(84h:53071)**

58A35 Stratified sets [See also 32Bxx, 58Cxx.]

- Buoncrisiano, Sandro (with Dedò, Maria) Local blow-up of stratified sets up to bordism. **84a:58014**
 Chernyak, A. G. See Vershik, A. M., **84m:58011**
 Dedò, Maria See Buoncrisiano, Sandro, **84a:58014**
 Fukuda, Takao (with Kobayashi, Takao) A local isotopy lemma. **84c:58007**
 Goresky, Mark (with MacPherson, Robert D.) Stratified Morse theory. **84i:58017**
 Johnson, Francis E. A. On the presentation of stratified sets and singular varieties. **84h:58009**
 On the triangulation of stratified sets and singular varieties. **84c:58007**
 Kobayashi, Takao See Fukuda, Takao, **84c:58007**
 MacPherson, Robert D. See Goresky, Mark, **84i:58017**
 Teufel, Michael Abstract prestratified sets are (b) -regular. **84f:58010**
 Trotman, David Regular stratifications and sufficiency of jets. **84i:58018**
 Comparing regularity conditions on stratifications. **84j:58021**
 Vershik, A. M. (with Chernyak, A. G.) Fields of convex polyhedra and Pareto-Smale optimum. (Russian) **84m:58011**

secondary classifications:

- Andradas, C. Normal decompositions of semi-algebraic sets. **(84j:32010)**
 Cheeger, Jeff (with Goresky, R. Mark; MacPherson, Robert D.) L^2 -cohomology and intersection homology of singular algebraic varieties. **(84f:58005)**
 Goresky, R. Mark (with Siegel, Paul) Linking pairings on singular spaces. **(84h:55004)**
 See also Cheeger, Jeff; et al., **(84f:58005)**
 MacPherson, Robert D. See Cheeger, Jeff; et al., **(84f:58005)**
 Medved', Milan On two-parametric systems of matrices and diffeomorphisms. **(84g:58087)**
 Nagase, Masayoshi L^2 -cohomology and intersection homology of stratified spaces. **(84m:58006)**
 Randall, John D. Topological sufficiency of smooth map-germs. **(84g:58020)**
 Siegel, Paul See Goresky, R. Mark, **(84h:55004)**

58A40 Differential spaces

- Andrzejczak, Grzegorz On regular tangent covectors, regular differential forms, and smooth vector fields on a differential space. **84g:58007**
 Borowik, Sergiusz Smooth mappings of spaces with the smoothness. **84f:58011**
 Matuszczyk, Hanna On the tangent spaces to a differential space. **84h:58010**
 On the formula of Słobodziński for Lie derivative of tensor fields in a differential space. **84f:58012**
 Rendi, B. See Rendi, D., **84j:58022**
 Rendi, D. (with Rendi, B.) Differential structures and tangent spaces. II. (Romanian. English summary) **84j:58022a**
 (with Rendi, B.) Cohomology of differential spaces. (Romanian. English summary) **84j:58022b**
 Sasín, W. (with Zekanowski, Z.) On some sheaves over a differential space. **84h:58011**
 Waliszewski, Włodzimierz On differential subspaces of Cartesian space. **84f:58013**
 Laplacian in general Riemannian structures. **84j:58023**
 Zekanowski, Z. See Sasín, W., **84h:58011**

secondary classifications:

- Chen, Kuo Tsai The Euler operator. **(84f:58039)**
 Grimm, R. The structure of supergravity in superspace. (See **84j:83077**)

58A99 None of the above, but in this section

- De Wilde, Marc (with Lecomte, Pierre B. A.) Algebraic characterizations of the algebra of functions and of the Lie algebra of vector fields of a manifold. **84h:58012**
 Eck, David J. Gauge-natural bundles and generalized gauge theories. **84a:58015**
 Fredricks, Gregory A. Sylvester's theorem for matrices with smooth entries. **84c:58008**
 Frölicher, Alfred Smooth structures. **84g:58008**
 Grosu, Maria Fuzzy manifolds. (Romanian) (See **84f:53001**)
 Lecomte, Pierre B. A. See De Wilde, Marc, **84h:58012**
 Prokhorov, L. V. On integrals on a Grassmann algebra. (Russian. English summary) **84d:58005**
 Toomanian, M. Regular s -structure on a 3-dimensional manifold and its bundle. (See **84m:00013**)
- secondary classifications:
- Bagger, Jonathan See Wess, Julius, **(84h:81114)**
 Czyż, Jamsz Graded bundles in Ogievetsky-Sokatchev supergravity. (See **84k:00008**)
 D'Auria, R. (with Fré, Pietro) Geometric supergravity in $D=11$ and its hidden supergroup. **(84e:83053a)**
 (with Fré, Pietro) Errata: "Geometric supergravity in $D=11$ and its hidden supergroup". **(84e:83053b)**
 Ferraris, Marco (with Francaviglia, Mauro; Reina, Cesare) A constructive approach to bundles of geometric objects on a differentiable manifold. **(84c:58006)**
 Francaviglia, Mauro See Ferraris, Marco; et al., **(84c:58006)**
 Fré, Pietro See D'Auria, R., **(84e:83053a)** and **(84e:83053b)**

- Hrubý, J. On the super sigma models and super sine-Gordon model. (84i:81065)
- Khmel'skii, I. L. Deux conférences sur la mécanique des systèmes non holonomes. [Two lectures on the mechanics of nonholonomic systems] (84i:70016)
- van Nieuwenhuizen, P. Four lectures at the 1979 Erice school on spin, torsion, rotation and supergravity. (See 84d:83002)
- Reina, Cesare. See Ferraris, Marco; et al., (84c:58006)
- Shander, V. N. Complete integrability of ordinary differential equations on supermanifolds. (Russian) (84g:58058)
- Verderesi, José Antonio. Contact et congruence de sous variétés. [Contact and congruence of submanifolds] (84i:53045)
- Vosylus, R. Geometry of systems of differential equations. VI. Local deformability of linear formal structures. (Russian) (84j:58138b)
- Wess, Julius (with Bagger, Jonathan) ★Supersymmetry and supergravity. (84h:81114)

58Bxx Infinite-dimensional manifolds

58B05 Homotopy and topological questions

- Florian, Radu. Differentiable vector bundles compatible with the base of the bundle. (Romanian. French summary) (84c:58008)
- Kasimov, V. A. Kuiper's theorem for the Hilbert module $L_2(A)$. (Russian. English and Azerbaijani summaries) (84m:58012)
- Seda, Anthony Karel. On the categories $\text{Sp}(X)$ and $\text{Ban}(X)$. (84g:58009)

secondary classifications:

- Dancer, E. N. On the existence of zeros of perturbed operators. (84m:47077)
- Fathi, A. Existence de systèmes dynamiques minimaux sur l'espace de Hilbert séparable. [Existence of minimal dynamical systems on a separable Hilbert space] (84c:54046)
- Hansen, Vagn Lundsgaard. The homotopy groups of a space of maps between oriented closed surfaces. (84f:55012)
- Heisey, Richard E. Manifolds modelled on the direct limit of lines. (84d:57009)
- Kasimov, V. A. Homotopy properties of the general linear group of the Hilbert module $L_2(A)$. (Russian) (84j:46096)
- Kósa, András. On the homotopy type of some spaces occurring in the calculus of variations. (84c:58048)
- Lay, Terry L. (with Walsh, John J.) Characterizing Hilbert cube manifolds by their homological structure. (84h:57007)
- Möller, Helmut. Darstellung von G-Räumen durch Schnitte in Bündeln. [Representation of G-spaces by sections in bundles] (84j:46100)
- Rodman, Leiba. On global geometric properties of subspaces in Hilbert space. (84j:46038)
- Sakai, Katsuro. Homeomorphisms of infinite-dimensional fibre bundles. (84f:57007)
- Boundaries and complements of infinite-dimensional manifolds in the model space. (84h:57008)
- Seip, Ulrich. A convenient setting for smooth manifolds. (84c:58013)
- Walsh, John J. Homological embedding properties of the fibers of a map and the dimension of its image. (84h:54034)
- See also Lay, Terry L., (84h:57007)

58B10 Differentiability questions

- Anghel, Nicolae. Mixed Grassmann manifolds. (Romanian. English summary) (84h:58013)
- Cristea, Mihai. A note on global inversion theorems and applications to differential equations. (84c:58006)
- Hebble, M. P. Approximation of differentiable functions on a Hilbert space. (84j:58024)
- Isac, George. Opérateurs asymptotiquement linéaires sur des espaces localement convexes. [Asymptotically linear operators on locally convex spaces] (84h:58014)

secondary classifications:

- Antoine, Ph. Étude locale d'une application différentiable. [Local study of a differentiable mapping] (84j:58030)
- Fonte, G. (with Schiffrer, G.) On the gradient method in quantum mechanics. (Italian summary) (84m:81054)
- Frolov, N. N. On a homeomorphism of Hilbert spaces that is realized by a differential operator. (Russian) (84c:46072)
- Penot, Jean-Paul (with Terpolilli, Peppino) Cônes tangents et singularités. (English summary) [Tangent cones and singularities] (84m:58015)
- Piech, M. Ann. Differentiability of measures associated with parabolic equations on infinite-dimensional spaces. (84c:28014)
- Schiffrer, G. See Fonte, G., (84m:81054)
- Terpolilli, Peppino. See Penot, Jean-Paul, (84m:58015)
- Treiman, Jay S. Characterization of Clarke's tangent and normal cones in finite and infinite dimensions. (84i:90144)

58B12 Questions of holomorphy [See also 32-XX, 46G20.]

secondary classifications:

- Dineen, Seán. ★Complex analysis in locally convex spaces. (84h:46050)
- Vigué, Jean-Pierre. Les automorphismes analytiques isométriques d'une variété complexe normée. (English summary) [The isometric analytic automorphisms of a complex normed manifold] (84b:32041)

58B15 Fredholm structures [See also 47A53.]

- Putinar, Mihai. Some invariants for semi-Fredholm systems of essentially commuting operators. (84h:58009)
- (with Vasilescu, F.-H.) Continuous and analytic invariants for deformations of Fredholm complexes. (84h:58019)
- Vasilescu, F.-H. See Putinar, Mihai, (84h:58019)

secondary classifications:

- Dmitrienko, V. T. (with Zvyagin, V. G.) Homotopy classification of a class of continuous mappings. (Russian) (84c:35282)
- Sapronov, Yu. I. Branching of solutions of smooth Fredholm equations. (Russian) (84c:58170)
- Zvyagin, V. G. See Dmitrienko, V. T., (84c:35282)

58B20 Riemannian, Finsler and other geometric structures [See also 53C20, 53C60.]

- Borisovich, Yu. G. Global analysis and some problems for differential equations. (Russian) (84c:58020)
- Ernikov, Yu. I. The Ricci identity in a vector bundle of Banach type. (Russian) (84j:58025)
- Fomin, V. E. A definition of linear connection on a Banach manifold. (Russian) (84j:58026)
- Gauchman, Hillel. Connection colligations on Hilbert bundles. (84i:58011)
- Tü, N. A. Lokale topologische Eigenschaften der auf Banach-Mannigfaltigkeiten definierten differenzierbaren Funktionen. [Local topological properties of differentiable functions that are defined on Banach manifolds] (84h:58010)
- Vassiliou, Elstathios. On affine transformations of Banachable bundles. (84i:58013)
- Transformations of linear connections. (84i:58012)

secondary classifications:

- Kaup, Wilhelm. Über die Klassifikation der symmetrischen hermiteschen Mannigfaltigkeiten unendlicher Dimension. II. [On the classification of symmetric Hermitian manifolds of infinite dimension. II] (84d:32045)

58B25 Group structures and generalizations on infinite-dimensional manifolds [See also 22E65, 58D05.]

- Magnus, R. J. Infinite-dimensional group actions and similarity of quadratic forms on a Hilbert space. (84i:58014)
- Mingo, James A. On the contractibility of the unitary group of the Hilbert space over a C^* -algebra. (84c:58008)

secondary classifications:

- Albeverio, Sergio (with Hoegh-Krohn, Raphael) Diffusions, quantum fields and groups of mappings. (84a:81014)
- de la Harpe, Pierre. The real symplectic group of a Hilbert space is essentially simple. (84g:22041)
- Hoegh-Krohn, Raphael. See Albeverio, Sergio, (84a:81014)
- Kobayashi, Osamu. See Omori, Hideki; et al., (84h:22044)
- Maeda, Yoshiaki. See Omori, Hideki; et al., (84h:22044)
- Nessonov, N. I. Description of representations of the group of invertible operators in a Hilbert space, containing the identity representation of the unitary subgroup. (Russian) (84f:22026)
- Omori, Hideki (with Maeda, Yoshiaki; Yoshioka, Akira; Kobayashi, Osamu) On regular Fréchet-Lie groups. IV. Definition and fundamental theorems. (84h:22044)
- Yoshioka, Akira. See Omori, Hideki; et al., (84h:22044)

58B99 None of the above, but in this section

- Mänttä, Elias. On Frenet theory of curves in Hilbert space. (84h:58015)

secondary classifications:

- Bäni, Werner. Subspaces in Hermitean spaces of countable dimension. (84j:10017)
- Fleming, Philip J. Structural stability and group cohomology. (84g:58061)
- Gähler, W. A generalization of the notion of a differentiable manifold. (84h:58004)
- Gierz, Gerhard. ★Bundles of topological vector spaces and their duality. (84c:46076)
- (Keimel, Klaus) See Gierz, Gerhard, (84c:46076)
- Novikova, L. V. An infinite-dimensional analogue of Siegel's theorem. (Russian) (84c:58057)
- Pisanelli, Domingos. The proof of Frobenius theorem in a Banach scale. (84g:58099)
- Reiffen, Hans-Jörg (with Trapp, Heinz Wilhelm) Ein Beitrag zur Lipschitz-Saturierung im unendlichdimensionalen Fall. (English summary) [A contribution to Lipschitz-saturation in the infinite-dimensional case] (84k:32036)
- Semenov, P. V. On the group of reflections of a Banach space. (Russian) (84h:58029)
- Shestakov, A. A. Theory and applications of the generalized Lyapunov direct method for abstract dynamical systems (a survey of the current state of the geometric direction in Lyapunov's direct method). (Russian) (84g:58065)
- Trapp, Heinz Wilhelm. See Reiffen, Hans-Jörg, (84k:32036)
- Vassiliou, Elstathios. Flat bundles and holonomy homomorphisms. (84c:57024)
- Volovich, I. V. A-superspaces and fibrations. (Russian) (84i:58001)
- Whitfield, J. H. M. Smooth bump functions and renormings of Banach spaces: a survey. (84f:46021)
- Wilkins, Daniel. A geometrical interpretation of the coagulation equation. (84c:85004)

58Cxx Calculus on manifolds; nonlinear operators [See also 47Hxx.]

58C05 Real-valued functions

- Auslender, Alfred. On the differential properties of the support function of the ε -subdifferential of a convex function. (84d:58007)
- Illarionov, M. A. (with Lin, V. Ya.) Local and global solutions of algebraic equations. (Russian) (84g:58010)

Lin, V. Ya. See Ilarionov, M. A., 84g:58010

Shi, Shu Zhong. Remarques sur le gradient généralisé. (English summary) [Remarks on the generalized gradient] 84d:58008

secondary classifications:

Fava, N. (with Keilhauer, G.; Larotonda, A.) Surface integrals, spherical coordinates and the area element of S^{n-1} . (84j:26015)

Fried, David. Polynomials on affine manifolds. (84d:53035)

Keilhauer, G. See Fava, N.; et al., (84j:26015)

Larotonda, A. See Fava, N.; et al., (84j:26015)

Shmyrev, V. I. The potentiality of piecewise constant monotone mappings in \mathbb{R}^n . (Russian) (84g:49024)

58C06 Set valued and function-space valued mappings

Schanuel, Stephen H. Continuous extrapolation to triangular matrices characterizes smooth functions. 84c:58009

secondary classifications:

Barbu, Viorel. Invariant manifolds for Hamiltonian systems in Hilbert spaces. (84i:58070)

Bogatyrev, A. V. Continuous branches of multivalued mappings with nonconvex right-hand side. (Russian) (84g:58028)

Bonet, José. Representations of the spaces $E^k(V, E)$ and $\mathcal{D}^k(V, E)$. (Spanish. English summary) (84c:46036)

Gupta, Chaitan P. Leray-Schauder type continuation theorems for some nonlinear equations in Banach spaces. (84h:47057)

Lassonde, Marc. On the use of KKM multifunctions in fixed point theory and related topics. (84c:47049)

Maritz, P. On a theorem of A. A. Lyapunov. (84d:46062)

Penot, Jean-Paul. Compact nets, filters, and relations. (84h:49032)

Turinici, Mihai. Invariant polygonal domains for multivalued functional-differential equations. (84m:34018)

58C07 Continuity properties of mappings

secondary classifications:

Breckner, Wolfgang W. (with Orbán, Gheorghe) Continuity of generalized convex mappings taking values in an ordered topological linear space. (84m:47089)

Françoise, Jean-Pierre. Domaines de linéarisation asymptotique pour des champs de vecteurs. [Domains of asymptotic linearization for some vector fields] (84c:58067)

Orbán, Gheorghe. See Breckner, Wolfgang W., (84m:47089)

Tineo, Antonio. ★ Un teorema de invertibilidad local. (Spanish) [A theorem of local invertibility] (84c:54020)

58C10 Holomorphic maps [See also 32-XX.]

Bierstone, Edward (with Milman, Pierre D.) Composite differentiable functions. 84c:58016

Goebel, Kazimierz. Fixed points and invariant domains of holomorphic mappings of the Hilbert ball. 84j:58027

Milman, Pierre D. See Bierstone, Edward, 84c:58016

Novikova, L. V. Normal forms of nonlinear operators in Banach spaces. (Russian) 84h:58016

Sburlan, Silviu. The subdifferential. (Romanian) 84h:58017

Shcherbakov, A. A. Topological classification of germs of conformal mappings with an identical linear part. (Russian. English summary) 84f:58014

Suzuki, Masahiko. The μ -number constant stratum of a quasihomogeneous function of corank two is smooth. 84j:58028

Tokarev, S. P. Analytic equivalence of compressible diffeomorphisms in the neighborhood of an invariant torus. (Russian) 84h:58021

secondary classifications:

Aron, R. M. (with Hervés, C.; Valdivia, Manuel) Weakly continuous mappings on Banach spaces. (84g:46066)

de Bartolomeis, Paolo. Sur l'analyticité complexe de certaines applications harmoniques. (English summary) [On the complex analyticity of some harmonic maps] (84h:58043)

Bornard, G. See Gauthier, J.-P., (84g:93022)

Chansolme, Denis. On the division of distributions by analytic functions in locally convex spaces. (84j:46072)

Colombeau, Jean-François (with Mujica, Jorge) Holomorphic and differentiable mappings of uniform bounded type. (84h:46055)

Frolov, N. N. On a homeomorphism of Hilbert spaces that is realized by a differential operator. (Russian) (84c:46072)

Gauthier, J.-P. (with Bornard, G.) Uniqueness of weakly minimal analytic realizations. (84g:93022)

Goebel, Kazimierz (with Reich, Simeon) Iterating holomorphic self-mappings of the Hilbert ball. (84h:47065)

Hervés, C. See Aron, R. M.; et al., (84g:46066)

Ilyashenko, Yu. S. Topology of phase portraits of analytic differential equations on a complex projective plane. (Russian) (84h:58164)

Mujica, Jorge. See Colombeau, Jean-François, (84h:46055)

Naishul, V. A. Topological invariants of analytic and area-preserving mappings and their application to analytic differential equations in C^2 and C^p . (Russian) (84f:58092)

Reich, Simeon. See Goebel, Kazimierz, (84h:47065)

Valdivia, Manuel. See Aron, R. M.; et al., (84g:46066)

58C15 Implicit function theorems; global Newton methods

Abdzhailov, M. Real solutions of a class of nonlinear systems of algebraic equations. (Russian) 84c:58015

Auslender, Alfred. Theorem of constant rank for Lipschitzian maps. 84c:58022

Caputi, Teoma. The plenary hull of the generalized Jacobian matrix and the inverse function theorem in subdifferential calculus. 84c:58016

Dancer, E. N. The G-invariant implicit function theorem in infinite dimensions. 84c:58010

Darbo, Gabriele. A global implicit function theorem. (Italian. English summary) 84c:58011

Dubinsky, Ed. Nonlinear analysis in different kinds of Fréchet spaces. 84f:58015

Pham Huy Diên. Some results on locally Lipschitzian mappings. 84c:58023

Ribarič, M. Application of general systems methodology to the study of implicit functions and the stability of functional analytic properties of operators. 84c:58024

Ricceri, Biagio. Applications de théorèmes de semi-continuité inférieure. (English summary) [Applications of lower semicontinuity theorems] 84c:58017

Solutions lipschitziennes d'équations différentielles sous forme implicite. (English summary) [Lipschitz solutions of implicit differential equations] 84c:58013

Shub, Michael (with Smale, Steve) On the average cost of solving polynomial equations. (See 84m:58003)

Smale, Steve. See Shub, Michael, (See 84m:58003)

Tineo, Antonio. ★ Inversión global. (Spanish) [Global inversion] 84g:58011

Wong, Wing Shing. Carleman transformation and Ovcyannikov-Trèves operators. 84g:58012

Ypma, T. J. Affine invariant convergence results for Newton's method. 84c:58018

secondary classifications:

Alexander, J. C. (with Antman, Stuart S.) Global behavior of solutions of nonlinear equations depending on infinite-dimensional parameters. (84d:58018)

Antman, Stuart S. See Alexander, J. C., (84d:58018)

Bertsekas, Dimitri P. Enlarging the region of convergence of Newton's method for constrained optimization. (84j:90072)

Botsaris, C. A. Constrained optimization along geodesics. (84c:90085)

Burenkov, V. I. Mollifying operators with variable step and their application to approximation by infinitely differentiable functions. (84a:46068)

Degiovanni, Marco (with Marino, Antonio; Spagnolo, Sergio) Some first-order nonlinear differential systems on the torus. (Italian. English summary) (84c:35022)

Elken, Thomas R. Combining a path method and parametric linear programming for the computation of competitive equilibria. (84c:90018)

Emmanuele, Giovanni. Convergence of the Mann-Ishikawa iterative process for nonexpansive mappings. (84d:47070a)

A remark on my paper: "Convergence of the Mann-Ishikawa iterative process for nonexpansive mappings". (84d:47070b)

Fletcher, Roger. A model algorithm for composite nondifferentiable optimization problems. (84f:90077)

Gabay, Daniel. Minimizing a differentiable function over a differential manifold. (84h:49071)

Gorin, E. A. See Sánchez-Fernández, C., (84m:46063)

Groze, Sever. Solution of nonlinear operator equations in Fréchet spaces by a method analogous to that of tangent parabolas. (Romanian. English summary) (84c:65055)

Hanzawa, Ei-ichi. Nash's implicit function theorem and the Stefan problem. (See 84m:35002)

Henig, Mordechai I. Existence and characterization of efficient decisions with respect to cones. (84c:90004)

Holota, Petr. Direct methods for geodesic boundary problems. (See 84h:86002)

Klainerman, Sergiu. Long-time behavior of solutions to nonlinear evolution equations. (84c:35015)

Langer, Joel (with Singer, David A.) Diffeomorphisms of the circle and geodesic fields on Riemann surfaces of genus one. (84h:58115)

Lietuviets, O. I. Analyticity of the solution of an operator equation. (Russian) (84h:45020)

Marino, Antonio. See Degiovanni, Marco; et al., (84c:35022)

Miller, Harry I. (with Xenikakis, Polychronis J.) Some properties of Baire sets and sets of positive measure. (84g:28013)

Neumaier, Arnold. Simple bounds for zeros of systems of equations. (84h:65052)

Oja, P. Newton's method in the case of multiple solutions. (Russian. English summary) (84f:65041)

Parthasarathy, T. ★ On global univalence theorems. (84m:26019)

Pomeroy, J.-Ch. The Lagrange multiplier set and the generalized gradient set of the marginal function of a differentiable program in a Banach space. (84h:49033)

Potra, F.-A. On the convergence of a class of Newton-like methods. (84c:65057)

Pron'kin, V. S. Application of Newton's method to a problem with small denominators. (Russian) (84a:34020)

Romanova, O. A. See Sidorov, N. A., (See 84c:34002)

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- Todd, Michael J. Approximate labelling for simplicial algorithms and two classes of special subsets of the sphere. (84c:65067)
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58C20 Differentiation theory (Gâteaux, Fréchet, etc.) [See also 26Exx, 46Gxx.]

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 Coimbra, Elvira ★ On derivation in super- v -metric spaces. Taylor's formula. (84f:46059)
 Dem'yanov, V. F. (with Rubinov, A. M.) On quasidifferentiable mappings. (German and Russian summaries) (84j:49015)
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- Anan'ev, V. V. Bifurcation set in a problem on the motion of a heavy rigid body and a point mass elastically connected with it. (Russian. English summary) **(84d:70007)**
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 Bader, R. F. W. (with Nguyen-Dang, T. T.; Tal, Y.) A topological theory of molecular structure. (84j:81142)
 Berry, M. V. Universal power-law tails for singularity-dominated strong fluctuations. (84b:58032)
 Bruce, J. W. (with Giblin, P. J.; Gibson, C. G.) Source genericity of caustics by reflexion in \mathbb{R}^3 . (84c:78003b)
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 Casti, John L. \star Большие системы: связность, сложность и катастрофы. (Russian) [Connectivity, complexity, and catastrophe in large-scale systems] (84a:93004)
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 Liu, Jian Min (with Gong, Chang De) A justification for the scaling of the Thom system. (Chinese. English summary) (84j:82049)

- Madden, Paul Catastrophic Walrasian equilibrium from the non-Walrasian viewpoint: a three-good macroeconomic example. (84g:90024)
- Nguyen-Dang, T. T. See Bader, R. F. W.; et al. (84j:81142)
- Niwa, Yoshiji (with Watanabe, Eiichi; Isami, Hidenori) Catastrophes of elastic column structures. (84m:73042)
- Obratsov, I. F. (with Avtandilov, G. G.; Vol'mir, A. S.) The problem of sudden coronary death in light of the mathematical theory of catastrophes. (Russian) (84g:92007)
- Okada, Kenichi (with Suzuki, Ikuo) Classical calculations on the phase transition. I. Phase diagram in four-dimensional space for the system with one order parameter. (84m:82046)
- (Piontkovskii, A. A.) See Casti, John L. (84g:93004)
- Pnevmatikos, Spyros N. Singularités en géométrie symplectique. (English summary) [Singularities in symplectic geometry] (84c:58085)
- Poston, Tim Perturbed bifurcations and crystal spectra. (84m:82101)
- Puu, Tõnu Stability and change in two-dimensional flows. (84b:58062)
- Randall, John D. Topological sufficiency of smooth map-germs. (84g:58020)
- Rasizade, O. Sh. Bifurcation and "catastrophes" in the Higgs field with external sources. (Russian. English summary) (84c:81078)
- Romero-Fuster, Carmen See Chillingworth, D. R. J. (84i:58021)
- Sabbah, Claude Fonctions de Morse sur une variété analytique complexe. [Morse functions on a complex analytic manifold] (84c:32010)
- Shcherbakov, A. P. See Demkov, Yu. N.; et al. (84c:78003)
- Stewart, I. N. (with Woodcock, A. E. R.) On Zeeman's equations for the nerve impulse. (84m:92014)
- Suzuki, Ikuo See Okada, Kenichi. (84m:82046)
- Tal, Y. See Bader, R. F. W.; et al. (84j:81142)
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- Thom, René Mathematics and scientific theorizing. (84j:00017)
- Mathématique et théorisation scientifique. [Mathematics and scientific theorizing] (84c:00027)
- Toller, M. See Jacucci, G.; et al. (84m:82097)
- Trotman, David Regular stratifications and sufficiency of jets. (84c:58018)
- Truesdell, Clifford Ambrose, III Our debt to the French tradition: "catastrophes" and our search for structure today. (84g:00004)
- Upstill, C. (with Wright, F. J.; Hajnal, J. V.; Templer, R. H.) The double-cusp unfolding of the X_2 diffraction catastrophe. (French summary) (84m:78003)
- Vendrik, M. C. M. A classification of phase diagrams by means of "elementary" catastrophe theory (ECT). I. (84a:82016a)
- A classification of phase diagrams by means of "elementary" catastrophe theory (ECT). II. (84a:82016b)
- Vol'mir, A. S. See Obratsov, I. F.; et al. (84g:92007)
- Wake, G. C. An analytic criterion for the disappearance of criticality. (84m:80017)
- Watanabe, Eiichi See Niwa, Yoshiji; et al. (84m:73042)
- Wilson, A. G. Criticality and urban retail structure: aspects of catastrophe theory and bifurcation. (84j:92046)
- Woodcock, A. E. R. See Stewart, I. N. (84m:92014)
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- Zeeman, E. Christopher Research, ancient and modern. (Polish) (84m:00002)

58C30 Fixed point theorems [See also 47H10.]

- Browder, Felix E. Fixed point theory and nonlinear problems. 84h:58027
- Duong Minh Duc Analytic contractive vector fields in Fréchet spaces. 84m:58020
- Gorbunov, A. D. ★ Методы решения нелинейных задач. (Russian) [Methods for solving nonlinear problems] 84m:58021
- Hoàng Tuy Three improved versions of Scarf's method using conventional subproblems and allowing restart and continuation procedures. (French and Russian summaries) 84d:58015
- Massabo, Ivar (with Vignoli, Alfonso) Irreducible continua of solutions for Birkhoff-Kellogg type equations. 84b:58028
- Morrison, Kent Symplectic flows on the open ball. 84a:58024
- Nickel, Karl Das Auflösungsverhalten von nichtlinearen Fixmengen-Systemen. (English summary) [The solution behavior of nonlinear systems of fixed sets] 84c:58045
- Rothe, E. H. Some homotopy theorems concerning Leray-Schauder maps. 84j:58037
- Todd, Michael J. Computing fixed points, with applications to economic equilibrium models. (See 84b:00034)
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- Appell, Jürgen On the solvability of nonlinear noncompact problems in function spaces with applications to integral and differential equations. (Italian summary) (84j:47099)
- Borisovich, Yu. G. Global analysis and some problems for differential equations. (Russian) (84c:58020)
- Browder, Felix E. Fixed point theory and nonlinear problems. (84h:58027)
- L'unicité du degré topologique pour des applications de type monotone. (English summary) [Uniqueness of the topological degree for mappings of monotone type] (84c:47041)
- Degree of mapping for nonlinear mappings of monotone type. (84g:47046)
- Cellina, Arrigo (with Sartori, Caterina) Continuous dependence on the convex sets and on the initial data of a method for finding fixed points. (See 84c:34003)
- Chow, Shui Nee Finding zeros of maps—continuation methods. (See 84b:00011)
- Dubois, Jacques (with Morales, Pedro) On the Hukuhara-Kneser property for some Cauchy problems in locally convex topological vector spaces. (84m:34093)
- Du'o'ng Trong Nhân Some metrical fixed point theorems. (84d:54071)
- Feng, De Xing (with Li, Shu Jie) Topological degrees of monotone mappings. (Chinese) (84b:47063)

- Fournier, Gilles (with Fournier, Reine) On the homotopy property of Nussbaum's fixed point index. (84g:55002)
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- Kehoe, Timothy J. Regularity and index theory for economies with smooth production technologies. (84i:90036)
- Khazin, L. G. (with Shnol', È. È.) Stability of fixed points of smooth mappings (critical and near-critical cases). (Russian) (84c:58125)
- Kojima, Masakazu (with Yamamoto, Yoshitsugu) Variable dimension algorithms: basic theory, interpretations and extensions of some existing methods. (84h:90082)
- van der Laan, G. (with Talman, A. J. J.) Note on the path following approach of equilibrium programming. (84f:90020)
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- Morales, Pedro See Dubois, Jacques. (84m:34093)
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- Sartori, Caterina See Cellina, Arrigo. (See 84c:34003)
- Scarf, Herbert E. The computation of equilibrium prices: an exposition. (See 84d:90005b)
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- Smith, Hal See Schmitt, Klaus. (84h:47066)
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- Piecewise-linear homotopy algorithms for sparse systems of nonlinear equations. (84f:65048)
- Toland, John F. A Leray-Schauder degree calculation leading to nonstandard global bifurcation results. (84i:58031)
- Vainikko, G. Invariance of rotation of vector fields in the approximation of multivalued mappings. (Russian. English summary) (84h:47063)
- Vignoli, Alfonso Some topological methods for solving nonlinear operator equations. (84g:58026)
- Wille, Friedrich Über eine Vermutung von Hopf zur Lösbarkeit nichtlinearer Gleichungssysteme. [On a conjecture of Hopf on the solvability of nonlinear systems of equations] (84d:55004)
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- Yamamoto, Yoshitsugu A new variable dimension algorithm for the fixed point problem. (84c:90098)
- See also Kojima, Masakazu. (84h:90082)
- Ypma, T. J. Following paths through turning points. (84c:65051)

58C35 Integration on manifolds; measures on manifolds [See also 28Cxx.]

- Ferreira, J. Campos The convergence of distributions at the boundary of a differentiable manifold, and a generalization of the Stokes theorem. (Portuguese) 84f:58022
- secondary classifications:
- Berlanga, R. (with Epstein, D. B. A.) Measures on sigma-compact manifolds and their equivalence under homeomorphisms. (84m:28023)
- Bleeker, P. M. Integration of functions in a space of complex dimensions. (Russian. English summary) (84h:81086)
- Bogachev, V. I. Negligible sets and differentiable measures in Banach spaces. (Russian. English summary) (84b:46046)
- Daletskii, Yu. L. Stochastic differential geometry. (Russian) (84j:58132)
- Epstein, D. B. A. See Berlanga, R. (84m:28023)
- Notrot, Roel ★ Optimal processes on manifolds. (84h:49044)
- Vinti, Calogero Nonlinear integration and Weierstrass integral over a manifold: connections with theorems on martingales. (84c:49062)

58C40 Spectral theory; eigenvalue problems [See also 58E07.]

- Schneider, Klaus R. Nonlinear eigenvalue problems of Birkhoff-Kellogg type. 84i:58025
- secondary classifications:
- Basile, Nicola (with Mininni, Michele) A nonlinear spectral approach to Landesman-Lazer type problems. (See 84c:34003)
- Bunow, B. See Kernevez, J.-P. (84c:92026)
- Dancer, E. N. On the indices of fixed points of mappings in cones and applications. (84d:58020)
- Furi, Massimo (with Vignoli, Alfonso) Unbounded nontrivial branches of eigenfunctions for nonlinear equations. (84g:58029)

- Hofer, Helmut** Variational and topological methods in partially ordered Hilbert spaces. (84g:58030)
- Kearfott, Ralph Baker** Some general bifurcation techniques. (84f:65047)
- Kernevez, J.-P.** (with Bunow, B.) Numerical exploration of bifurcating branches of solutions to reaction-diffusion equations describing the kinetics of immobilized enzymes. (84a:92026)
- Marbes, Heinz** On the spectra of compact locally symmetric Riemannian manifolds. (84d:22025)
- On the spectra of $\Gamma \backslash \text{SL}(2, \mathbb{R})/\text{SO}(2)$ and $\Gamma \backslash \text{SL}(2, \mathbb{C})/\text{SU}(2)$. (84d:22026)
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- Romanova, O. A.** See Sidorov, N. A., (See 84c:34002)
- Ros, Antonio** Spectral geometry of CR-minimal submanifolds in the complex projective space. (84m:58157)
- Shapiro, Alexander** On the unsolvability of inverse eigenvalues problems almost everywhere. (84e:15010)
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- Turyn, Lawrence** Perturbation of linked eigenvalue problems. (84f:58032)
- Vignoli, Alfonso** See Furi, Massimo, (84g:58029)
- 58C99** None of the above, but in this section
- Farmer, J. Doine** (with Ott, Edward; Yorke, James A.) The dimension of chaotic attractors. 84m:58022
- Françoise, Jean-Pierre** An example of diffeomorphism whose semisimple part is divergent. 84c:58016
- Gauchman, Hillel** Operator colligations on differentiable manifolds. 84c:58017
- Jarić, Marko V.** (with Michel, Louis; Sharp, R. T.) Invariant formulation for the zeros of covariant vector fields. (See 84c:00008)
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- Michel, Louis** See Jarić, Marko V.; et al., (See 84c:00008)
- Ott, Edward** See Farmer, J. Doine; et al., 84m:58022
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- Sharp, R. T.** See Jarić, Marko V.; et al., (See 84c:00008)
- Shih, Weishu** Sur l'équation intégrale-différentielle non-linéaire et la topologie algébrique. [On nonlinear integro-differential equations and algebraic topology] 84j:58038
- Yorke, James A.** See Farmer, J. Doine; et al., 84m:58022

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- Cecchi, Mariella** (with Marini, Mauro; Zezza, Pierluigi) An abstract method for nonlinear boundary value problems on noncompact intervals. (Italian) (84f:34016)
- Chew, Geoffrey F.** (with Poenaru, Valentin) Topological bootstrap theory of hadrons. (84i:1108)
- Ewald, Günter** ★ Probleme der geometrischen Analysis. (German) [Problems of geometric analysis] (84g:58001)
- Gatto, R.** (with Sartori, G.) Gauge symmetry breaking in supersymmetric gauge theories: necessary and sufficient condition. (84d:81030)
- Grisell, R.** A geometrical treatment of singular trajectories. (84c:58061)
- Holmes, J. P.** See Sagle, Arthur A., (84c:55011)
- Janyška, Josef** (with Kolář, Ivan) Lie derivatives on vector bundles. (84b:58005a)
- Kolář, Ivan** Lie derivatives and higher order Lagrangians. (84b:58005b)
- See also Janyška, Josef, (84b:58005a)
- (Li, Pei Lian)** See Sattinger, D. H., (84d:58021)
- Marini, Mauro** See Cecchi, Mariella; et al., (84f:34016)
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- Sagle, Arthur A.** (with Holmes, J. P.) Algebraic identities and invariant vector fields on H -spaces. (84c:55011)
- Sartori, G.** See Gatto, R., (84d:81030)
- Sattinger, D. H.** Bifurcation and symmetry breaking in applied mathematics. (Chinese) (84d:58021)
- Tavakoli, Javad** Normal forms of matrices in topoi. (84c:18009)
- Zeza, Pierluigi** See Cecchi, Mariella; et al., (84f:34016)

58Dxx Spaces and manifolds of mappings (including nonlinear versions of 46Exx)**58D05 Groups of diffeomorphisms and homeomorphisms as manifolds** [See also 22E65, 57Q05.]

- Filipkiewicz, R. P.** Isomorphisms between diffeomorphism groups. 84j:58039
- Leslie, J. A.** A Lie group structure for the group of analytic diffeomorphisms. 84f:58023
- Malgrange, Bernard** Travaux d'Écalle et de Martinet-Ramis sur les systèmes dynamiques. [Works of Écalle, Martinet and Ramis on dynamical systems] 84m:58023
- Mascaro, Francisca** Normal subgroups of $\text{Diff}^2(\mathbb{R}^n)$. 84f:58024
- Neretin, Yu. A.** Unitary representations with a higher weight of a group of diffeomorphisms of a circle. (Russian) 84c:58047
- Semenov, P. V.** On the group of reflections of a Banach space. (Russian) 84b:58029
- Xia, Dao Xing** On the representations of the local current algebra and the group of diffeomorphisms. I. 84j:58040

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- Alberverio, Sergio** (with Blanchard, Philippe; Hoegh-Krohn, Raphael) Some applications of functional integration. (See 84j:81006)
- Bismut, Jean-Michel** ★ Mécanique aléatoire. (French) [Random mechanics] (84c:70002)
- Blanchard, Philippe** See Alberverio, Sergio; et al., (See 84j:81006)

- Cavalier, V.** Groupe d'invariance de couples de 1-formes holomorphes. [Invariance group of pairs of holomorphic 1-forms] (84f:58007)
- Fleming, Philip J.** Structural stability and group cohomology. (84g:58061)
- Hatzenbuehler, James** Decomposition of elements of the automorphism group of a torus action. II. (84j:57029)
- Hoegh-Krohn, Raphael** See Alberverio, Sergio; et al., (See 84j:81006)
- Hsiang, W. C.** (with Jahren, B.) A note on the homotopy groups of the diffeomorphism groups of spherical space forms. (84h:57017)
- Jahren, B.** See Hsiang, W. C., (84h:57017)
- Karube, Takashi** Homeomorphism groups of homogeneous spaces. (84j:57028)
- Kasimov, V. A.** Homotopy properties of the general linear group of the Hilbert module $l_2(A)$. (Russian) (84j:46098)
- Kirillov, A. A.** Unitary representations of the group of diffeomorphisms and of some of its subgroups. (84m:22031)
- Lacomba, Ernesto A.** (with Losco, Lucette) Variational characterization of contact vector fields in the group of contact diffeomorphisms. (84g:58038)
- Lee, Kyung Bai** Geometric realization of $\pi_0 \mathfrak{g}(M)$. (84m:57026)
- Losco, Lucette** See Lacomba, Ernesto A., (84g:58038)
- McDuff, Dusa** Some canonical cohomology classes on groups of volume preserving diffeomorphisms. (84h:58154)
- Millionschikov, V. M.** Baire classes of functions and Lyapunov exponents. VI. (Russian) (84j:34044a)
- Baire classes of functions and Lyapunov exponents. VII. (Russian) (84j:34044b)
- Baire classes of functions and Lyapunov exponents. VIII. (Russian) (84j:34044c)
- Baire classes of functions and Lyapunov exponents. IX. (Russian) (84j:34044d)
- Baire classes of functions and Lyapunov exponents. X. (Russian) (84j:34044e)
- Baire classes of functions and Lyapunov exponents. XI. (Russian) (84j:34044f)
- Baire classes of functions and Lyapunov exponents. XII. (Russian) (84j:34044g)
- Newhouse, S. E.** (with Palis, Jacob, Jr.; Takens, Floris) Bifurcations and stability of families of diffeomorphisms. (84g:58080)
- Palis, Jacob, Jr.** See Newhouse, S. E.; et al., (84g:58080)
- van Strien, Sebastian J.** Saddle connections of arcs of diffeomorphisms: moduli of stability. (84d:58062)
- Takens, Floris** See Newhouse, S. E.; et al., (84g:58080)
- Tkachenko, V. K.** On quantization of currents of an ideal fluid. (Russian. English summary) (84j:76068)
- Xia, Dao Xing** On the representations of the group of diffeomorphisms and the local current algebra. (See 84j:81006)

58D07 Groups and semigroups of nonlinear operators [See also 17B65, 47Dxx, 47H20.]

secondary classifications:

- Fathi, A.** Existence de systèmes dynamiques minimaux sur l'espace de Hilbert séparable. [Existence of minimal dynamical systems on a separable Hilbert space] (84c:54046)

58D10 Spaces of imbeddings and immersions**Chaltin, Hendrik** Embedded 2-spheres in \mathbb{R}^3 . 84i:58026

secondary classifications:

- Gaveau, Bernard** (with Mazet, Edmond) Opérateurs elliptiques et mesures sur l'espace des lacets invariants par le groupe des difféomorphismes du cercle. (English summary) [Elliptic operators and measures on the space of loops that are invariant under the group of diffeomorphisms of the circle] (84h:58150)
- Mazet, Edmond** See Gaveau, Bernard, (84h:58150)
- Ward, R. S.** Deformations of the embedding of the $\text{SU}(2)$ monopole solution in $\text{SU}(3)$. (84g:81040)

58D15 Manifolds of mappings [See also 54C35.]

- Kösa, András** On the homotopy type of some spaces occurring in the calculus of variations. 84c:58048
- Seip, Ulrich** A convenient setting for smooth manifolds. 84c:58013

secondary classifications:

- Arizmendi Peimbert, Hugo** (with Lara, Miguel; Tomás, Francisco) An abstract notion of compact-open topology. (Spanish) (84m:46054)
- Aron, R. M.** (with Hervés, C.; Valdivia, Manuel) Weakly continuous mappings on Banach spaces. (84g:46066)
- Bonet, José** Representations of the spaces $\mathcal{S}^4(V, E)$ and $\mathcal{Q}^4(V, E)$. (Spanish. English summary) (84c:46036)
- Ciesielski, Zbigniew** Bases and K -functionals for Sobolev spaces over C^∞ compact manifolds. (84c:46033)
- Frölicher, Alfred** Smooth structures. (84g:58008)
- Graff, Richard A.** (with Ruess, Wolfgang M.) Appropriate locally convex domains for differential calculus. (84b:58012)
- Hansen, Vagn Lundsgaard** Local triviality of fiber maps and mapping space constructions. (84b:55025)
- Henry, Daniel B.** How to remember the Sobolev inequalities. (84f:46040)
- Hervés, C.** See Aron, R. M.; et al., (84g:46066)
- Lara, Miguel** See Arizmendi Peimbert, Hugo; et al., (84m:46054)
- Mayer, Dieter H.** (with Viswanathan, K. S.) A note on the vacuum structure of an $\text{SU}(2)$ Yang-Mills theory. (84k:81083)
- Ramadas, T. R.** On the space of maps inducing isomorphic connections. (French summary) (84h:53038)
- Ruess, Wolfgang M.** See Graff, Richard A., (84b:58012)

Schöffler, Karl-Heinz Isolierteit und Stabilität von Flächen konstanter mittlerer Krümmung. (English summary) [Isolation and stability of surfaces of constant mean curvature] (84e:58032)

Sutherland, W. A. Path-components of function spaces. (84g:55019)

Tomás, Francisco See Arizmendi Peimbert, Hugo; et al., (84m:46054)

Valdivia, Manuel See Aron, R. M.; et al., (84g:46066)

Viswanathan, K. S. See Mayer, Dieter H., (84k:81083)

Wen, Lan A closing lemma for differentiable mappings of the circle. (Chinese. English summary) (84e:58058)

58D17 Manifolds of metrics (esp. Riemannian)

secondary classifications:

Bando, Shigetoshi (with Urakawa, Hajime) Generic properties of the eigenvalue of the Laplacian for compact Riemannian manifolds. (84h:58146)

DeWitt, Bryce S. A gauge invariant effective action. (See 84j:83003)

Jadczyk, A. Conservation laws and string-like matter distributions. (French summary) (84i:53067)

Kuwahara, Ruishi Correction to: "On isospectral deformations of Riemannian metrics. II" [Compositio Math. 47 (1982), no. 2, 195–205; MR 83m:58080]. (84m:58156)

Lafontaine, Jacques Sur la géométrie d'une généralisation de l'équation différentielle d'Obata. [On the geometry of a generalization of Obata's differential equation] (84i:53047)

Nikolaev, I. G. Smoothness of the metric of spaces with bilaterally bounded curvature in the sense of A. D. Aleksandrov. (Russian) (84h:53098)

Urakawa, Hajime See Bando, Shigetoshi, (84h:58146)

58D20 Measures (Gaussian, cylindrical, etc.) on manifolds of maps [See 28Cxx.]

secondary classifications:

Darling, R. W. R. Martingales in manifolds—definition, examples, and behaviour under maps. (84j:58133)

Elimova, E. I. (with Uglanov, A. V.) Green's formula on a Hilbert space. (Russian) (84c:46038)

Ellis, Richard S. (with Rosen, Jay S.) Asymptotic analysis of Gaussian integrals. II. Manifold of minimum points. (84h:60074b)

(with Rosen, Jay S.) Asymptotic analysis of Gaussian integrals. I. Isolated minimum points. (84h:60074a)

Itô, Kiyosi Distribution-valued processes arising from independent Brownian motions. (84i:60104)

Kondrat'ev, Yu. G. Spaces of entire functions of an infinite number of variables connected with a rigging of Fock space. (Russian) (84c:46043)

Li, Yu Chia Fundamental solutions for differential equations associated with the number operator. (84k:35140a)

A correction and some additions to: "Fundamental solutions for differential equations associated with the number operator". (84k:35140b)

Meyer, P.-A. Note sur les processus d'Ornstein-Uhlenbeck. [Note on the Ornstein-Uhlenbeck processes] (84i:60103)

Rosen, Jay S. See Ellis, Richard S., (84h:60074a) and (84h:60074b)

Smolyanov, O. G. Infinite-dimensional pseudodifferential operators and Schrödinger quantization. (Russian) (84c:35144)

Uglanov, A. V. See Elimova, E. I., (84c:46038)

58D25 Equations in function spaces; evolution equations [See also 34Gxx, 35K22, 35R15.]

Ginibre, J. (with Velo, G.) The Cauchy problem for the $Q(N)$, $CP(N-1)$, and $G_C(N, p)$ models. (84i:58027)

Marino, Antonio (with Tosques, M.) Curves of maximal slope for a certain class of nonregular functions. (Italian summary) (84i:58025)

Mora, Xavier Finite-dimensional attracting manifolds in reaction-diffusion equations. (84g:58024)

Saperstone, Stephen H. ★ Semidynamical systems in infinite-dimensional spaces. (84m:58024)

Segal, Irving E. The Cauchy problem for the Yang-Mills equations. (84a:58025)

Sosna, Dieter Eine implizite Integro-Differentialgleichung und Bifurkationen. [An implicit integro-differential equation and bifurcations] (84h:58027)

Tosques, M. See Marino, Antonio, (84i:58025)

Velo, G. See Ginibre, J., (84i:58027)

secondary classifications:

Altman, Mieczysław Nonlinear evolution equations in Banach spaces. (84i:34092)

Ashtekar, Abhay (with Magnon-Ashtekar, Anne) On the symplectic structure of general relativity. (84h:83020)

Aurilia, A. (with Christodoulou, Demetrios) Theory of strings and membranes in an external field. I. General formulation. (84a:35184)

Bazley, Norman W. (with Weinacht, Richard J.) A class of operator equations in nonlinear mechanics. (84k:34066)

Bogdanski, Yu. V. The Cauchy problem for an essentially infinite-dimensional parabolic equation on an infinite-dimensional sphere. (Russian) (84i:35134)

Choquet-Bruhat, Yvonne (with Christodoulou, Demetrios) Existence of global solutions of the Yang-Mills, Higgs and spinor field equations in $3+1$ dimensions. (84i:81041)

Christodoulou, Demetrios See Aurilia, A., (84a:35184) and Choquet-Bruhat, Yvonne, (84i:81041)

Colombeau, Jean-François (with Matos, Mário C.) Convolution equations in infinite dimensions: brief survey, new results and proofs. (84m:46049)

Constantin, Peter (with Foias, Ciprian) Sur le transport des variétés de dimension finie par les solutions des équations de Navier-Stokes. (English summary) [On the transport of finite-dimensional manifolds along the solutions of the Navier-Stokes equations] (84d:35126)

Dellwo, David (with Keller, Herbert B.; Matkowsky, Bernard J.; Reiss, Edward L.) On the birth of isolas. (84f:58088)

Dominguez Benavides, Tomás Applications of Baire categories to the existence of a solution of a differential equation in a Banach space. (Spanish. English summary) (84f:34087)

Elworthy, K. David ★ Stochastic differential equations on manifolds. (84d:58080)

Foias, Ciprian (with Temam, Roger) Homogeneous statistical solutions of Navier-Stokes equations. (84a:35238)

See also Constantin, Peter, (84d:35126)

Francaviglia, Mauro Mathematical methods and perspectives in general relativity. (Italian) (84e:83004)

Separability of Einstein space-times: the state of the art. (84e:83003)

Georgescu, Adelina ★ Recent results in fluid mechanics. (84i:76001)

Guillopé, Colette Comportement à l'infini des solutions des équations de Navier-Stokes et propriété des ensembles fonctionnels invariants (ou attracteurs). (English summary) [Behavior at infinity of the solutions of Navier-Stokes equations and a property of functional invariant sets (or attractors)] (84a:35241)

Joshi, N. E. See Saraykar, R. V., (84i:83010)

Keller, Herbert B. See Dellwo, David; et al., (84f:58088)

Komech, A. I. See Vishik, M. I., (84f:35119)

Laserra, Ettore The relativistic Cauchy problem in a spherically symmetric universe with disseminated matter. (Italian. English summary) (84m:83005)

Lawitzky, G. Exterior fields can have different sources—even empty ones. (84m:83006)

Li, Yu Chia Applications of the Fourier-Wiener transform to differential equations on infinite-dimensional spaces. II. (84a:35283)

Loginov, B. N. Stability of solutions of the problem of bifurcation points. (Russian) (84g:58032)

Magadeev, B. A. (with Sokolov, V. V.) Complete Lie-Bäcklund algebra for the Korteweg-de Vries equation. (Russian) (84h:58138)

Magnon-Ashtekar, Anne See Ashtekar, Abhay, (84h:83020)

Matkowsky, Bernard J. See Dellwo, David; et al., (84f:58088)

Matos, Mário C. See Colombeau, Jean-François, (84m:46049)

Piech, M. Ann Differentiability of measures associated with parabolic equations on infinite-dimensional spaces. (84a:28014)

Piletskas, K. I. On the existence of solutions of Navier-Stokes equations that have infinite dissipation of energy in a class of domains with a noncompact boundary. (Russian) (84a:35244)

Reiss, Edward L. See Dellwo, David; et al., (84f:58088)

Saraykar, R. V. (with Joshi, N. E.) Erratum: "Linearization stability of Einstein equations coupled with self-gravitating scalar fields" [J. Math. Phys. 22 (1981), no. 2, 343–347; MR 82f:83010]. (84i:83010)

Shubov, V. I. Unique solvability of the Cauchy problem for equations of the motion of discrete analogues of multidimensional chiral fields, taking values in compact symmetric spaces. (Russian. English summary) (84d:81043)

Slyusarchuk, V. E. The invertibility of almost periodic c -continuous functional operators. (Russian) (84h:34091)

Smolentsev, N. K. A bi-invariant metric on the group of diffeomorphisms of a three-dimensional manifold. (Russian) (84h:58030)

Sokolov, V. V. See Magadeev, B. A., (84h:58138)

Stefani, Gianna (with Zecca, Pietro) Multivalued vector field and multivalued differential equations. (84h:58046)

Temam, Roger See Foias, Ciprian, (84a:35238)

Vishik, M. I. (with Komech, A. I.) Generalized solutions of the inverse Kolmogorov equation that corresponds to the stochastic Navier-Stokes system. (Russian. English summary) (84f:35119)

Weinacht, Richard J. See Bazley, Norman W., (84k:34066)

Wu, Zhong Chao Singularities in self-similar cosmologies. (84c:83056)

Zecca, Pietro See Stefani, Gianna, (84h:58046)

58D30 Applications (in quantum mechanics (Feynman path integrals), relativity, fluid dynamics, etc.)

Chaljub-Simon, Alice Decomposition of the space of covariant two-tensors on \mathbb{R}^1 . (84f:58026)

Chebotaev, A. M. See Maslov, V. P., (84i:58049)

Exner, P. (with Kolerov, G. I.) Feynman maps without improper integrals. (84j:58041a) (with Kolerov, G. I.) Polygonal-path approximations on the path spaces of quantum-mechanical systems. (84j:58041b)

Kolerov, G. I. See Exner, P., (84j:58041)

Maslov, V. P. (with Chebotaev, A. M.) On the second term of the logarithmic asymptotic expansion of functional integrals. (Russian) (84i:58049)

Narasimhan, M. S. (with Ramadas, T. R.) Geometry of $SU(2)$ gauge fields. (84i:58050)

Osborn, Hugh Semiclassical functional integrals for self-dual gauge fields. (84m:58025)

Parthasarathy, Kalyanapuram Rangachari (with Sinha, Kalyan B.) Feynman path integrals of operator-valued maps. (84i:58028)

Quittner, Pavol Generic properties of von Kármán equations. (84d:58016)

Ramadas, T. R. See Narasimhan, M. S., (84i:58050)

Sinha, Kalyan B. See Parthasarathy, Kalyanapuram Rangachari, (84i:58028)

Smolentsev, N. K. A bi-invariant metric on the group of diffeomorphisms of a three-dimensional manifold. (Russian) (84h:58030)

secondary classifications:

Alimenkov, I. V. Continual integrals and canonical transformations. (Russian) (84e:81018)

- Alonso, F. (with Julve, J.; Tiemblo, A.) On the quantization of nonpolynomial Lagrangians symmetric under nonlinear group transformations. I. Global case. (Italian summary) (84c:81046)
- Arsen'er, A. A. Kubo-Martin-Schwinger states for classical dynamic systems with an infinite-dimensional phase space. (Russian) (84b:82001)
- Barth, N. H. (with Christensen, S. M.) Quantizing fourth-order gravity theories: the functional integral. (84j:83032)
- Belavkin, V. P. (with Maslov, V. P.; Tariverdiev, S. È.) The asymptotic dynamics of a system with a large number of particles described by Kolmogorov-Feller equations. (Russian. English summary) (84b:82028)
- Bhagwat, K. V. See Khandekar, D. C.; et al., (84f:81029a) and Bosco, E., (84f:81029b)
- Bonora, L. (with Cotta-Ramusino, P.) Some remarks on BRS transformations, anomalies and the cohomology of the Lie algebra of the group of gauge transformations. (84g:81030)
- Bosco, E. Comment on: "Path integration of a quadratic action with a generalized memory" [Phys. Lett. A 93 (1982/83), no. 4, 167-172; MR 84f:81029a] by D. C. Khandekar, S. V. Lawande and K. V. Bhagwat. (84f:81029b)
- Boyna, M. Nonlinear approximation scheme for the Einstein evolution equations. (84f:83013)
- Cahen, Michel (with Gutt, Simone) Invariance des équations de Maxwell. [Invariance of the Maxwell equations] (84g:78006)
- Cameron, R. H. (with Storrick, D. A.) An operator-valued Yeh-Feynman integral and a Feynman integral equation. (84m:81065)
- Camposino-Romeo, E. (with D'Olivio, J. C.; Socolovsky, M.) Hausdorff dimension for the quantum harmonic oscillator. (84c:81039)
- Castrigiano, D. P. L. (with Kokiantonis, N.) Classical paths for a quadratic action with memory and exact evaluation of the path integral. (84c:81040)
- Christensen, S. M. See Barth, N. H., (84j:83032)
- Combet, Edmond How to connect exponential integrals to optimal process? (84j:58122)
- Cotta-Ramusino, P. See Bonora, L., (84g:81030)
- Dhara, A. K. (with Khandekar, D. C.; Lawande, S. V.) Path integration of a generalized quadratic action. (84b:81038)
- D'Olivio, J. C. See Camposino-Romeo, E.; et al., (84c:81039)
- Durhuus, B. (with Olesen, P.; Petersen, J. L.) Polyakov's quantized string with boundary terms. (84b:81057a)
- (with Olesen, P.; Petersen, J. L.) Polyakov's quantized string with boundary terms. II. (84b:81057b)
- Fan, Hong Yi See Ruan, Tu Nan; et al., (84d:81014) and (84d:81015)
- Fradkin, E. S. (with Tseitin, A. A.) Quantized string models. (84d:81052)
- Friedman, John L. (with Witt, Donald M.) Internal symmetry groups of quantum geons. (84m:83028)
- Gambini, R. (with Trias, A.) Relativistic propagators as sum of paths in Minkowski space. (84j:81036)
- (with Trias, A.) Chiral formulation of Yang-Mills equations: a geometric approach. (84c:81074)
- Gerry, Christopher C. (with Inomata, Akira) Semiclassical calculation of a radial path integral. (84c:81021)
- (with Silverman, Steven) Path integral for coherent states of the dynamical group $SU(1,1)$. (84j:81037)
- Ginibre, J. Le problème de Cauchy pour les équations de Yang-Mills. [The Cauchy problem for the Yang-Mills equations] (84f:81059)
- Gribov, V. N. Local confinement of charge in massless QED. (84b:81134)
- Gutt, Simone See Cahen, Michel, (84g:78006)
- (Hlavaty, Ladislav) See Popov, V. N., (84m:81008)
- van Holten, J. W. See Salomonson, P., (84f:81032)
- Horváthy, Péter A. Prequantisation from path integral viewpoint. (84f:58052)
- Hull, C. M. The positivity of gravitational energy and global supersymmetry. (84m:83026)
- Ichinose, Takashi Path integral for the Dirac equation in two space-time dimensions. (84c:81036)
- Inomata, Akira See Gerry, Christopher C., (84c:81021)
- Iyanaga, M. Path-ordered phase factors as generators of gauge fields. (Italian and Russian summaries) (84j:81077)
- Jarić, Marko V. Extrema of Landau and Higgs polynomials and fixed points of renormalization-group equations. (84m:82042a)
- Errata: "Extrema of Landau and Higgs polynomials and fixed points of renormalization-group equations". (84m:82042b)
- Joshi, N. E. See Saraykar, R. V., (84c:83010)
- Julve, J. See Alonso, F.; et al., (84b:81046)
- Khandekar, D. C. (with Lawande, S. V.; Bhagwat, K. V.) Path integration of a quadratic action with a generalized memory. (84f:81029a)
- See also Dhara, A. K.; et al., (84b:81038) and Bosco, E., (84f:81029b)
- Kokiantonis, N. See Castrigiano, D. P. L., (84c:81040)
- Kree, Paul Anticommutative integration and Fermi fields. (84j:81052)
- Ladyzhenskaya, O. A. The finite-dimensionality of bounded invariant sets for the Navier-Stokes system and other dissipative systems. (Russian. English summary) (84c:35020)
- Lawande, S. V. See Dhara, A. K.; et al., (84b:81038); Khandekar, D. C.; et al., (84f:81029a) and Bosco, E., (84f:81029b)
- Leschke, Hajo Path integral approach to fluctuations in dynamic processes. (See 84b:00033)
- Levit-skiĭ, B. A. (with Yappa, Yu. A.) On the structure of the energy-momentum tensor and the spin tensor in the covariant theory of a spinor field. (Russian. English summary) (84c:83045)
- Marino, E. C. (with Schroer, B.; Swieca, J. A.) Euclidean functional integral approach for disorder variables and kinks. (84b:81070)
- Marsden, Jerrold E. Spaces of solutions of relativistic field theories with constraints. (84f:81062)
- Maslov, V. P. The Kolmogorov-Feller equation and a probability model of quantum mechanics. (Russian) (84j:81011)
- See also Belavkin, V. P.; et al., (84b:82028)
- Moncrief, Vincent E. Classical and quantum models of strong cosmic censorship. (84m:83015)
- Nelson, Bruce Path integral for scattering theory. (84c:81030)
- Neville, Donald E. Conformal divergences and spacetime foam in an $R+R^2$ theory. (84c:83024)
- (Niederle, Jiří Ø.) See Popov, V. N., (84m:81008)
- Novikov, L. F. Continual integral with respect to a numerical measure for interacting bosons and fermions. (Russian. English summary) (84m:81089)
- Obozov, V. I. On geodesic normal flow of perfect and viscous fluid. (84g:83032)
- Olesen, P. See Durhuus, B.; et al., (84b:81057a) and (84b:81057b)
- Padmanabhan, T. Quantum stationary states in the Bianchi universes. (84b:83023)
- Petersen, J. L. See Durhuus, B.; et al., (84b:81057a) and (84b:81057b)
- Piipi, G. M. A class of Feynman integrals. (Russian. English and Georgian summaries) (84i:81037)
- Polyakov, A. M. Quantum geometry of bosonic strings. (84b:81093a)
- Quantum geometry of fermionic strings. (84b:81093b)
- Popov, V. N. ★Functional integrals in quantum field theory and statistical physics. (84m:81008)
- Prokhorov, L. V. Hamiltonian path integrals. (84g:81018)
- Rezende, Jorge Remark on the solution of the Schrödinger equation for anharmonic oscillators via the Feynman path integral. (84f:81031)
- Riva, F. (with Zanon, D.) About functional methods in superspace. (84i:81121)
- Ruan, Tu Nan (with Fan, Hong Yi; Yin, Hong Jun) Effective Lagrangian of path integral quantization formalism in curved space. (84d:81014)
- (with Fan, Hong Yi; Yin, Hong Jun) Functional integration techniques for negative metric. (84d:81015)
- See also Zhou, Guang Zhao, (84f:81075)
- Rzewuski, Jan A new definition of functional integrals over anticommuting functions. (Russian summary) (84b:81044)
- van Saarloos, Wim Exact differential renormalization group equations for Ising models on square lattices. (84c:82015)
- Salomonson, P. (with van Holten, J. W.) Fermionic coordinates and supersymmetry in quantum mechanics. (84f:81032)
- Saraykar, R. V. (with Joshi, N. E.) Erratum: "Linearization stability of Einstein equations coupled with self-gravitating scalar fields" [J. Math. Phys. 22 (1981), no. 2, 343-347; MR 82f:83010]. (84c:83010)
- Schroer, B. Functional integrals for order-disorder variables in terms of Bohm-Aharonov strings. (84j:81052)
- See also Marino, E. C.; et al., (84b:81070)
- Schwab, P. Two-instanton contribution to the topological susceptibility in CP^{n-1} -models on a sphere. (84m:81128)
- Segal, Irving E. Quantization, stability, and scattering. (84m:81081)
- Shih, Weishu Sur l'équation intégrale-différentielle non-linéaire et la topologie algébrique. [On nonlinear integro-differential equations and algebraic topology] (84j:58038)
- Silverman, Steven See Gerry, Christopher C., (84j:81037)
- Simon, Barry ★Functional integration and quantum physics. (84m:81066)
- Smolyanov, O. G. Infinite-dimensional pseudodifferential operators and Schrödinger quantization. (Russian) (84c:35144)
- Socolovsky, M. See Camposino-Romeo, E.; et al., (84c:81039)
- Spector, Scott J. On uniqueness for the traction problem in finite elasticity. (84d:73038)
- Storrick, D. A. See Cameron, R. H., (84m:81065)
- Swieca, J. A. See Marino, E. C.; et al., (84b:81070)
- Tariverdiev, S. È. See Belavkin, V. P.; et al., (84b:82028)
- Tarski, Jan Path integrals over phase space, their definition and simple properties. (84m:81067)
- Tataru-Mihai, P. Polyakov's string theory and Teichmüller spaces. (Italian and Russian summaries) (84i:81074)
- Tiemblo, A. See Alonso, F.; et al., (84b:81046)
- Trias, A. See Gambini, R., (84j:81036) and (84c:81074)
- Tseitin, A. A. See Fradkin, E. S., (84d:81052)
- Wissel, Christian Definitions of path integrals for general diffusion processes. (See 84b:00033)
- Witt, Donald M. See Friedman, John L., (84m:83028)
- Yappa, Yu. A. See Levit-skiĭ, B. A., (84c:83045)
- Yin, Hong Jun See Ruan, Tu Nan; et al., (84d:81014) and (84d:81015)
- Zamolodchikov, A. B. On the entropy of random surfaces. (84b:81094)
- Zanon, D. See Riva, F., (84i:81121)
- Zhou, Guang Zhao (with Ruan, Tu Nan) On the quantization and the renormalization of the pure gauge fields on the coset space. (Chinese summary) (84f:81075)

58D99 None of the above, but in this section

secondary classifications:

- Ball, John MacLeod (with Marsden, Jerrold E.; Slemrod, M.) Controllability for distributed bilinear systems. (84c:49079)
- Christodoulou, Demetrios (with Ó Murchadha, N.) The boost problem in general relativity. (84c:83011)
- Gravesen, Jens Whitney C^∞ -topologies and the Baire property. (84g:58013)
- Karpushev, S. I. Canonical states on the group G^2 . (Russian. English summary) (84g:22006)
- Kuo, Hui Hsiung On Fourier transform of generalized Brownian functionals. (84d:60099)
- Marsden, Jerrold E. See Ball, John MacLeod; et al., (84c:49079)
- Ó Murchadha, N. See Christodoulou, Demetrios, (84c:83011)
- Slemrod, M. See Ball, John MacLeod; et al., (84c:49079)
- Tipler, Frank J. General relativity and the eternal return. (See 84j:83001)

58Exx Variational problems in infinite-dimensional spaces

secondary classifications:

(Morse, Marston) See Global analysis-analysis on manifolds. (84m:58004)

(Rassias, Themistocles M.) See Global analysis-analysis on manifolds. (84m:58004)

Anniversary:

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Global analysis-analysis on manifolds ★ Global analysis-analysis on manifolds. (84m:58004)

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Bates, Peter W. (with Castro, Alfonso) Necessary and sufficient conditions for existence of solutions to equations with noninvertible linear part. (Spanish summary) (84b:47080)

Benci, Vieri (with Capozzi, A.; Fortunato, Donato) Periodic solutions of a class of Hamiltonian systems. (See 84b:34002)

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Böhme, Reinhold New results on the classical problem of Plateau. On the existence of many solutions. (84c:58021)

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Capozzi, A. See Benci, Vieri, et al., (See 84b:34002)

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Eells, J. Variational theory in fibre bundles: examples. (84b:58048)

Fadell, E. R. (with Husseini, S. Y.; Rabinowitz, Paul H.) Borsuk-Ulam theorems for arbitrary S^1 actions and applications. (84b:55001)

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Girardi, M. (with Matzeu, Michele) Some results on solutions of minimal period to superquadratic Hamiltonian systems. (84g:58092)

Gomes, Jonas de Miranda (with Voloch, José Felipe) Une inégalité géométrique concernant les points critiques d'une fonction. (English summary) [A geometric inequality in critical point theory] (84c:53051)

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- Ball, John MacLeod Discontinuous equilibrium solutions and cavitation in nonlinear elasticity. (84i:73041)
- Berding, C. (with Haken, Hermann) Pattern formation in morphogenesis. Analytical treatment of the Gierer-Meinhardt model on a sphere. (84c:92013)
- Bergé, P. Rayleigh-Bénard convection in high Prandtl number fluid. (See 84b:00033)
- Berger, Mel S. Confinement problems in mathematical physics, classical and modern. (See 84a:58006)
- Bongers, Achim (with Heinz, Hans-Peter; Küpper, Tassilo) Existence and bifurcation theorems for nonlinear elliptic eigenvalue problems on unbounded domains. (84h:35007)
- Botashev, A. I. Systems of nonlinear integral equations and branching of their solutions. (Russian) (84a:45006)
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- Britov, N. A. Planar MHD structures. Topological approach. (84j:76060)
- Busse, F. H. Transition to turbulence in Rayleigh-Bénard convection. (See 84m:76003)
- Chillingworth, D. R. J. (with Marsden, Jerrold E.; Wan, Yieh Hei) Symmetry and bifurcation in three-dimensional elasticity. I. (84i:73042)
- DiPrima, R. C. (with Swinney, Harry L.) Instabilities and transition in flow between concentric rotating cylinders. (See 84m:76003)
- Do, Claude Flambement élastoplastique d'une plaque mince. [Elastoplastic buckling of a thin plate] (84i:73044)
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- Isac, George Errata: "The existence of fixed cones for convex processes" [Period. Math. Hungar. 12 (1981), no. 4, 301-306; MR 83c:90161]. (French) (84i:90165)
- James, Richard D. The equilibrium and post-buckling behavior of an elastic curve governed by a nonconvex energy. (84h:73023)
- Joseph, Daniel D. Hydrodynamic stability and bifurcation. (See 84m:76003)
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- Nauenberg, M. (with Scalapino, D.) Scaling at a bifurcation point. (See 84k:81008)
- Okamoto, Hisashi A stationary free boundary problem for a circular flow with or without surface tension. (84f:76036)
- Pejsachowicz, J. See Fitzpatrick, P. M.; et al., (84k:47044a) and (84k:47044b)
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- Quittner, Pavol Generic properties of von Kármán equations. (84d:58016)
- Rabier, Patrick Étude locale des problèmes non linéaires perturbés. [Local study of perturbed nonlinear problems] (84i:47047)
- Rappaz, Jacques Estimations d'erreur dans différentes normes pour l'approximation de problèmes de bifurcation. (English summary) [Error estimates in various norms for the approximation of bifurcation problems] (84g:65078)
- Räuchle, E. Instability as a property of plasma states. (See 84b:00033)
- Rehberg, I. See Brandstätter, A.; et al., (See 84b:00033)
- Sather, D. See Knightly, George H., (See 84c:00005)
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- Schmitt, Klaus (with Smith, Hal) Fredholm alternatives for nonlinear differential equations. (84h:76066)
- Schulz-DuBois, E. O. See Brandstätter, A.; et al., (See 84b:00033)
- Shirer, Hampton N. (with Wells, Robert) Improving spectral models by unfolding their singularities. (84b:58023)
- Smith, Hal See Schmitt, Klaus, (84h:76066)
- Smoller, Joel A. ★Shock waves and reaction-diffusion equations. (84d:35002)
- Sofer, Miguel On the inversion of the Lagrange-Dirichlet stability theorem—mechanical and generalized systems. (German summary) (84g:49032)
- Sosna, Dieter Eine implizite Integro-Differentialgleichung und Bifurkationen. [An implicit integro-differential equation and bifurcations] (84b:58027)
- Steeb, Willi-Hans See Strampp, W.; et al., (84c:35063)
- Strampp, W. (with Steeb, Willi-Hans; Erig, W.) Solutions to nonlinear reaction-diffusion equations in two space dimensions. (84c:35063)
- Stuart, C. A. A variational approach to bifurcation in L^p on an unbounded symmetrical domain. (84c:35047)
- Suquet, Pierre See Mignot, F.; et al., (84c:73046)
- Swinney, Harry L. (with Gollub, Jerry P.) Introduction. (See 84m:76003)
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- Tikhonov, V. P. See Zabreiko, P. P., (84h:47069)
- Turitsyn, S. K. See Kuznetsov, E. A., (84b:76061)
- Vanderbauwhede, André Bifurcation at double eigenvalues for a class of symmetric Dirichlet problems. (84c:35015)
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- Wan, Yieh Hei See Chillingworth, D. R. J.; et al., (84i:73042)
- Wells, Robert See Shirer, Hampton N., (84b:58023)
- Wolfe, Peter Equilibrium states of an elastic conductor in a magnetic field: a paradigm of bifurcation theory. (84f:73056)
- Verion, K. A. Multiparametered nonhomogeneous nonlinear equations. (84d:47091)
- Zabreiko, P. P. (with Tikhonov, V. P.) Determining equations and the relatedness principle. (Russian) (84h:47069)
- Zak, Michail Post-instability in continuous systems. I. Failure of differentiability of solutions in continuum mechanics. (84d:73007)
- Zhang, Gong Qing Free boundary problems and the set-valued mappings. (84h:35172)
- Zwahlen, Bruno The behaviour of the critical value of an equation under small perturbations. (84h:35009)

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- Anosov, D. V. Generic properties of closed geodesics. (Russian) 84b:58029
- Ballmann, Werner (with Thorbergsson, G.; Ziller, Wolfgang) Existence of closed geodesics on positively curved manifolds. 84i:58032
- Blaquière, Austin Optimization and controllability in problems of relativistic dynamics and of geometrical optics. 84k:58054
- Croke, Christopher B. Poincaré's problem and the length of the shortest closed geodesic on a convex hypersurface. 84f:58034
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- Ortmann, J. Singularités de champs hamiltoniens. Lien avec l'existence de solutions optimales en calcul des variations. [Singularities of Hamiltonian fields. Connection with the existence of optimal solutions in the calculus of variations] 84b:58031
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- Anosov, D. V. Closed geodesics. (Russian) (84b:58114)
- See also Klingenberg, Wilhelm, (84f:53037)
- Ballmann, Werner (with Ziller, Wolfgang) On the number of closed geodesics on a compact Riemannian manifold. (84d:53048)
- On the lengths of closed geodesics on convex surfaces. (84f:53035)
- Bott, Raoul Lectures on Morse theory, old and new. (84m:58026b)
- Lectures on Morse theory, old and new. (84m:58026a)
- (Gryn'alt', A. I.) See Klingenberg, Wilhelm, (84f:53037)
- Klingenberg, Wilhelm ★ Лекции о замкнутых геодезических. (Russian) [Lectures on closed geodesics] (84f:53037)
- ★ Riemannian geometry. (84f:53001)
- Vigné-Poirrier, Micheline Dans le fibré de l'espace des lacets libres, la fibre n'est pas, en général, totalement non cohomologue à zéro. [In the free-loop-space fibration the fiber is not, in general, totally noncohomologous to zero] (84e:55007)
- Ziller, Wolfgang See Ballmann, Werner, (84d:53048)

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58E12 Applications to minimal surfaces (problems in two independent variables)

- Coron, Jean-Michel Une deuxième surface à courbure moyenne prescrite s'appuyant sur une courbe donnée. [A second prescribed mean curvature surface lying on a given curve] (See 84i:35003)
- Rassias, Themistocles M. Morse theory and Plateau's problem. 84b:58040
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- Tromba, A. J. A sufficient condition for a critical point of a functional to be a minimum and its application to Plateau's problem. 84b:58033

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- Barbosa, João Lucas Marquês (with Mori, Hiroshi) Stability of constant mean curvature surfaces in Riemannian 3-space form. (84d:53060)
- Hildebrandt, Stefan Partielle Differentialgleichungen und Differentialgeometrie. [Partial differential equations and differential geometry] (84g:53001)
- Kawai, Shigeo On the instability of a minimal surface in a 4-manifold whose curvature lies in the interval $(\frac{1}{4}, 1]$. (84c:53075)
- Lichnerowicz, A. Un problème modèle en théorie de la plasticité; analogie avec le problème des surfaces minimales. [A model problem in elasticity theory; analogy with the problem of minimal surfaces] (84c:73026)
- Meeks, William H., III (with Yau, Shing Tung) The classical Plateau problem and the topology of three-dimensional manifolds. The embedding of the solution given by Douglas-Morrey and an analytic proof of Dehn's lemma. (84g:53016)
- Mori, Hiroshi See Barbosa, João Lucas Marquês, (84d:53060)
- Nitsche, Johannes C. C. Minimal surfaces and partial differential equations. (84j:53009)
- Rassias, Themistocles M. Morse theory and Plateau's problem. (84i:49085)
- Schiffner, Karl-Heinz (with Tomi, Friedrich) Ein Indexsatz für Flächen konstanter mittlerer Krümmung. [An index theorem for surfaces of constant mean curvature] (84b:53085)
- Tomi, Friedrich See Schiffner, Karl-Heinz, (84b:53085)
- Yau, Shing Tung See Meeks, William H., III, (84g:53016)

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- Böhme, Reinhold New results on the classical problem of Plateau. On the existence of many solutions. 84c:58021
- Bourguignon, Jean-Pierre Stability and self-duality of Yang-Mills fields. (See 84d:53003)
- Brézis, Haim (with Coron, Jean-Michel) Sur la conjecture de Rellich pour les surfaces à courbure moyenne prescrite. (English summary) [On Rellich's conjecture for surfaces with prescribed mean curvature] 84i:58034
- Coron, Jean-Michel See Brézis, Haim, 84i:58034
- Lewandowski, Jerzy (with Tafel, Jacek; Trautman, Andrzej) Geometrical aspects of gauge conditions. 84m:58032
- Onofri, E. On the positivity of the effective action in a theory of random surfaces. 84j:58043
- Price, Peter A monotonicity formula for Yang-Mills fields. 84m:58033
- Reinoza, Alfonso Global behavior of generalized equations: a Sard theorem. 84b:58041
- Sibner, L. M. An existence theorem for a nonregular variational problem. 84i:58035
- Tafel, Jacek See Lewandowski, Jerzy; et al., 84m:58032
- Trautman, Andrzej See Lewandowski, Jerzy; et al., 84m:58032
- Uhlenbeck, Karen K. Conservation laws and their application in global differential geometry. 84c:58057

secondary classifications:

- Bartnik, Robert (with Simon, Leon) Spacelike hypersurfaces with prescribed boundary values and mean curvature. (84j:58126)
- Berger, Marcel Recent trends in Riemannian geometry. (84d:53047)
- Bobyly, N. A. Deformation of functionals having a unique critical point. (Russian) (84j:47100)
- Brézis, Haim Solutions positives d'équations elliptiques non linéaires avec exposant de Sobolev critique et conjecture de Rellich pour les surfaces à courbure moyenne prescrite. [Positive solutions of nonlinear elliptic equations with critical Sobolev exponent and Rellich's conjecture for surfaces with assigned mean curvature] (See 84i:58006)
- Chua, Leon O. (with Lin, G. N.) Nonlinear optimization with constraints: a cookbook approach. (84i:90080)
- Đào Trọng Thi Isoperimetric inequalities for multivarifolds. (84b:49060)
- Dodziuk, Jozef (with Min-Oo) An L_2 -isolation theorem for Yang-Mills fields over complete manifolds. (84b:53033b)
- Fomenko, A. T. Multidimensional variational methods in the topology of extremals. (Russian) (84c:58022)
- Letelier, Patricio S. Classical dynamics of $(n+1)$ -dimensional minimal surfaces. (84m:70015)
- Lin, G. N. See Chua, Leon O., (84i:90080)
- McKeon, Gerry Topologically stable solutions in an $O(4)$ Yang-Mills, Higgs system. (French summary) (84b:81072)
- Min-Oo An L_2 -isolation theorem for Yang-Mills fields. (84b:53033a)
- See also Dodziuk, Jozef, (84b:53033b)
- Nitsche, Johannes C. C. Minimal surfaces and partial differential equations. (84j:53009)
- Rund, Hanno The construction of the complete figure in the calculus of variations of multiple integrals: a direct approach. (84b:49031)
- Rybakov, Yu. P. Search for the absolute minimum of energy in chiral models. (Russian) (84c:81085)
- Simon, Leon See Bartnik, Robert, (84j:58126)
- Temam, Roger Fonction convexe d'une mesure et applications. [Convex function of a measure and applications] (See 84i:35006)
- Wintgen, Peter Totale Absolutkrümmung von Hyperflächen. [Total absolute curvature of hypersurfaces] (84g:53087)

58E17 Pareto optimality, etc., applications to economics

- Chernyak, A. G. See Vershik, A. M., 84b:58058
- Malivert, Christian A descent method for Pareto optimization. 84f:58036
- Vershik, A. M. (with Chernyak, A. G.) Critical points of fields of convex polyhedra and the Pareto-Smale optimum relative to a convex cone. (Russian) 84b:58058

secondary classifications:

- Anderson, Robert M. (with Sonnenschein, Hugo) On the existence of rational expectations equilibrium. (84b:90022)
- Cheng, Hsueh Cheng Generic examples on the rate of convergence of the core. (84j:90020)
- Chernyak, A. G. See Vershik, A. M., (84m:58011)
- Cornet, Bernard Neutrality of planning procedures. (84b:90020)
- Debreu, Gerard Existence of competitive equilibrium. (See 84d:90005b)
- Ginsburgh, Victor A. (with Waelbroeck, Jean L.) ★ Activity analysis and general equilibrium modelling. (84d:90022)
- Grandmont, Jean-Michel Temporary general equilibrium theory. (See 84d:90005b)
- Hart, Sergiu See Kurz, Mordecai, (84j:90024)
- Khan, M. Ali (with Yamazaki, Akira) On the cores of economies with indivisible commodities and a continuum of traders. (84a:90024)
- Kurz, Mordecai (with Hart, Sergiu) Pareto-optimal Nash equilibria are competitive in a repeated economy. (84j:90024)
- Lóvei, László Temporary competitive equilibrium. (Hungarian. English and Russian summaries) (84b:90024)
- Marakulin, V. M. Equilibrium inefficiency in smooth economies with utility functions of a general type. (Russian) (84b:90017)
- Moldavskii, M. A. Investigation of the properties of convolutions of the vector criterion in search for Pareto solutions. (Russian) (See 84b:90010)
- Nielsen, Lars Tyge Pareto optima, nonconvexities and regulated market equilibria. (84c:90024)

Schmeidler, David A condition guaranteeing that the Nash allocation is Walrasian. (84c:90025)

Sonnenschein, Hugo See Anderson, Robert M., (84c:90022)

Vershik, A. M. (with Chernyakov, A. G.) Fields of convex polyhedra and Pareto-Smale optimum. (Russian) (84c:58011)

Waelbroeck, Jean L. See Glimburgh, Victor A., (84c:90022)

Yamazaki, Akira See Khan, M. Ali, (84c:90024)

58E20 Harmonic maps

Adams, J. F. Maps from a surface to the projective plane. 84c:58042

Baird, P. Some aspects of theoretical physics relating to harmonic maps. (See 84d:53003)

Baldes, Alfred Harmonic mappings with partially free boundary. 84c:58036

de Bartolomeis, Paolo Sur l'analyticité complexe de certaines applications harmoniques.

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Bourgoin, Jean-Pierre Introduction aux problèmes analytiques posés par le système des équations de Yang-Mills. [Introduction to analytic problems posed by the Yang-Mills system of equations] (See 84c:58006)

Catenacci, Roberto (with Martellini, M.; Reina, Cesare) On the classical energy spectrum of CP^2 models. 84c:58033

Fomenko, A. T. Multidimensional variational methods in the topology of extremals. (Russian) 84c:58022

Giaquinta, Mariano (with Giusti, Enrico) On the regularity of the minima of variational integrals. 84c:58034

(with Hildebrandt, Stefan) A priori estimates for harmonic mappings. 84c:58035

(with Giusti, Enrico) Differentiability of minima of nondifferentiable functionals. 84c:58037

Giusti, Enrico See Giaquinta, Mariano, 84c:58034 and 84c:58037

Hildebrandt, Stefan Liouville theorems for harmonic mappings, and an approach to Bernstein theorems. 84c:58029

See also Giaquinta, Mariano, 84c:58035

Hu, He Sheng sine-Laplace equation, sinh-Laplace equation and harmonic maps. 84c:58037

Jost, Jürgen (with Karcher, Hermann) Geometrische Methoden zur Gewinnung von a-priori-Schranken für harmonische Abbildungen. (English summary) [Geometric methods for obtaining a priori bounds for harmonic mappings] 84c:58023

(with Yau, Shing Tung) Harmonic mappings and Kähler manifolds. 84c:58022

Existence proofs for harmonic mappings with the help of a maximum principle. 84c:58056

Kamber, Franz W. (with Tondeur, Philippe) Harmonic foliations. 84c:58044

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Karp, Leon The growth of harmonic functions and mappings. 84c:58034

Lemaire, Luc Boundary value problems for harmonic and minimal maps of surfaces into manifolds. 84c:58059

Martellini, M. See Catenacci, Roberto; et al., 84c:58033

Nagano, Tadashi Stability of harmonic maps between symmetric spaces. 84c:58023

Pan, Yang Lian Some nonexistence theorems on stable harmonic mappings. (Chinese summary) 84c:58024

Parker, Monique Orthogonal multiplications in small dimensions. 84c:58060

Parker, Thomas H. Gauge theories on four-dimensional Riemannian manifolds. 84c:58036

Piu, M. Paola Vector fields and harmonic maps. (Italian. English summary) 84c:58061

Reina, Cesare See Catenacci, Roberto; et al., 84c:58033

Sampson, J. H. On a class of harmonic maps. 84c:58030

Sanini, Aristide Harmonic maps between the tangent bundles of Riemannian manifolds. (Italian. English summary) 84c:58036

Schoen, Richard M. (with Uhlenbeck, Karen K.) A regularity theory for harmonic maps. 84c:58037a

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Takeuchi, Hiroshi A stable harmonic map of a manifold with boundary. 84c:58062

Tondeur, Philippe See Kamber, Franz W., 84c:58044

Tóth, Gábor On rigidity of harmonic mappings into spheres. 84c:58025

Uhlenbeck, Karen K. Equivariant harmonic maps into spheres. 84c:58038

See also Schoen, Richard M., 84c:58037

Wood, J. C. Some aspects of harmonic maps from a surface to complex projective space. (See 84d:53003)

Xin, Yuan Long On stable harmonic maps and their application. (See 84c:00020)

Some existence theorems for harmonic maps in Riemannian manifolds. 84c:58037

Yau, Shing Tung See Jost, Jürgen, 84c:58022

secondary classifications:

Abbott, R. B. Elliptic solutions of CP^{n-1} models and their properties. (84c:81020)

Aubin, Thierry Métriques d'Einstein-Kähler sur les variétés kählériennes compactes. [Einstein-Kähler metrics on compact Kähler manifolds] (See 84c:53004)

Chakrabarti, Amitabha Harrison-Neugebauer-type transformations for instantons: multicharged monopoles as limits. (84c:81039)

Darling, R. W. R. Martingales in manifolds—definition, examples, and behaviour under maps. (84j:58133)

Din, A. M. (with Zakrzewski, W. J.) Quantum fluctuations around a noninstanton solution. (84b:81062)

Elworthy, K. David Stochastic methods and differential geometry. (84c:58149)

Gidas, Basilis Euclidean Yang-Mills and related equations. (84c:81025)

Gu, Chao Hao (with Hu, He Sheng) On the spherically symmetric gauge fields. (84c:81064)

Some problems of nonlinear hyperbolic systems. (84j:35111)

Guo, Han Ying Models of harmonic mapping theory for the Beltrami space-time of constant curvature. (84c:83009)

Gürsey, Feza (with Tze, Hsiung Chia) Complex and quaternionic analyticity in chiral and gauge theories. I. (84d:81031)

Hikami, Shinobu (with Maskawa, Toshihide) Nonlinear σ models on symmetric spaces and large N limit. (84c:81026)

Hildebrandt, Stefan Partielle Differentialgleichungen und Differentialgeometrie. [Partial differential equations and differential geometry] (84g:53001)

Hu, He Sheng See Gu, Chao Hao, (84c:81064)

Ishihara, Tōru The harmonic Gauss maps in a generalized sense. (84c:53053)

Janušauskas, Algimantas ★ Трёхмерные аналоги конформных отображений. (Russian) [Three-dimensional analogues of conformal mappings] (84c:30021)

Jost, Jürgen (with Meier, Michael) Boundary regularity for minima of certain quadratic functionals. (84i:35051)

Karp, Leon Subharmonic functions on real and complex manifolds. (84d:53042)

Koo, W. K. See Teh, Rosy; et al., (84c:81055)

Maskawa, Toshihide See Hikami, Shinobu, (84c:81026)

Mazur, Pawel O. Proof of uniqueness of the Kerr-Newman black hole solution. (84j:83013)

Meier, Michael See Jost, Jürgen, (84i:35051)

Nishikawa, Seiki (with Shiga, Kiyoshi) On the holomorphic equivalence of bounded domains in complete Kähler manifolds of nonpositive curvature. (84i:32032)

Novikov, V. A. See Vainshtein, A. I.; et al., (84c:81056)

Oh, C. H. See Teh, Rosy; et al., (84c:81055)

Rawnsley, J. H. On the rank of horizontal maps. (84b:58007)

Sasaki, Ryu General classical solutions of the complex Grassmannian and CP^{n-1} sigma models. (84c:81087)

Shen, Chun Li Weak stability of Yang-Mills fields over submanifolds of the sphere. (84c:53030)

Shifman, M. A. See Vainshtein, A. I.; et al., (84c:81056)

Shiga, Kiyoshi See Nishikawa, Seiki, (84i:32032)

Teh, Rosy (with Oh, C. H.; Koo, W. K.) Yang-Mills field configurations with critical source strengths. (84c:81055)

Tze, Hsiung Chia See Gürsey, Feza, (84d:81031)

Uhlenbeck, Karen K. Conservation laws and their application in global differential geometry. (84c:58057)

Vainshtein, A. I. (with Zakharov, V. I.; Novikov, V. A.; Shifman, M. A.) ABC of instantons. (84c:81056)

Wood, J. C. Corrigenda to: "An extension theorem for holomorphic mappings" [Math. Proc. Cambridge Philos. Soc. 88 (1980), no. 1, 125-127; MR 82d:32021]. (84g:32042)

Zakharov, V. I. See Vainshtein, A. I.; et al., (84c:81056)

Zakrzewski, W. J. See Din, A. M., (84b:81062)

58E25 Applications to control theory (optimal and nonoptimal)

Bacciotti, Andrea Topological aspects of the minimum time problem. (Italian) 84c:58045

Castro, Alfonso Reduction methods via minimax. 84c:58024

Stefani, Gianna (with Zecca, Pietro) Multivalued vector field and multivalued differential equations. 84c:58046

Verdier, Jean-Louis Two-dimensional σ -models and harmonic maps from S^2 to S^{2n} . (See 84c:00008)

Zecca, Pietro See Stefani, Gianna, 84c:58046

secondary classifications:

Barbu, Viorel Invariant manifolds for Hamiltonian systems in Hilbert spaces. (84c:58070)

Blaquiere, Austin Optimization and controllability in problems of relativistic dynamics and of geometrical optics. (84c:58054)

Botaris, C. A. Constrained optimization along geodesics. (84c:90085)

Graham, Robert Hopf bifurcation with fluctuating control parameter. (84d:58059)

Hiriart-Urruty, Jean-Baptiste Characterizations of the plenary hull of the generalized Jacobian matrix. (84i:90080)

Katayama, Tooru See Takagi, Tomoaki, (84c:49059a) and (84c:49059b)

Keenan, Donald ★ Differential dynamics in general equilibrium theory. (84i:90035)

Nottrott, Roel ★ Optimal processes on manifolds. (84c:49044)

Pomeroy, J.-Ch. The Lagrange multiplier set and the generalized gradient set of the marginal function of a differentiable program in a Banach space. (84c:49033)

Rockafellar, R. T. Lagrange multipliers and subderivatives of optimal value functions in nonlinear programming. (84c:90067)

Stefani, Gianna (with Zecca, Pietro) Multivalued differential equations on manifolds with application to control theory. (84c:58101)

Takagi, Tomoaki (with Katayama, Tooru) Study of singular control problem by a differential form theory. I. n -dimensional nonlinear control system with n controls appearing linearly. (Japanese. English summary) (84c:49059a)

(with Katayama, Tooru) Study of singular control problem by a differential form theory. II. n -dimensional nonlinear control system with one control variable appearing linearly. (Japanese. English summary) (84c:49059b)

Yatsenko, V. A. Euler equations on Lie groups, and optimal control of bilinear systems. (Russian) (84m:93053)

Zecca, Pietro See Stefani, Gianna, (84c:58101)

58E30 Variational principles

Amara, Luis (with Pera, Maria Patrizia) On periodic solutions of nonconservative systems. 84c:58063

Arens, Richard Reducing the order of a Lagrangian. 84c:58047

Bauderon, Michel Le problème inverse du calcul des variations. (English summary) [The inverse problem of the calculus of variations] 84c:58038

Chen, Kuo Tsai The Euler operator. 84c:58039

Dolecki, Szymon (with Salinetti, Gabriella; Wets, Roger J.-B.) Convergence of functions: equi-semicontinuity. 84c:58064

- Eells, J. Variational theory in fibre bundles: examples. (84h:58048)
- Hussain, Munawar An invariance theory for a second order variational problem in group variables. (84m:58035)
- Lacomba, Ernesto A. (with Losco, Lucette) Variational characterization of contact vector fields in the group of contact diffeomorphisms. (84g:58038)
- Losco, Lucette See Lacomba, Ernesto A. (84g:58038)
- Matsuyuk, R. Ya. On the existence of a Lagrangian for a system of ordinary differential equations. (Russian) (84g:58039)
- Meeker, David Bang-bang control and local semidynamical systems on CW complexes. (See 84e:00005)
- Nahm, Werner The algebraic geometry of multimoments. (See 84k:00008)
- Pera, Maria Patrizia See Amaral, Luis. (84i:58063)
- Salinetti, Gabriella See Dolecki, Szymon; et al. (84i:58064)
- Sanini, Aristide Maps between Riemannian manifolds with critical energy with respect to deformations of metrics. (Italian. English summary) (84j:58044)
- Trostel, Robert Geometric formulation of the indirect analytic representation of dynamical systems, exterior differential calculus on Banach spaces and variational selfadjointness. (84m:58036)
- Fermionic lifting of variational selfadjointness. (84i:58039)
- Wets, Roger J.-B. See Dolecki, Szymon; et al. (84i:58064)

secondary classifications:

- Alfakos, Nicholas D. Quantitative maximum principles and strongly coupled gradient-like reaction-diffusion systems. (84g:35063)
- (Azé, Dominique) See Blot, Joël. (84i:58041)
- Bahar, Leon Y. (with Kwiatny, Harry G.) First integrals independent of the Hamiltonian for some dynamical systems. (84j:70021)
- Blot, Joël ★Systèmes hamiltoniens: leurs solutions périodiques. (French) [Hamiltonian systems: their periodic solutions] (84i:58041)
- Bonora, L. (with Pasti, P.; Tonin, M.) Superspace approach to quantum gauge theories. (84i:81113)
- Boya, Luis J. (with Mateos, Juan) The vortex: complex Hopf bundle and Morse theory. (84e:81035)
- Broucke, R. On the principle of least action; some possible generalizations. (84d:70024)
- Christina, Jan Another approach to the classical calculus of variations. (84h:49086)
- Detyna, Edward Group-theoretical approach to the ideal fluid problem. (84a:76005)
- Dikii, L. A. Hamiltonian structures and Lax equations generated by matrix differential operators with polynomial dependence on a parameter. (84i:58053)
- Ekeland, Ivar Oscillations forcées de systèmes hamiltoniens non linéaires. [Forced oscillations of nonlinear Hamiltonian systems] (84i:58098a)
- Forced oscillations of nonlinear Hamiltonian systems. II. (84i:58098b)
- Faddeev, L. D. The energy problem in Einstein's theory of gravitation. (84i:83016)
- Farias, J. Ronald (with Teixeira, N. L.) Equivalent Lagrangians in field theory. (84i:70020)
- Francaviglia, Mauro (with Krupka, Demeter) The Hamiltonian formalism in higher order variational problems. (French summary) (84m:70022)
- Galindo, A. (with Garcia Alcaine, G.) On the extremality of the action integral. (84m:49040)
- Garcia Alcaine, G. See Galindo, A. (84m:49040)
- Giaquinta, Mariano On differentiability of the extremals of variational integrals. (84h:49002)
- Gibbons, G. W. (with Hawking, S. W.; Horowitz, Gary T.; Perry, Malcolm J.) Positive mass theorems for black holes. (84k:83015)
- Griffiths, Phillip ★Exterior differential systems and the calculus of variations. (84h:58007)
- Guil Guerrero, F. The Riccati equation and Hamiltonian systems. (84h:58054)
- Hawking, S. W. See Gibbons, G. W.; et al. (84k:83015)
- Henneaux, Marc Equations of motion, commutation relations and ambiguities in the Lagrangian formalism. (84a:70014)
- Horowitz, Gary T. See Gibbons, G. W.; et al. (84k:83015)
- Hu, He Sheng On the static solutions of massive Yang-Mills equations. (Chinese summary) (84i:81061)
- Jadczyk, A. Conservation laws and string-like matter distributions. (French summary) (84i:53067)
- Kalina, Jerzy Some remarks on variational properties of inhomogeneous complex Monge-Ampère equation. (Russian summary) (84j:32023)
- Kapitanskiĭ, L. V. (with Ladyzhenskaya, O. A.) The Coleman principle for determining stationary points of invariant functionals. (Russian) (84k:58051)
- Krupka, Demeter See Francaviglia, Mauro. (84m:70022)
- Kwiatny, Harry G. See Bahar, Leon Y. (84j:70021)
- Ladyzhenskaya, O. A. See Kapitanskiĭ, L. V. (84k:58051)
- Lions, Pierre-Louis Fully nonlinear elliptic equations and applications. (84h:35045)
- Losik, M. V. The invariant theory of variational problems. (Russian) (84i:49084)
- Marris, A. W. Two new theorems on Ericksen's problem. (84k:49038)
- Mateos, Juan See Boya, Luis J. (84e:81035)
- Newman, Richard P. A. C. (with Percival, Ian C.) Definite paths and upper bounds on regular regions of velocity phase space. (84i:58048)
- Novikov, S. P. The Kirchhoff type equations and multivalued functionals. (See 84j:81006)
- The Hamiltonian formalism and a multivalued analogue of Morse theory. (Russian) (84h:58032)
- Pasti, P. See Bonora, L.; et al. (84i:81113)
- Percival, Ian C. See Newman, Richard P. A. C. (84i:58048)
- Perry, Malcolm J. See Gibbons, G. W.; et al. (84k:83015)
- Prästaro, Agostino On the intrinsic expression of the Euler-Lagrange operator. (Italian summary) (84i:58049)
- Ray, John R. (with Smalley, Larry L.) Improved perfect-fluid energy-momentum tensor with spin in Einstein-Cartan space-time. (84h:83044a)
- (with Smalley, Larry L.) Errata: "Improved perfect-fluid energy-momentum tensor with spin in Einstein-Cartan space-time". (84h:83044b)

- Rund, Hanno Differential-geometric and variational background of classical gauge field theories. (84j:53083)
- Salomone, A. (with Schechter, Joseph M.) Mechanical analog for a quantum-chromodynamic phase transition. (84h:81115)
- Schechter, Joseph M. See Salomone, A. (84h:81115)
- Serre, Denis Formes quadratiques et calcul des variations. (English summary) [Quadratic forms and the calculus of variations] (84m:49031)
- Shadwick, W. F. The Hamiltonian formulation of regular r th-order Lagrangian field theories. (84h:58059)
- Smalley, Larry L. See Ray, John R. (84h:83044a) and (84h:83044b)
- Taylor, Jean E. Surface tension functions and their surfaces of least energy. (84h:49089)
- Teixeira, N. L. See Farias, J. Ronald. (84i:70020)
- Tonin, M. See Bonora, L.; et al. (84i:81113)
- Tonti, Enzo A general solution of the inverse problem of the calculus of variations. (84i:49029)
- Zabrejko, P. P. A new approach and new results in the theory of extrema. (See 84a:49002)
- Zhelukhin, A. A. Gauge descriptions and nonlinear string equations in d -dimensional space-time. (Russian. English summary) (84k:81091)

58E35 Variational inequalities (global problems)

secondary classifications:

- Miersemann, Erich Höhere Eigenwerte von Variationsungleichungen. (English summary) [Higher eigenvalues of variational inequalities] (84c:49016)
- Sofonea, Mircea Variational inequalities with blocking property. (84c:49013)

58E99 None of the above, but in this section

- Handel, Michael A pathological area preserving C^∞ diffeomorphism of the plane. (84f:58040)
- secondary classifications:
- Attouch, Hedy (with Wets, Roger J.-B.) Convergence de points min/sup et de points fixes. (English summary) [Convergence of min/sup points and fixed points] (84i:49028)
- Baiocchi, Orlando R. See Raupp, Marco A. (84h:94032)
- Berestycki, Henri (with Lions, Pierre-Louis) Nonlinear scalar field equations. I. Existence of a ground state. (84h:35054a)
- (with Lions, Pierre-Louis) Nonlinear scalar field equations. II. Existence of infinitely many solutions. (84h:35054b)
- Demange, Gabrielle A limit theorem on the minmax set. (84c:90008)
- Dikmen, Murat ★Theory of thin elastic shells. (84h:73035)
- Farias, J. Ronald On the conditions for the existence of a Lagrangian in field theory. (84d:70020)
- Gindikin, S. G. See Volevich, L. R. (84m:58147)
- Golden, K. (with Papanicolaou, George C.) Bounds for effective parameters of heterogeneous media by analytic continuation. (84h:78006)
- Gromov, Mikhail L. Volume and bounded cohomology. (84h:53053)
- Hetzer, G. The principal component of the solution set of nonlinear Schrödinger type problems. (Italian summary) (84h:35056)
- Heyvaerts, Jean (with Lasry, Jean-Michel; Schatzman, Michelle; Witomski, Patrick) A mathematical model of solar flares. (84j:85008)
- Ivanenko, D. D. (with Sardanashvili, G. A.) The gauge treatment of gravity. (84g:83040)
- Kösa, András On the homotopy type of some spaces occurring in the calculus of variations. (84h:58048)
- Kress, Rainer A singular perturbation problem for linear operators with an application to the limiting behaviour of stationary electromagnetic wave fields for small frequencies. (84j:78032)
- Kundu, A. Soliton solutions with nontrivial Hopf invariant on an intermediate S^1 manifold. (84h:81067)
- Lasry, Jean-Michel See Heyvaerts, Jean; et al. (84j:85008)
- Lazer, Alan C. (with McKenna, P. J.) On limitations to the solution set of some nonlinear problems. (84h:35061)
- Lemarechal, Claude (with Mifflin, Robert) Global and superlinear convergence of an algorithm for one-dimensional minimization of convex functions. (84f:49048)
- Lions, Pierre-Louis See Berestycki, Henri. (84h:35054a) and (84h:35054b)
- Loginov, B. V. Application of bifurcation theory with group invariance in the construction of periodic solutions of a problem on phase transitions in the statistical theory of a crystal. (Russian) (84i:82034)
- Marques, M. D. P. M. Existence de fonctionnelle énergie pour les milieux continus élastiques du 1er ordre. [Existence of the energy functional for first-order elastic continuous media] (84h:73006)
- McKenna, P. J. See Lazer, Alan C. (84h:35061)
- Mifflin, Robert See Lemarechal, Claude. (84f:49048)
- van Nieuwenhuizen, P. See Ore, F. R., Jr. (84d:81065)
- Ore, F. R., Jr. (with van Nieuwenhuizen, P.) Local BRST symmetry and the geometry of gauge-fixing. (84d:81065)
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 Kolyada, S. F. (with Sharkovskii, A. N.) The measure of repellers of one-dimensional smooth mappings. (Russian) (84c:58051)
 Lacombe, Ernesto A. Variétés de l'infini pour une énergie non nulle en mécanique céleste. (English summary) [Infinity manifolds for nonzero energy in celestial mechanics] (84f:58048)
 Mañé, Ricardo. An ergodic closing lemma. (84f:58070)
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 Serra, Rafael. See Alsedà, Lluís, (See 84f:58001)
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- Ahlfors, Lars Valerian ★ Möbius transformations in several dimensions. (84m:30028)
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 Haine, L. Geodesic flow on $SO(4)$ and abelian surfaces. (84i:14031)
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 Kummer, Martin On the regularization of the Kepler problem. (84d:58028)
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 Novello, M. (with Soares, I. Damiao; Tiomno, J.) Geodesic motion and confinement in Gödel's universe. (84h:83005)
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 Safonov, A. V. A spectral type of ergodic G -induced flows. (Russian) (84i:58132)
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- Aoki, Nobuo Homeomorphisms without the pseudo-orbit tracing property. (84h:54076)
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- Wen, Lan A closing lemma for differentiable mappings of the circle. (Chinese. English summary) **84c:58058**
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- Beyer, W. A. (with Stein, Paul R.) Further results on periods and period doubling for iterates of the trapezoid function. (**84f:58066**)
- Block, Louis Periodic orbits and topological entropy of one-dimensional discrete dynamical systems. (See **84c:00005**)
- Boyarsky, Abraham (with Byers, William) Fullness of maps. (**84d:26005**)
- Approximating the absolutely continuous measures invariant under general maps of the interval. (**84b:28015**)
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- Cosnard, Michel Comportement d'itérations d'un opérateur de renormalisation. (English summary) [Behavior of the iterations of a renormalization operator] (**84h:58076**)
- Crutchfield, James P. (with Packard, Norman H.) Symbolic dynamics of one-dimensional maps: entropies, finite precision, and noise. (**84b:58064**)
- (with Packard, Norman H.) Noise scaling of symbolic dynamics entropies. (See **84f:00014**)
- Daido, Hiroaki Period-doubling bifurcations and associated universal properties including parameter dependence. (**84c:58058**)
- Elgin, J. N. (with Forster, D.; Sarkar, Sarben) Mechanism for chaos in the Duffing equation. (**84j:70041**)
- Feigenbaum, Mitchell J. Tests of the period-doubling route to chaos. (See **84b:00035**)
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- Fried, David Flow equivalence, hyperbolic systems and a new zeta function for flows. (**84g:58083**)
- Kolyada, S. F. (with Sharkovskii, A. N.) The measure of repellers of one-dimensional smooth mappings. (Russian) (**84c:58051**)
- Lasota, Andrzej (with Yorke, James A.) Exact dynamical systems and the Frobenius-Perron operator. (**84d:28023**)
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- Mayer, Dieter H. Ruelle's zeta function for a one-sided subshift of finite type with interaction decreasing faster than exponentially. (**84j:82095**)
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- Sarkar, Sarben See Elgin, J. N.; et al., (**84j:70041**)
- Shail, R. (with Packham, B. A.) On some properties of a nonlinear mapping. (**84i:58062**)
- Sharkovskii, A. N. See Kolyada, S. F., (**84c:58051**)
- Shenker, Scott J. Scaling behavior in a map of a circle onto itself: empirical results. (**84f:58066**)
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- Szlenk, Wiesław Some dynamical properties of certain differentiable mappings of an interval. II. (**84b:58066**)
- Tél, T. On the construction of invariant curves of period-two points in two-dimensional maps. (**84h:58104**)
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- Chicone, Carmen (with Shafer, Douglas S.) Separatrix and limit cycles of quadratic systems and Dulac's theorem. **84m:58110**
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- Malomed, B. A. A simple dynamical system with stochastic behaviour. **84m:58111**
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- Ananthakrishna, G. (with Valsakumar, M. C.) Chaotic flow in a model for repeated yielding. (**84h:73043**)
- Belair, J. (with Glass, Leon) Self-similarity in periodically forced oscillators. (**84c:58160**)
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- Cartier, Pierre Perturbations singulières des équations différentielles ordinaires et analyse non-standard. [Singular perturbations of ordinary differential equations and nonstandard analysis] (**84i:34072**)
- Castro, Abel Perturbation of a two-dimensional system with unstable limit cycle. (Spanish. English summary) (**84h:58132**)
- Chen, Guang Qing Limit cycles of equations of type II in a quadratic differential system. I. (Chinese) (**84m:34038**)
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- Chen, Lan Sun Regular integrals of a center, Dulac functions and limit cycles for a quadratic system. I. (Chinese) (**84d:34022**)
- Cheresiz, V. M. See Gorban', A. N., (**84f:54056**)
- Chicone, Carmen (with Tian, Jing Huang) On general properties of quadratic systems. (**84f:34044**)
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- Huang, Qi Chang (with Yang, Si Ren) Conditions for the existence of limit cycles of the Liénard equation with alternate damping. (Chinese. English summary) (**84h:34052**)
- Hunt, Fern Regulation of population cycles by genetic feedback: existence of periodic solutions of a mathematical model. (**84c:92029**)
- Kawato, Mitsuo Transient and steady state phase response curves of limit cycle oscillators. (**84i:92013**)
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- Chekhovskaya, T. N. See Markeev, A. P., (84a:70017)
- Churchill, Richard C. (with Kummer, Martin; Rod, David L.) On averaging, reduction, and symmetry in Hamiltonian systems. (84c:58071)
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- De Gregorio, S. (with Scoppola, E.; Tirozzi, B.) Periodic orbits of dynamical systems with chaotic behavior. (See 84c:81009)
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- de Figueiredo, Rui J. P. On the existence of N periodic solutions of Liénard's equation. (84g:34072)
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- Kummer, Martin See Churchill, Richard C.; et al., (84c:58071)
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- Sato, Shin-ichi (with Sano, Masaki; Sawada, Yasuji) Universal scaling property in bifurcation structure of Duffing's and of generalized Duffing's equations. (84c:58152)
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- Xanthopoulos, B. C. (with Bozis, George) The planar inverse problem with four monoparametric families of curves. (84f:70021)
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- De Wilde, Marc (with Lecomte, Pierre B. A.) On Lie group actions of order one. (84g:57039)
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 Johnson, Russell A. On almost-periodic linear differential systems of Millionshchikov and Vinograd. (84c:34068)
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 Ren, Yong Tai (with Suo, Guang Jian) The global structure of a quadratic system which possesses three integral straight lines. (Chinese. English summary) (84d:34024)
 Rosenberg, Harold Labyrinths in the disc and surfaces. (84h:57016)
 Rouchaleau, Y. See Byrnes, C.; et al., (84h:93032)
 Sharp, R. T. See Jarić, Marko V.; et al., (See 84k:00008)
 Shimizu, Hiroshi See Yamaguchi, Yoko; et al., (84h:70033)
 Suo, Guang Jian See Ren, Yong Tai, (84d:34024)
 Urbanski, Paweł Nonhomogeneous mixed Neumann problem for nonlinear wave equation. (84j:35121)
 Vul, E. B. (with Khanin, K. M.) On the unstable separatrix of Feigenbaum's fixed point. (Russian) (84c:58093)
 Yamaguchi, Yoko (with Komietani, K.; Shimizu, Hiroshi) Self-synchronization of nonlinear oscillations in the presence of fluctuations. (84h:70033)
 Yatsuyuk, V. T. Toroidal integral manifolds of systems of differential equations with quasiperiodic coefficients. (Russian) (84m:34058)
 Zhitomirskii, M. Ya. A criterion for linearization of differential forms. (Russian) (84j:58009)

58Gxx Partial differential equations on manifolds; differential operators [See also 35-XX.]

- (Pröbldorf, Siegfried) See Seminar: Analysis, 84h:58103
 (Schulze, Bert-Wolfgang) See Seminar: Analysis, 84h:58103

Seminar:

Analysis ★Seminar Analysis, 1981/82. (84h:58103)

secondary classifications:

Astérisque ★Astérisque. 95. (French) (84c:35002)

58G05 Differential complexes [See also 35Nxx.]; elliptic complexes

- Eskin, Michael (with Shamir, Eliahu) Elliptic solvability of augmented differential complexes on piecewise smooth manifolds. (84c:58111)
 van den Essen, Arno Le conoyau de l'opérateur $\partial/\partial x_n$ agissant sur un \mathcal{O}_n -module holonome. (English summary) [The cokernel of the operator $\partial/\partial x_n$ acting on a holonomic \mathcal{O}_n -module] (84c:58208)
 Estabrook, Frank B. Moving frames and prolongation algebras. (84c:58065)
 Gaveau, Bernard Intégrales harmoniques non abéliennes. (English summary) [Nonabelian harmonic integrals] (84m:58131)
 Itoh, Mitsuhiro On the moduli space of anti-self-dual Yang-Mills connections on Kähler surfaces. (84c:58209)
 Kashiwara, Masaki (with Kawai, Takahiro) Theory of maximally overdetermined systems: the central case of regular singularities. (Japanese) (84c:58210)
 Kawai, Takahiro An example of a complex of linear differential operators of infinite order. (84c:58112)
 See also Kashiwara, Masaki, 84c:58210
 Lévy-Brühl, Pierre Application de la formule de Plancherel à la résolubilité d'opérateurs invariants à gauche sur des groupes nilpotents d'ordre deux. (English summary) [Application of the Plancherel formula to the solvability of left-invariant operators on second-order nilpotent groups] (84h:58104)
 Manin, Yu. I. Gauge fields and cohomology of spaces of null geodesics. (See 84h:81003)
 Nacimovich, Mauro On the absence of Poincaré lemma for some systems of partial differential equations. (84m:58132)
 Complex analysis and complexes of differential operators. (84h:58139)
 On the solvability of systems of differential equations. (Italian) (84m:58133)
 Shamir, Eliahu See Eskin, Michael, 84c:58111
 Trèves, François A remark on the Poincaré lemma in analytic complexes with nondegenerate Levi form. (84h:58140)
 Sur l'exactitude des complexes différentiels de type de Lewy. [Exactness of differential complexes of Lewy type] (See 84c:35003)
 Tsujishita, Toru On variation bicomplexes associated to differential equations. (84h:58105)

secondary classifications:

- Berger, Roland Cohomologie différentielle des algèbres de polynômes, de leurs localisées ou de leurs complètes, et des variétés. [Differentiable cohomology of polynomial algebras, of their localizations or completions, and of manifolds] (84c:16031)
 Björk, J.-E. The reconstruction theorem $\mathcal{R}^* = \mathcal{G}^* \otimes_{\mathcal{G}} \mathcal{R}_{\text{reg}}$. (84c:58211)
 Borel, A. (with Garland, H.) Laplacian and the discrete spectrum of an arithmetic group. (84c:58220)
 Craioveanu, M. (with Puta, Mircea) A chain homotopy theorem for a class of first order linear differential operators. (84j:58014)
 Dudnikov, P. I. (with Sambors'kii, S. M.) Noether boundary value problems for overdetermined systems of partial differential equations. (Russian) (84c:58081)
 Garland, H. See Borel, A., (84c:58220)
 Hanouzet, B. (with Joly, Jean-Luc) Formes multilinéaires sur des sous-espaces de distributions. [Multilinear forms on distribution subspaces] (84f:46050)
 Helffer, Bernard Conditions nécessaires d'hypoanalyticité pour des opérateurs invariants à gauche homogènes sur un groupe nilpotent gradué. [Necessary conditions of hypoanalyticity for homogeneous left-invariant operators on a graded nilpotent group] (84c:35026)
 Hermann, Robert Quantum mechanics and geometric analysis on manifolds. (84c:58039)
 Joly, Jean-Luc See Hanouzet, B., (84f:46050)
 Kohn, J. J. Lectures on degenerate elliptic problems. (84c:35059)
 Li, Peter (with Yau, Shing Tung) On the Schrödinger equation and the eigenvalue problem. (84c:58225)
 Nguyen Tu' Cu'ong ★Freie Auflösung eines flachen holonomen Systems und ihre Entfaltung. (German) [Free resolution of a flat holonomic system and its unfolding] (84d:58074)
 Puta, Mircea Some spectral properties of the Kostant complex. (84f:58054)
 See also Craioveanu, M., (84j:58014)
 Sambors'kii, S. M. Boundary value problems for overdetermined systems of partial differential equations. (Russian) (84c:58082)
 Boundary value problems for overdetermined systems of partial differential equations. (Russian) (84c:35096)
 See also Dudnikov, P. I., (84c:58081)
 Yau, Shing Tung See Li, Peter, (84c:58225)

58G07 Relations with hyperfunctions

- Andronikof, E. Systèmes déterminés d'équations aux dérivées partielles. [Determinate systems of partial differential equations] (84c:58066)
 Aoki, Takashi Growth order of microdifferential operators of infinite order. (84c:58072)
 Björk, J.-E. The reconstruction theorem $\mathcal{R}^* = \mathcal{G}^* \otimes_{\mathcal{G}} \mathcal{R}_{\text{reg}}$. (84c:58211)
 van den Essen, Arno Un \mathcal{O} -module holonome tel que le conoyau de l'opérateur $\partial/\partial x_n$ soit non-holonome. (English summary) [A holonomic \mathcal{O} -module such that the cokernel of the operator $\partial/\partial x_n$ is not holonomic] (84c:58076)
 Farris, Mark K. A generalization of Egorov's theorem. (84j:58117)
 Kataoka, Kiyomi On the theory of Radon transformations of hyperfunctions. (84c:58067)
 Kim, Jongsik (with Kim, Sung Ock) Note on Mizohata type operators. (84c:58077)
 Kim, Sung Ock See Kim, Jongsik, 84c:58077
 Laurent, Y. Deuxième microlocalisation. Condition de Levi pour un système. [Second microlocalization. Levi condition for a system] (84c:58073)

- Malgrange, Bernard** Modules microdifférentiels et classes de Gevrey. [Microdifferential modules and Gevrey classes] **84a:58074**
 Réduction d'un système microdifférentiel aux points génériques. I. [Reduction of a microdifferential system to the generic points. I.] **84j:58118**
 Transformation de Fourier géométrique et microlocalisation. [Geometric Fourier transform and microlocalization] (See **84i:35006**)
- Mebkhout, Zoghman** Théorèmes de bidualité locale pour les \mathcal{O}_X -modules holonomes. [Local biduality theorems for holonomic \mathcal{O}_X -modules] **84a:58075**
- Mendoza, Gerardo** Symbol calculus associated with intersecting Lagrangians. **84j:58119**
- Muro, Masakazu** Singular spectrums of hyperfunctions and Fourier transforms of group invariant measures on singular orbits of prehomogeneous vector spaces. I. **84i:58113**
- Nguyễn Hữu Đức** See **Nguyễn Tiến Đại**; et al., **84m:58134**
- Nguyễn Tiến Đại** (with **Nguyễn Hữu Đức**; **Pham, Frédéric**) Singularités non dégénérées des systèmes de Gauss-Manin réticulés. [Nondegenerate singularities of reticulated Gauss-Manin systems] **84m:58134**
- Nguyễn Tu' Cù'ng** ★Freie Auflösung eines flachen holonomen Systems und ihre Entfaltung. (German) [Free resolution of a flat holonomic system and its unfolding] **84d:58074**
 See also **Nguyễn Tiến Đại**; et al., **84m:58134**
- Pham, Frédéric** See **Nguyễn Tiến Đại**; et al., **84m:58134**
- Qi, Min You** An introduction to Sato's theory of hyperfunctions (one-variable case). II. (Chinese) **84c:58068**
- secondary classifications:
- Bailey, Toby Nicholas** (with **Ehrenpreis, Leon**; **Wells, R. O., Jr.**) Weak solutions of the massless field equations. (**84d:81021**)
- Baouendi, M. S.** Microlocalisation hypo-analytique et extension holomorphe de fonctions C.R. [Hypoanalytic microlocalization and holomorphic extension of CR functions] (**84a:32029**)
- Donnelly, Harold** (with **Fefferman, Charles**) L_2 cohomology of the Bergman metric. (**84g:32028**)
- Ehrenpreis, Leon** See **Bailey, Toby Nicholas**; et al., (**84d:81021**)
- Fefferman, Charles** See **Donnelly, Harold**, (**84g:32028**)
- Feldman, G. L.** Global dimension of rings of differential operators. (Russian) (**84g:16023**)
- Jimbo, Michio** Studies on holonomic quantum fields. IX. (**84m:81125b**)
 See also **Sato, Mikio**; et al., (**84m:81125a**) and (**84m:81125c**)
- Kashiwara, Masaki** Holonomic systems of linear differential equations with regular singularities and related topics in topology. (**84j:32016**)
 See also **Sato, Mikio**; et al., (**84i:14054**) and **Kawai, Takahiro**, (**84b:01048**)
- Kawai, Takahiro** Algebraic study of parts of the theory of systems of pseudodifferential equations. 9th Iyanaga prize awarded to Masaki Kashiwara. (Japanese) (**84b:01048**)
 An example of a complex of linear differential operators of infinite order. (**84c:58112**)
 See also **Sato, Mikio**; et al., (**84i:14054**)
- Kimura, Tatsuo** The b -functions and holonomy diagrams of irreducible regular prehomogeneous vector spaces. (**84j:32017**)
- Komatsu, Hikosaburo** Linear ordinary differential equations with Gevrey coefficients. (**84i:34017**)
- Lê Dũng Tráng** Faisceaux constructibles quasi-unipotents. [Quasiunipotent constructible sheaves] (**84g:32015**)
 (with **Mebkhout, Zoghman**) Variétés caractéristiques et variétés polaires. (English summary) [Characteristic varieties and polar varieties] (**84g:32018**)
- Lerner, Nicolas** Unicité de Cauchy pour des opérateurs faiblement principalement normaux. [Cauchy uniqueness for weakly principally normal operators] (See **84i:35003**)
- McConnell, J. C.** The Nullstellensatz and Jacobson properties for rings of differential operators. (**84a:16006**)
- Mebkhout, Zoghman** Dualité de Poincaré. [Poincaré duality] (**84c:32014**)
 The Riemann-Hilbert problem in higher dimension. (**84c:32012**)
 See also **Lê Dũng Tráng**, (**84g:32018**)
- Miwa, Tetsuji** See **Sato, Mikio**; et al., (**84m:81125a**) and (**84m:81125c**)
- Nguyễn Hữu Đức** Systèmes de Gauss-Manin à bord et stabilité de l'interaction analytique. (English summary) (**84j:58127**)
- Sato, Mikio** (with **Miwa, Tetsuji**; **Jimbo, Michio**) Studies on holonomic quantum fields. VIII. (**84m:81125a**)
 (with **Miwa, Tetsuji**; **Jimbo, Michio**) Studies on holonomic quantum fields. X. (**84m:81125c**)
 (with **Kashiwara, Masaki**; **Kawai, Takahiro**) Linear differential equations of infinite order and theta functions. (**84i:14054**)
- Tajima, Shimichi** Analyse microlocale sur les variétés de Cauchy-Riemann et problème du prolongement des solutions holomorphes des équations aux dérivées partielles. [Microlocal analysis on Cauchy-Riemann manifolds and the extension problem for holomorphic solutions of partial differential equations] (**84i:32031**)
- Trèves, François** A remark on the Poincaré lemma in analytic complexes with nondegenerate Levi form. (**84c:58140**)
- Wells, R. O., Jr.** See **Bailey, Toby Nicholas**; et al., (**84d:81021**)
- Hirayama, Minoru** (with **Torii, Tatsuo**) Fermion fractionalization and index theorem. **84m:58135**
- Inoue, Hisao** A proof of the holomorphic Lefschetz formula for higher-dimensional fixed point sets by the heat equation method. **84i:58105**
- Moscovici, Henri** See **Connes, Alain**, **84a:58076**
- Nestke, A.** Cohomology of elliptic complexes and the fixed point formula of Atiyah and Bott. **84i:58106**
- Séade, José A.** On the η -function of the Dirac operator on $\Gamma \backslash S^1$. **84i:58116**
- Shaw, Mei Chi** Hodge theory on domains with conic singularities. **84c:58078**
- Skrjpnik, I. V.** Topological methods of investigation of operator equations and nonlinear boundary value problems. **84c:58069**
- Torii, Tatsuo** See **Hirayama, Minoru**, **84m:58135**
- Tóth, Gábor** On the Atiyah-Singer index theorem. III. Singular homology and cohomology. (Hungarian) **84i:58213**
- Vergne, Michèle** See **Berline, Nicole**, **84i:58114**
- secondary classifications:
- Atiyah, Michael** (with **Donnelly, Harold**; **Singer, I. M.**) Geometry and analysis of Shimizu L -functions. (**84c:12013**)
- Baldoni Silva, M. W.** (with **Barbasch, Dan**) The unitary spectrum for real rank one groups. (**84c:22022**)
- Barbasch, Dan** See **Baldoni Silva, M. W.**, (**84c:22022**)
- Barth, N. H.** (with **Christensen, S. M.**) Arbitrary spin field equations on curved manifolds with torsion. (**84i:81082**)
- Baum, Paul** Fixed point formula for singular varieties. (**84g:14018**)
 (with **Douglas, Ronald G.**) Toeplitz operators and Poincaré duality. (**84m:58139**)
- Carey, Richard W.** (with **Pincus, Joel D.**) Principal functions, index theory, geometric measure theory and function algebras. (**84c:47048**)
- Christensen, S. M.** See **Barth, N. H.**, (**84i:81082**)
- Colombeau, Jean-François** ★Differential calculus and holomorphy. (**84i:46005**)
- Connes, Alain** A survey of foliations and operator algebras. (**84m:58140**)
- Donnelly, Harold** (with **Fefferman, Charles**) L_2 cohomology of the Bergman metric. (**84g:32028**)
 See also **Atiyah, Michael**; et al., (**84c:12013**)
- Douglas, Ronald G.** See **Baum, Paul**, (**84m:58139**)
- Elchner, Johannes** On the index of hypoelliptic one-dimensional pseudodifferential operators. (**84g:35038**)
- Fefferman, Charles** See **Donnelly, Harold**, (**84g:32028**)
- Francaviglia, Mauro** Mathematical methods and perspectives in general relativity. (Italian) (**84c:83004**)
- Fried, David** Homological identities for closed orbits. (**84g:58088**)
- Friedrich, Th.** Zur Existenz paralleler Spinorfelder über Riemannschen Mannigfaltigkeiten. [On the existence of parallel spinor fields on Riemannian manifolds] (**84c:53050**)
- Gilkey, Peter B.** Secondary characteristic classes of locally flat bundles over lens spaces in dimension 3. (**84j:57019**)
- Hortaçu, M.** Index theorem for merons. (**84i:81077**)
- Kobayashi, Takao** Elementary solutions and propagation of singularities for hyperbolic operators with involutive characteristics. (**84i:35098**)
- Lee, Ronnie** (with **Weintraub, Steven H.**) On a generalization of a theorem of Erich Hecke. (**84i:32041**)
- Madore, J.** Geometric methods in classical field theory. (**84i:81080**)
- Matsushita, Yasuo** Thorpe-Hitchin inequality for compact Einstein 4-manifolds of metric signature $(+ + - -)$ and the generalized Hirzebruch index formula. (**84i:53039**)
- Nagase, Masayoshi** de Rham-Hodge theory on a manifold with cone-like singularities. (**84i:58006**)
- Pan, Yang Lian** Some nonexistence theorems on stable harmonic mappings. (Chinese summary) (**84c:58024**)
- Pincus, Joel D.** See **Carey, Richard W.**, (**84c:47048**)
- Plamenevskii, B. A.** On the index of pseudodifferential operators with isolated singularities of symbols in \mathbb{R}^n . (Russian) (**84i:35148**)
- Rodino, Luigi** A boundary value problem for functions of several complex variables in polycylinders. (**84b:32009**)
- Römer, H.** Gravitational instantons, G-index theorem and nonlocal boundary terms. (See **84b:81002**)
- Sarkaria, K. S.** A trace formula for compact manifolds. (**84i:58004**)
- Schwänzl, Roland** Äquivalente 2-Felder auf Mannigfaltigkeiten mit Involution. [Equivariant 2-fields on manifolds with involution] (**84d:57014**)
- Singer, I. M.** See **Atiyah, Michael**; et al., (**84c:12013**)
- Smoller, Joel A.** ★Shock waves and reaction-diffusion equations. (**84d:35002**)
- Tsushima, Ryuji** On the spaces of Siegel cusp forms of degree two. (**84i:10036**)
- Valette, Alain** Extensions of C^* -algebras: a survey of the Brown-Douglas-Fillmore theory. (**84b:46098**)
- Weintraub, Steven H.** See **Lee, Ronnie**, (**84i:32041**)
- Wintgen, Peter** On the intersection number of submanifolds with higher-dimensional intersection. (**84d:57021**)
- Witten, Edward** Constraints on supersymmetry breaking. (**84j:81131**)
 An $SU(2)$ anomaly. (**84j:81090**)
- 58G10 Index theory and fixed point theorems
- Berline, Nicole** (with **Vergne, Michèle**) Zéros d'un champ de vecteurs et classes caractéristiques équivariantes. [Zeros of a vector field and equivariant characteristic classes] **84i:58114**
- Connes, Alain** (with **Moscovici, Henri**) L^2 -index theory on homogeneous spaces and discrete series representations. **84a:58076**
- Deundyak, V. M.** Homotopic classification of bi-elliptic operators on the product of two compact manifolds. (Russian) **84i:58115**
- Gilkey, Peter B.** Vector bundles with harmonic connections over spheres. **84i:58212**
- 58G11 Heat and other parabolic equation methods
- Bérard, Pierre** (with **Gallot, Sylvestre**) Remarques sur quelques estimées géométriques explicites. (English summary) [Remarks on some explicit geometric estimates] **84i:58214**
- Callias, Constantine J.** The heat equation with singular coefficients. I. Operators of the form $-d^2/dx^2 + \kappa/x^2$ in dimension 1. **84m:58136**
- Fegan, H. D.** Special function potentials for the Laplacian. **84i:58107**
- Gallot, Sylvestre** See **Bérard, Pierre**, **84i:58214**

- Gilkey, Peter B. (with Smith, Lance) The eta invariant for a class of elliptic boundary value problems. **84h:58141**
- Lue, Ping Chang The asymptotic expansion for the trace of the heat kernel on a generalized surface of revolution. **84e:58070**
- Ozawa, Shin Hadamard's variation of the Green kernels of heat equations and their traces. I. **84m:58137**
- Smith, Lance See Gilkey, Peter B., **84h:58141**
- Strichartz, Robert S. Analysis of the Laplacian on the complete Riemannian manifold. **84m:58138**
- Varopoulos, Nicholas Th. The Poisson kernel on positively curved manifolds. **84h:58142a**
Green's functions on positively curved manifolds. **84h:58142b**
Green's functions on positively curved manifolds. II. **84h:58142c**

secondary classifications:

- Arnol'd, V. I. Some remarks on the antidynamo theorem. (Russian. English summary) (**84i:58003**)
- Belavkin, V. P. (with Maslov, V. P.; Tariverdiev, S. È.) The asymptotic dynamics of a system with a large number of particles described by Kolmogorov-Feller equations. (Russian. English summary) (**84h:82028**)
- Chebotaev, A. M. See Maslov, V. P., (**84i:58049**)
- Denardo, G. (with Spallucci, E.) Finite-temperature scalar pregeometry. (Italian and Russian summaries) (**84g:83026**)
- Fateev, V. A. (with Frolov, I. V.; Shvarts, A. S.; Tyupkin, Yu. S.) Quantum fluctuations of instantons. (**84h:81064**)
- Fawcett, M. S. The energy-momentum tensor near a black hole. (**84k:83026**)
- Fedoryuk, M. V. See Maslov, V. P., (**84i:58226**)
- Frolov, I. V. See Fateev, V. A.; et al., (**84h:81064**)
- Gaveau, Bernard (with Trauber, Philip) Une construction de la quantification euclidienne du champ de Yang-Mills régularisé. [A construction of the Euclidean quantization of the regularized Yang-Mills field] (**84h:81061**)
- Grubb, Gerd The heat equation associated with a pseudodifferential boundary problem. (**84h:35069**)
- Har'El, Zvi Curvature invariants, volume functions and spectral expansions. (**84c:53038**)
- Karp, Leon The growth of harmonic functions and mappings. (**84m:58034**)
- Lohoue, Noël (with Rychener, Thomas) Die Resolvente von Δ auf symmetrischen Räumen vom nichtkompakten Typ. [The resolvent of Δ on symmetric spaces of noncompact type] (**84m:58163**)
- Maslov, V. P. (with Fedoryuk, M. V.) ★Semiclassical approximation in quantum mechanics. (**84i:58226**)
The Kolmogorov-Feller equation and a probability model of quantum mechanics. (Russian) (**84j:81011**)
(with Tariverdiev, S. È.) The asymptotic behavior of the Kolmogorov-Feller equation for a system of a large number of particles. (Russian) (**84j:82064**)
(with Chebotaev, A. M.) On the second term of the logarithmic asymptotic expansion of functional integrals. (Russian) (**84i:58049**)
See also Belavkin, V. P.; et al., (**84h:82028**)
- (Niederle, Jiri Ø.) See Maslov, V. P.; et al., (**84i:58226**)
- Nieh, H. T. (with Yan, Mu Lin) Quantized Dirac field in curved Riemann-Cartan background. I. Symmetry properties, Green's function. (**84h:81090**)
- Roth, Jean-Pierre Spectre du laplacien sur un graphe. (English summary) [Spectrum of the Laplacian on a graph] (**84g:58104**)
- Rothe, K. D. (with Schroer, B.) Green functions, determinants and induced actions in gauge theories. (**84j:81086**)
- Rychener, Thomas See Lohoue, Noël, (**84m:58163**)
- Schroer, B. See Rothe, K. D., (**84j:81086**)
- Shvarts, A. S. See Fateev, V. A.; et al., (**84h:81064**)
- Spallucci, E. See Denardo, G., (**84g:83026**)
- Tariverdiev, S. È. See Belavkin, V. P.; et al., (**84h:82028**) and Maslov, V. P., (**84j:82064**)
- Tataru-Mihai, P. A study of alternative actions for lattice gauge theories. (**84i:81088**)
- Tolar, J. See Maslov, V. P.; et al., (**84i:58226**)
- Toms, David J. Background-field method and the renormalization of nonabelian gauge theories in curved space-time. (**84i:81087**)
- Trauber, Philip See Gaveau, Bernard, (**84h:81061**)
- Tyupkin, Yu. S. See Fateev, V. A.; et al., (**84h:81064**)
- Yan, Mu Lin See Nieh, H. T., (**84h:81090**)
- Zannias, T. Path-integral representation of van Vleck-DeWitt determinant. (**84d:81016a**)
Erratum: "Path-integral representation of van Vleck-DeWitt determinant". (**84d:81016b**)

58G12 Exotic index theories [See also 46L05, 46L10, 46M20.]

- Baum, Paul (with Douglas, Ronald G.) K homology and index theory. **84d:58075**
(with Douglas, Ronald G.) Toeplitz operators and Poincaré duality. **84m:58139**
- Connes, Alain A survey of foliations and operator algebras. **84m:58140**
(with Moscovici, Henri) The L^2 -index theorem for homogeneous spaces of Lie groups. **84f:58108**
(with Moscovici, Henri) Invariant elliptic equations and discrete series representations. (See **84m:46003**)
- Douglas, Ronald G. See Baum, Paul, **84d:58075** and **84m:58139**
- Fack, Thierry (with Skandalis, Georges) Some properties of the C^* -algebra associated with a foliation. **84e:58077**
- Hilsum, Michel Opérateurs de signature sur une variété lipschitzienne et modules de Kasparov non bornés. (English summary) [Signature operators on Lipschitz manifolds and unbounded Kasparov modules] **84k:58215**
- Kasparov, G. G. Index of invariant elliptic operators, K -theory and representations of Lie groups. (Russian) **84g:58100**
- Moscovici, Henri See Connes, Alain, **84f:58108** and (See **84m:46003**)
- Skandalis, Georges See Fack, Thierry, **84e:58077**

secondary classifications:

- Baaj, Saad (with Julg, Pierre) Théorie bivariable de Kasparov et opérateurs non bornés dans les C^* -modules hilbertiens. (English summary) [Bivariant Kasparov theory and unbounded operators on Hilbert C^* -modules] (**84m:46091**)
- Cuntz, Joachim K -theory for certain C^* -algebras. (**84c:46058**)
 K -theory for certain C^* -algebras. II. (**84c:46053**)
- Effros, Edward G. ★Dimensions and C^* -algebras. (**84c:46042**)
- Julg, Pierre See Baaj, Saad, (**84m:46091**)
- Kasimov, V. A. A property of Hilbert modules and Fredholm operators over C^* -algebras. (Russian. English and Azerbaijani summaries) (**84j:46099**)
- Kastler, Daniel On A. Connes' noncommutative integration theory. (**84c:46077**)
- Katz, Gabriel Some realization theorems in equivariant L -theory and calculations of G -signature. (**84c:57019**)
- Mehdi, M. L'indice d'une courbe dans une variété symplectique munie d'une connexion linéaire. [The index of a curve in a symplectic manifold equipped with a linear connection] (**84j:53039**)
- Power, S. C. Fredholm theory of piecewise continuous Fourier integral operators on Hilbert space. (**84m:47067**)
- Rosenberg, Jonathan (with Schochet, Claude) Comparing functors classifying extensions of C^* -algebras. (**84j:46101**)
The role of K -theory in noncommutative algebraic topology. (**84h:46097**)
- Schochet, Claude Topological methods for C^* -algebras. I. Spectral sequences. (**84g:46105a**)
Topological methods for C^* -algebras. II. Geometry resolutions and the Künneth formula. (**84g:46105b**)
See also Rosenberg, Jonathan, (**84j:46101**)

58G15 Pseudodifferential and Fourier integral operators on manifolds

- Adams, Malcolm R. Spectral properties of zeroth-order pseudodifferential operators. **84m:58141**
- Aoki, Takashi Invertibility for microdifferential operators of infinite order. **84c:58079**
- Aramaki, Junichi Complex powers of a class of pseudodifferential operators and their applications. **84m:58142**
- Belousov, M. V. On the theory of generalized Green operators. (Russian) **84h:58143**
- Bezyaev, V. I. The asymptotic behavior of eigenvalues of hypoelliptic operators on a closed manifold. (Russian) **84h:58144**
- Biktashev, R. A. Spectra of pseudodifferential operators over C^* -algebras. (Russian) **84j:58120**
- Boyaraki, Bogdan Analytical and geometrical properties of generalized potentials. **84j:58121**
- Buslaev, V. S. (with Rybakina, E. A.) The trace formula in Hamiltonian mechanics. (Russian) **84d:58076**
- Combet, Edmond ★Intégrales exponentielles. Développements asymptotiques, propriétés lagrangiennes. (French) [Exponential integrals. Asymptotic expansions, Lagrangian properties] **84m:58143**
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- Danilov, V. G. (with Dzhelesnyuk, I. A.) Estimates for Fourier integral operators with a complex phase. (Russian) **84f:58109**
- Dencker, Nils On the propagation of singularities for pseudodifferential operators of principal type. **84c:58216**
- Dzhelesnyuk, I. A. See Danilov, V. G., **84f:58109**
- Fedoryuk, M. V. See Maslov, V. P., **84i:58226**
- Gindikin, S. G. See Volovich, L. R., **84m:58147** and **84m:58148**
- Gorman, A. D. (with Wells, Robert) A sharpening of Maslov's method of characteristics to give the full asymptotic series. **84i:58117**
- Heffler, Bernard (with Robert, Didier) Asymptotique des niveaux d'énergie pour des hamiltoniens à un degré de liberté. [Asymptotics of energy levels for Hamiltonians with one degree of freedom] **84m:58144**
- Inoue, Atsushi (with Maeda, Yoshiaki) On integral transformations associated with a certain Riemannian metric. **84j:58123**
- (Kirillov, A. A.) See Lion, Gérard; et al., **84m:58145**
- Laubin, P. Composition d'opérateurs Fourier-intégraux particuliers. (English summary) [Composition of certain Fourier-integral operators] **84e:58078**
Front d'onde analytique et décomposition microlocale des distributions. [Analytic wave front and microlocal decomposition of distributions] (See **84h:35003**)
- Liess, Otto Antilocality of complex powers of elliptic differential operators with analytic coefficients. **84j:58124**
- Lion, Gérard Indices de Maslov et représentation de Weil. [Maslov index and the Weil representations] **84j:58125**
(with Vergne, Michèle) ★Представление Вейля, индекс Маслова и эта-ряды. (Russian) [The Weil representation, Maslov index and theta series] **84m:58145**
- Maeda, Yoshiaki See Inoue, Atsushi, **84j:58123**
- Malikov, Kh. M. Over-determination of a system of differential equations for versal integrals of type A, D, E. (Russian) **84m:58146**
- Maslov, V. P. (with Fedoryuk, M. V.) Logarithmic asymptotic behavior of Laplace integrals. (Russian) **84g:58101**
- Miller, Kenneth G. Invariant pseudodifferential operators on two-step nilpotent Lie groups. **84i:58118**
- Nomoflov, V. E. Asymptotic solutions of a system of second-order equations concentrated in the neighborhood of a ray. (Russian. English summary) **84e:58071**
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- Qi, Min You On a class of singular pseudodifferential operators. **84k:58217**
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- Rodino, Luigi Microlocal analysis for spatially inhomogeneous pseudodifferential operators. **84h:58145**
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- Tang, Xian Jiang Asymptotic expansions of some oscillatory integrals with inhomogeneous phase function. (Chinese. English summary) **84c:58073**
- Trépassy, J.-M. Sur la résolubilité microlocale des opérateurs de type principal. [Microlocal solvability of principal operators] **84c:58079**
- Vergne, Michèle See Lion, Gérard, **84m:58145**
- Volevich, L. R. (with Gindikin, S. G.) Differential operators with constant coefficients of principal type with respect to a Newton polyhedron. (Russian) **84m:58147**
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- Wells, Robert See Gorman, A. D., **84i:58117**
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- Arnol'd, V. I. Singularities of ray system's. (Russian) **(84m:58037)**
- Babich, V. M. (with Ulin, V. V.) Complex ray solutions and eigenfunctions that are concentrated in the neighborhood of a closed geodesic. (Russian. English summary) **(84c:35225)**
- Bagrov, V. G. (with Belov, V. V.; Ternov, I. M.) Quasiclassical trajectory-coherent states of a nonrelativistic particle in an arbitrary electromagnetic field. (Russian. English summary) **(84c:81032)**
- Bacouendi, M. S. (with Goulaouic, C.) Sharp estimates for analytic pseudodifferential operators and application to Cauchy problems. **(84c:35173)**
- Belov, V. V. See Bagrov, V. G.; et al., **(84c:81032)**
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- Busse, F. H. Transition to turbulence via the statistical limit cycle route. (See **84b:00033**)
- Castro, Eduardo A. See Fernández, Francisco M., **(84b:81025)**
- Chkashua, O. O. Investigation of a singular integro-differential operator on a compact manifold without boundary. (Russian. English and Georgian summaries) **(84d:47063)**
- Dangelmayr, G. Analytic singularities in dispersive wave phenomena based on topological singularities of dispersion relations. **(84d:58010)**
- Dedene, Guido The Maslov class of a Lagrangian immersion in an almost Kähler manifold. **(84j:53069)**
- De Leon, N. (with Heller, Eric J.) Semiclassical quantization and extraction of eigenfunctions using arbitrary trajectories. **(84b:81023)**
- Demkov, Yu. N. (with Komarov, I. V.; Shcherbakov, A. P.) Quasiclassical singularities of the amplitude of small angle scattering by nonspherical potentials. (Russian. English summary) **(84c:78003)**
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- Duistermaat, J. J. (with Heckman, G. J.) On the variation in the cohomology of the symplectic form of the reduced phase space. **(84h:58051a)**
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- Elschner, Johannes On the index of hypoelliptic one-dimensional pseudodifferential operators. **(84c:35038)**
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- Gårding, Lars Hyperbolic boundary problems. **(84c:35084)**
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- Goulaouic, C. See Bacouendi, M. S., **(84c:35173)**
- Grigis, A. Propagation des singularités le long de courbes microbicharactéristiques pour des opérateurs pseudodifférentiels à caractéristiques doubles. I. [Propagation of singularities along microbicharacteristic curves for pseudodifferential operators with double characteristics. II] **(84c:35003)**
- Grinberg, Eric L. Spherical harmonics and integral geometry on projective spaces. **(84m:53071)**
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- Heckman, G. J. See Duistermaat, J. J., **(84h:58051a)** and **(84h:58051b)**
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- Heller, Eric J. See De Leon, N., **(84b:81023)**
- Høegh-Krohn, Raphael See Albeverio, Sergio; et al., **(84c:81010)**
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- Kobayashi, Osamu See Omori, Hideki; et al., **(84h:22044)**
- Komarov, I. V. See Demkov, Yu. N.; et al., **(84c:78003)**
- Kovachev, V. Khr. Microlocal parametriz for the Cauchy problem for hyperbolic symmetric systems with symplectic multiple characteristics. I. **(84c:35090)**
- Kucherenko, V. V. (with Osipov, Yu. V.) Justification of formal asymptotic solutions for ordinary differential equations with a degenerate symbol. (Russian) **(84j:34053)**
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- Lousberg, Pierre On a theorem of composition of differentiable singularities. **(84b:46042)**
- Maeda, Yoshiaki See Omori, Hideki; et al., **(84h:22044)**
- Maslov, V. P. See Karasev, M. V., **(84m:58047)**
- Meyer, Yves Régularité des solutions des équations aux dérivées partielles non linéaires (d'après J.-M. Bony). [Regularity of the solutions of nonlinear partial differential equations (according to J.-M. Bony)] **(84c:35015)**
- Nghiêm Xuân Hai The Fourier integral transform on nilpotent Lie groups. **(84j:22011)**
- Omelyanov, G. A. Boundary value problems for elliptic systems of nonlinear differential equations with a small parameter. (Russian) **(84c:35063)**
- Omori, Hideki (with Maeda, Yoshiaki; Yoshioka, Akira; Kobayashi, Osamu) On regular Fréchet-Lie groups. IV. Definition and fundamental theorems. **(84h:22044)**
- Osipov, Yu. V. See Kucherenko, V. V., **(84j:34053)**
- Prasad, Phoolan Kinematics of a multidimensional shock of arbitrary strength in an ideal gas. **(84b:76046)**
- Putz, Mircea Some remarks on the wave front of a de Rham current. **(84j:58016)**
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- Shcherbakov, A. P. See Demkov, Yu. N.; et al., **(84c:78003)**
- Shih, Weishu Sur l'équation intégrale-différentielle non-linéaire et la topologie algébrique. [On nonlinear integro-differential equations and algebraic topology] **(84j:58038)**
- Shishmarev, I. A. The Cauchy problem and T -products for hypoelliptic systems. (Russian) **(84j:35043)**
- Sternberg, Shlomo See Guillemin, Victor, **(84d:58034)**
- Sternin, B. Yu. Differential equations of subprincipal type. (Russian) **(84c:35039)**
- Ternov, I. M. See Bagrov, V. G.; et al., **(84c:81032)**
- Ulin, V. V. See Babich, V. M., **(84c:35225)**
- Unterberger, André (with Unterberger, Julianne) La série discrète de $SL(2, \mathbb{R})$ et les opérateurs pseudo-différentiels sur une demi-droite. (English summary) [The discrete series of $SL(2, \mathbb{R})$ and pseudodifferential operators on the half line] **(84g:22037)**
- Unterberger, Julianne See Unterberger, André, **(84g:22037)**
- Vasil'ev, D. G. Asymptotic behavior of the spectrum of pseudodifferential operators with small parameters. (Russian) **(84c:58126)**
- Yoshioka, Akira See Omori, Hideki; et al., **(84h:22044)**
- 58G16 Hyperbolic equations
- Cagnac, Francis (with Choquet-Bruhat, Yvonne) Solution globale d'une équation non linéaire sur une variété hyperbolique. (English summary) [Global solution of a nonlinear hyperbolic equation on a manifold] **84i:58119**
- Cardoso, Fernando Hyperbolic operators with double involutive characteristics. (Portuguese) (See **84b:00011**)
- Choquet-Bruhat, Yvonne See Cagnac, Francis, **84i:58119**
- Dossa, Marcel Inégalités énergétiques sur un cône caractéristique. (English summary) [The energy inequalities on a characteristic cone] **84c:58080**
- Nachman, Adrian I. The wave equation on the Heisenberg group. **84c:58074**
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- Choquet-Bruhat, Yvonne (with Christodoulou, Demetrios) Existence of global solutions of the Yang-Mills, Higgs and spinor field equations in $3+1$ dimensions. **(84c:81041)**
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- Gu, Chao Hao Some problems of nonlinear hyperbolic systems. **(84j:35111)**
- Hanquin, J.-L. Sur l'hyperbolicité globale du domaine de dépendance d'un ensemble achronal fermé en relativité générale. (English summary) [The global hyperbolicity of the domain of dependence of a closed achronal set in general relativity] **(84c:83035)**
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- Klainerman, Sergiu (with Sarnak, P.) Explicit solutions of $\square u = 0$ on the Friedmann-Robertson-Walker space-times. **(84h:83050)**
- Krivonos, S. O. See Ivanov, E. A., **(84m:81111)**
- Mizohata, Sigeru On the hyperbolicity in the domain of real analytic functions and Gevrey classes. **(84c:35068)**
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- Yajima, Kenji The quasiclassical approximation to Dirac equation. I. **(84a:81066a)**
- The quasiclassical approximation to Dirac equation. II. Scattering theory. **(84a:81066b)**
- 58G17 Propagation of singularities; initial value problems
- Bahouri, H. Sur la propriété de prolongement unique pour les opérateurs d'Hörmander. [The unique extension property for Hörmander operators] (See **84c:35003**)
- Dencker, Nils On the propagation of polarization sets for systems of real principal type. **84c:58081**
- Geroch, Robert The local nonsingularity theorem. **84c:58218**
- Palamodov, V. P. Caustics of wave processes and generalized functions that are connected with singular analytic hypersurfaces. (Russian) **84d:58150**
- Santos Filho, José Ruidival Propagation of singularities for partial differential operators in radial points. (Portuguese) (See **84b:00011**)
- Shatalov, V. E. See Sternin, B. Yu., **84c:58219**
- Sjöstrand, Johannes Singularités analytiques microlocales. [Microlocal analytic singularities] **84m:58151**

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Frisch, Hélène See **Sulem, Catherine**; et al., **(84m:58088)**

Garnir, H. G. Propagation des singularités analytiques dans les problèmes aux limites de la physique mathématique par les méthodes de Kawai-Kashiwara et Sjöstrand. I. Introduction: cas de l'espace indéfini. [Propagation of analytic singularities in boundary value problems of mathematical physics using the Kawai-Kashiwara and Sjöstrand methods. I. Introduction: the case of infinite space] (See **84b:35003**)

Grigis, A. Propagation des singularités sur des groupes de Lie nilpotents de rang 2. II. [Propagation of singularities on nilpotent Lie groups of rank 2. II] **(84c:35004)**

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(with Lascar, Richard) Propagation des singularités pour des équations hyperboliques à caractéristiques de multiplicité au plus double et singularités masloviennes. II. [Propagation of singularities for hyperbolic equations with multiplicity of at most two and Maslov singularities. II] **(84c:35099)**

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Sur les ondes de surface analytiques de nature non diffractive. (English summary) [On analytic surface waves of nondiffractive type] **(84c:35009)**

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Rauch, Jeffrey (with Reed, Michael C.) Propagation of singularities in nonstrictly hyperbolic semilinear systems: examples. **(84a:35159)**

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58G20 Boundary value problems

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Bartnik, Robert (with Simon, Leon) Spacelike hypersurfaces with prescribed boundary values and mean curvature. **84j:58126**

Belousov, M. V. Generalized Green operators with a finite group of shifts on the boundary. (Russian) **84d:58077**

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Dudnikov, P. I. (with Sambo's'kii, S. M.) Noether boundary value problems for overdetermined systems of partial differential equations. (Russian) **84a:58081**

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Paquet, Luc Problèmes mixtes pour le système de Maxwell. (English summary) [Mixed problems for the Maxwell system] **84e:58075**

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Sambo's'kii, S. M. Boundary value problems for overdetermined systems of partial differential equations. (Russian) **84a:58082**

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Ganoulis, N. (with Goddard, P.; Olive, D. I.) Self-dual monopoles and Toda molecules. **(84c:81045)**

Gårding, Lars Hyperbolic boundary problems. **(84c:35084)**

Gidas, Basilis (with Ni, Wei Ming; Nirenberg, Louis) Symmetry of positive solutions of nonlinear elliptic equations in \mathbb{R}^n . **(84a:35063)**

Gilkey, Peter B. (with Smith, Lance) The eta invariant for a class of elliptic boundary value problems. **(84c:58141)**

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Holota, Petr Direct methods for geodesic boundary problems. (See **84b:36002**)

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Rempel, Stephan (with Schulze, Bert-Wolfgang) Parametrix of general elliptic pseudodifferential boundary value problems. (Russian) (See **84c:34002**)

(with Schulze, Bert-Wolfgang) Complex powers for pseudodifferential boundary problems without the transmission property. **(84m:35129)**

Schulze, Bert-Wolfgang See **Rempel, Stephan**, **(84m:35129)** and (See **84c:34002**)

Smith, Lance See **Gilkey, Peter B.**, **(84c:58141)**

58G25 Spectral problems; spectral geometry; scattering theory

Bando, Shigetoshi (with Urakawa, Hajime) Generic properties of the eigenvalue of the Laplacian for compact Riemannian manifolds. **84h:58146**

Bérard, Pierre (with Meyer, Daniel) Inégalités isopérimétriques et applications. [Isoperimetric inequalities and applications] **84h:58147**

Bérard-Bergery, Lionel (with Bourguignon, Jean-Pierre) Laplacians and Riemannian submersions with totally geodesic fibres. **84m:58153**

Borel, A. (with Garland, H.) Laplacian and the discrete spectrum of an arithmetic group. **84c:58220**

Bourguignon, Jean-Pierre See **Bérard-Bergery, Lionel**, **84m:58153**

Buser, Peter A note on the isoperimetric constant. **84e:58076**

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[Immersed eigenvalues in the continuous spectrum of a Riemann surface] (See **84c:35006**)

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Donnelly, Harold On the spectrum of towers. **84j:58128**

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Fichera, Gaetano The problem of the computation of the geometric multiplicity of an eigenvalue. **84c:58121**

Friedlander, Leonid Sur le spectre de la perturbation faible d'un opérateur auto-adjoint. (English summary) [On the spectrum of a weak perturbation of a selfadjoint operator] **84f:58110**

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Guillemin, Victor (with Melrose, Richard B.) A cohomological invariant of discrete dynamical systems. **84h:58148**

(with Uribe, A.) Spectral properties of a certain class of complex potentials.

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Gutkin, Eugene Integrable systems with delta-potential. **84a:58085**

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Ikeda, Akira On spherical space forms which are isospectral but not isometric. **84m:58155**

Ilias, Said Sur une inégalité de Sobolev. (English summary) [A Sobolev inequality] **84a:58086**

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The asymptotics of a spectral problem associated to the Laplace-Beltrami

operator on a manifold with boundary. (Russian) **84c:58122**

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Correction to: "On isospectral deformations of Riemannian metrics. II"

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- Tenenblat, Ketī ★ Transformações de superfícies e aplicações. (Portuguese) [Transformations of surfaces and applications] (84k:53001)
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- Wang, Shi Kun See Guo, Han Ying; et al., (84i:83042)
- Weiss, John (with Tabor, Michael; Carnevale, George F.) The Painlevé property for partial differential equations. (84c:35101)
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- Gaveau, Bernard (with Vauthier, Jacques) Intégrales oscillantes stochastiques: l'équation de Pauli. [Stochastic oscillatory integrals: the Pauli equation] 84m:58171
- It's, A. R. Asymptotic behavior of the solutions to the nonlinear Schrödinger equation, and isomonodromic deformations of systems of linear differential equations. (Russian) 84k:58238
- Rozendorn, E. R. On the possible nonuniqueness of solutions of the Monge-Ampère equation on a sphere. (Russian) 84k:58239
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- Affleck, Ian (with Dine, Michael; Seiberg, Nathan) Supersymmetry breaking by instantons. (84k:81136)
- Akdeniz, K. G. (with Hortaçsu, M.) Stability of merons in spinor models. (84j:81067)
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- Delph, T. J. Isovector fields and self-similar solutions for power law creep. (84j:73032)
- Dine, Michael See Affleck, Ian; et al., (84k:81136)
- Diósi, L. Comments on the nonabelian Stokes theorem. (84k:81072)
- Duff, M. J. Supergravity, the seven-sphere, and spontaneous symmetry breaking. (84k:83051)
- Durhuus, B. (with Olesen, P.; Petersen, J. L.) Polyakov's quantized string with boundary terms. (84b:81057a)
- (with Olesen, P.; Petersen, J. L.) Polyakov's quantized string with boundary terms. II. (84b:81057b)
- Eastwood, Michael (with Tod, K. P.) Edth—a differential operator on the sphere. (84m:83023)
- Érdi, Balint See Várad, F., (84k:70017)
- Forde, Allan P. (with Kulish, Peter P.) Nonlinear Schrödinger equations and simple Lie algebras. (84k:58106)
- Forgács, Peter (with Horváth, Zsolt; Palla, László) On the construction of axially symmetric $SU(N)$ monopoles. (84k:81073)
- Gaffet, B. Two hidden symmetries of the equations of ideal gasdynamics, and the general solution in a case of nonuniform entropy distribution. (84k:76085)
- Gervais, Jean-Loup (with Neveu, André) Dual string spectrum in Polyakov's quantization. II. Mode separation. (84b:81062)
- Golo, V. L. Geometric ideas in the theory of superfluid ^3He . (Russian) (84k:81159)
- Guo, Han Ying (with Wu, Ke; Wang, Shi Kun) Prolongation structure, Bäcklund transformation and principal homogeneous Hilbert problem in general relativity. (84i:83042)
- Halperin, B. I. See Weinrib, Abel, (84j:82073b)
- Hortaçsu, M. See Akdeniz, K. G., (84j:81067)
- Horváth, Zsolt See Forgács, Peter; et al., (84k:81073)
- Hunt, Louis R. (with Su, Ren Jeng; Meyer, George) Design for multi-input nonlinear systems. (84k:93010)
- Ivanov, B. A. See Bar'yakhtar, I. V., (84m:81204)
- Koller, Jeff Unconstrained prepotentials in extended superspace. (84k:81140)
- Krichever, Ios. M. The "Hessian" of integrals of the Korteweg-de Vries equation and perturbations of finite-gap solutions. (Russian) (84k:58191)
- Kulish, Peter P. See Forde, Allan P., (84k:58106)
- Kyriakopoulos, E. Real solutions of the Yang-Mills field equations in Minkowski space. (84b:81070)
- Lada, A. Investigation of the asymptotics of transition probability for a multidimensional stochastic chemical reaction model. (Russian. English summary) (84j:80021)
- Leray, Jean Application à l'équation de Schrödinger atomique d'une extension du théorème de Fuchs. [Application of the atomic Schrödinger equation to an extension of the Fuchs theorem] (84j:81138)
- Madore, J. Geometric methods in classical field theory. (84j:81080)

- Makhan'kov, V. G. (with Pashaev, O. K.; Sergeenkov, S. A.) "Coloured" solitons in a stable medium. (84m:81205)
- Marnelius, Robert Liouville equation with boundary conditions derived from classical strings. (84k:81082)
- Marsden, Jerrold E. (with Rajiu, Tudor; Weinstein, Alan) Semidirect products and reduction in mechanics. (84k:58081)
- Maslov, V. P. (with Tariverdiev, S. E.) The asymptotic behavior of the Kolmogorov-Feller equation for a system of a large number of particles. (Russian) (84j:82064)
- Meyer, George See Hunt, Louis R.; et al. (84k:93010)
- Michalec, J. Group analysis of a set of equations describing isentropic shock waves in solids. (Russian and Polish summaries) (84k:76030)
- Mitra, P. Geometry of nondegenerate Susskind fermions. (84k:81102)
- Miwa, Tetsuji Clifford operators and Riemann's monodromy problem. (84k:34013)
- Painlevé property of monodromy preserving deformation equations and the analyticity of τ functions. (84k:34014)
- Nagatomo, Kiyokazu Null strings and null solutions of Maxwell's equations. (84m:78009)
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- Neveu, André See Gervais, Jean-Loup. (84k:81062)
- Oh, C. H. (with Teh, Rosy) Some solutions of classical SU(2) Yang-Mills field equations. (84f:81065)
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- Onofri, E. On the positivity of the effective action in a theory of random surfaces. (84j:58043)
- O'Riartaigh, L. (with Rouhani, S.; Singh, Lambodar P.) Explicit solution of the Corrigan-Goddard conditions for n monopoles for small values of the parameters. (84j:81083)
- Orlov, Yu. I. Caustics with anomalous phase shifts. (84j:78008a)
- Wave field near a caustic of an arbitrary order. (84j:78008b)
- Palla, László See Forgács, Peter; et al. (84k:81073)
- Pashaev, O. K. See Makhan'kov, V. G.; et al. (84m:81205)
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- Ramadas, T. R. See Narasimhan, M. S.; et al. (84k:58050)
- Rasetti, Mario Topological concepts in phase transition theory. (84k:82048)
- Rajiu, Tudor See Marsden, Jerrold E.; et al. (84k:58081)
- Rawsley, J. H. (with Schmid, Wilfried; Wolf, Joseph A.) Singular unitary representations and indefinite harmonic theory. (84j:22022)
- Richard, Jean-Louis (with Rouet, Alain) The CP_1 model on the torus: contribution of instantons. (84j:81085)
- Rothe, K. D. (with Schroer, B.) Green functions, determinants and induced actions in gauge theories. (84j:81086)
- Rouet, Alain See Richard, Jean-Louis. (84j:81085)
- Rouhani, S. See O'Riartaigh, L.; et al. (84j:81083)
- Samuel, Stuart Some aspects of the CP^{N-1} model. (84k:81086)
- Schmid, Wilfried See Rawsley, J. H.; et al. (84j:22022)
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- Schwarz, Fritz Franz Symmetries of SU(2) invariant Yang-Mills theories. (84j:81087)
- Seiberg, Nathan See Affleck, Ian; et al. (84k:81136)
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- Song, Xing Chang See Zhou, Guang Zhao. (84k:81092)
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- Tariverdiev, S. E. See Maslov, V. P.; et al. (84k:82064)
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- Trostel, Robert Group theoretical treatment of relaxation, conservation quantities of dissipative wave-equations in thermodynamics. (84k:80009)
- Urani, John R. (with Barker, George Phillip) Dirac general covariance and tetrads. I. Clifford and Lie bundles and torsion. (84k:53070)
- Valiev, E. Z. Phase transitions and singularities of Lagrange manifolds. (Russian) (84j:82052)
- Váradi, F. (with Erdi, Bálint) Existence of the solution of Szebehely's equation in three dimensions using a two-parametric family of orbits. (84k:70017)
- Wang, Shi Kun See Guo, Han Ying; et al. (84k:83042)
- Weinrib, Abel Percolation threshold of a two-dimensional continuum system. (84j:82073a)
- (with Halperin, B. I.) Distribution of maxima, minima, and saddle points of the intensity of laser speckle patterns. (84j:82073b)
- Weinstein, Alan See Marsden, Jerrold E.; et al. (84k:58081)
- Wolf, Joseph A. See Rawsley, J. H.; et al. (84j:22022)
- Wu, Ke See Guo, Han Ying; et al. (84k:83042)
- York, James W., Jr. Energy and momentum of the gravitational field. (See 84j:83001)
- Zhou, Guang Zhao (with Song, Xing Chang) The H_2 sigma-models and self-dual SU(n) Yang-Mills fields in four-dimensional Euclidean space. (84k:81092)
- Zulehner, W. (with Ames, W. F.) Group analysis of a semilinear vector diffusion equation. (84j:35094)
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- De Wilde, Marc (with Lecomte, Pierre B. A.) Some characterizations of differential operators on vector bundles. 84a:58092
- Lecomte, Pierre B. A. See De Wilde, Marc. 84a:58092
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- Witten, Edward Supersymmetry and Morse theory. 84b:58111
- secondary classifications:
- Andersson, Stig I. Vector bundle connections and liftings of partial differential operators. (84k:53029)
- Benci, Vieri (with Fortunato, Donato) The dual method in critical point theory. Multiplicity results for indefinite functionals. (Italian summary) (84g:58025)
- Bengel, Gunter (with Gérard, Raymond) Formal and convergent solutions of singular partial differential equations. (84d:35024)
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- Bessis, N. (with Bessis, G.; Hadering, G.) The perturbed ladder operator method. Perturbed eigenvalues and eigenfunctions from finite difference considerations. (84c:34031)
- Biktshev, R. A. Spectra of pseudodifferential operators over C^* -algebras. (Russian. English summary) (84j:46092)
- Bixon, Mordechai (with Jortner, Joshua) Quantum dynamics of the Hénon-Heiles system. (84k:81006)
- Bourgignon, Jean-Pierre Introduction aux problèmes analytiques posés par le système des équations de Yang-Mills. [Introduction to analytic problems posed by the Yang-Mills system of equations] (See 84i:35006)
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- Carroll, Robert Wayne Remarks on the Gel'fand-Levitan and Marčenko equations. (84f:35122)
- Christodoulou, Demetrios The boost problem. (See 84j:81006)
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- Debbaj, O. Régularité hôlderienne de certains problèmes aux limites elliptiques singuliers. [Hölder regularity of certain singular elliptic boundary value problems] (See 84i:35003)
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- Fulton, William (with MacPherson, Robert D.) ★Категорический подход к изучению пространств с особенностями. (Russian) [Categorical framework for the study of singular spaces] (84m:55001)
- Gaveau, Bernard Intégrales harmoniques non abéliennes. (English summary) [Nonabelian harmonic integrals] (84m:58131)
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- Hadering, G. See Bessis, N.; et al. (84c:34031)
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- Joly, Jean-Luc See Hanouz, B. (See 84m:35001)
- Jortner, Joshua See Bixon, Mordechai. (84c:81006)
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- Kosloff, Ronnie (with Freed, Karl F.) Green's function semiclassical quantization of nonclosed quasiperiodic classical trajectories. (84d:81010)
- Letelier, Patricio S. Solitary waves of matter in general relativity. (84c:83015)
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- Mankin, Romi Über sphärische Wellenfamilien höherer Ordnung bei Huygensschen Differentialgleichungen. [On higher-order spherical wave families for Huygens differential equations] (84i:35096)
- Maslov, V. P. ★Métodos operacionales. (Spanish) [Operator methods] (84d:47001)
- Miwa, Tetsuji (with Jimbo, Michio) Introduction to holonomic quantum fields. (84k:81121)
- Moncrief, Vincent E. Singularities, Cauchy horizons and extensions of a large class of Einstein-Maxwell spacetimes. (See 84j:81006)
- Münster, Gernot The $1/n$ expansion and instantons in CP^{n-1} -models on a sphere. (84c:83043)
- Nahm, Werner The algebraic geometry of multimomenta. (See 84k:00008)
- Palmer, John Products in spin representations. (84f:81050)
- Petkov, Vesselin (with Vogel, Pierre) La représentation de l'application de Poincaré correspondant aux rayons périodiques réfléchissants. (English summary) [Representation of the Poincaré map corresponding to periodic reflecting rays] (84i:58124)
- Pincus, Joel D. (with Xia, Dao Xing) Mosaic and principal function of hyponormal and semi-hyponormal operators. (84d:47030)
- Pusterla, M. See Guerra, Francesco. (84i:81017)
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- Sasaki, Ryu Algebraic construction of static axially symmetric self-dual fields. (See 84h:81064)
- (Shokurov, A. V.) See Fulton, William; et al. (84m:55001)
- (Shokurov, V. V.) See Fulton, William; et al. (84m:55001)
- Tong, Yue Lin Lawrence (with Wang, S. P.) Harmonic forms dual to geodesic cycles in quotients of SU($p, 1$). (84m:32046)
- Torrence, R. J. Calculating Debye potentials from data on \mathbb{R}^3 and \mathbb{K} . (84c:83026)
- Trèves, François ★Approximation and representation of functions and distributions annihilated by a system of complex vector fields. (84k:58008)
- Vasilescu, F.-H. See Putinar, Mihai. (84k:58019)
- Vogel, Pierre See Petkov, Vesselin. (84i:58124)
- Voitsekhoval, S. A. (with Gavrilyuk, I. P.; Makarov, Vladimir Leonidovich) The convergence of difference solutions to the generalized solutions of the Dirichlet problem for the Helmholtz equation in an arbitrary domain. (Russian) (84f:65078)
- Voros, André Zeta functions of the quartic (and homogeneous anharmonic) oscillators. (84i:81027)
- Wang, S. P. See Tong, Yue Lin Lawrence. (84m:32046)

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 Zhang, Gong Qing Morse theory and the partial differential equation. (See 84i:00020)

58Hxx Pseudogroups and general structures on manifolds

58H05 Pseudogroups [See also 22E65.]

- Chacín, Mauricio Orellana Prolongations and formal derivations in the algebra of relations of order one. (Portuguese) (84c:58112)
 Ferreira, E. (with Petitjean, A.) Algèbres de Lie régulières. [Regular Lie algebras] (84g:58111)
 Hsiao, Sherman Hsing-Chung On Cartan-Sternberg's example of the reduction of G-structure. II, III. (84m:58172)
 Kiso, Kazuhiro Infinitesimal automorphisms of g -structures and certain intransitive infinite Lie algebra sheaves. (84c:58113)
 Ngô Van Quê (with Vo Van Tho) Définition des pseudogroupes infinitésimaux de Lie intransitifs. Théorème fondamental de réalisation en dimension deux. [Definition of intransitive infinitesimal Lie pseudogroups. Fundamental theorem for realization in dimension two] (84c:58114)
 Petitjean, A. See Ferreira, E., (84g:58111)
 Rodrigues, Alexandre A. Martins On infinite Lie groups. (French summary) (84c:58082)
 Talyshiev, A. A. Higher-order tangent transformations of partial differential systems. (Russian) (84i:58137)
 Tapia, Joseph Sous-groupoïdes différentiables d'un groupoïde différentiable. (English summary) [Differentiable subgroups of a differentiable groupoid] (84c:58083)
 Tong Van Du'e Un théorème d'équivalence pour les Γ -structures feuilletées. (English summary) [An equivalence theorem for foliated Γ -structures] (84j:58137)
 Vosylus, R. Geometry of systems of differential equations. V. Defining Lie structure. (Russian) (84j:58138a)
 Geometry of systems of differential equations. VI. Local deformability of linear formal structures. (Russian) (84j:58138b)
 Vo Van Tho See Ngô Van Quê, (84c:58114)
 Woufo Kampa, Jean Groupoïde différentiable et G-structure. [Differentiable groupoids and G-structures] (84c:58081)
 secondary classifications:
 Boyom, Michel Nguiffo B. Sur une ex-conjecture de L. Auslander. [On a former conjecture of L. Auslander] (84j:22010)
 Brooks, Robert Some Riemannian and dynamical invariants of foliations. (84j:58096)
 Dhooq, P. F. J. Contact transformations, contact algebras and lifts on a jet bundle. (84j:58006)
 Ibragimov, N. Kh. Noether's identity. (Russian) (84a:49039)
 Magadeev, B. A. (with Sokolov, V. V.) Complete Lie-Bäcklund algebra for the Korteweg-de Vries equation. (Russian) (84h:58138)
 Pommaret, Jean-François Cohomologie de déformation des équations de Lie. [Deformation cohomology of Lie equations] (84f:58119)
 Renault, Jean N. C^* -algebras of groupoids and foliations. (84c:46068)
 Roger, C. R. Foliations with a symplectic or contact transverse structure. (84k:57015)
 Sokolov, V. V. See Magadeev, B. A., (84h:58138)
 Turiel, Francisco Javier Some remarks concerning the transitive geometric structures defined by exterior forms. (Spanish) (84c:58003)

58H10 Cohomology of classifying spaces for pseudogroup structures (Spencer, Gel'fand-Fuks, etc.)

- De Wilde, Marc Cohomologie de Chevalley de l'algèbre de Lie des champs de vecteurs d'une variété associée à la dérivée de Lie des formes. [Chevalley cohomology of the Lie algebra of vector fields of a manifold associated with the Lie derivative of forms] (84c:58242)
 McDuff, Dusa Some canonical cohomology classes on groups of volume preserving diffeomorphisms. (84c:58154)
 Natsume, Hiroko (with Natsume, Toshikazu) On a theorem of Bott and Haefliger. (84c:58243)
 Natsume, Toshikazu See Natsume, Hiroko, (84c:58243)
 Pommaret, Jean-François Cohomologie de déformation des équations de Lie. [Deformation cohomology of Lie equations] (84f:58119)
 Vanzura, Jiri A note on product structures and the Gel'fand-Fuks cohomology. (84c:58244)
 secondary classifications:
 Bonora, L. (with Cotta-Ramusino, P.; Reina, Cesare) Conformal anomaly and cohomology. (84c:81129)
 Cotta-Ramusino, P. See Bonora, L.; et al., (84c:81129)
 Dudnikov, P. I. (with Samborskiĭ, S. M.) Noether boundary value problems for overdetermined systems of partial differential equations. (Russian) (84c:58081)
 Girbau, Joan Sur le théorème de stabilité de feuilletages de Hamilton, Epstein et Rosenberg. (English summary) [On the Hamilton-Epstein-Rosenberg stability theorem for foliations] (84c:57017)
 Haefliger, André (with Sitanantham, K.) A proof that $B\mathbb{T}_1^2$ is 2-connected. (84c:57020)
 Lichnerowicz, André Formes caractéristiques d'un feuilletage et classes de cohomologie de l'algèbre des vecteurs tangents à valeurs dans les formes normales. (English summary) [Characteristic forms of a foliation and cohomology classes of the Lie algebra of the tangent vector fields, with values in the normal forms] (84d:53032)

- Molino, Pierre Cohomologie partielle et équations différentielles. [Partial cohomology and differential equations] (See 84a:53001)
 Pisanelli, Domingos The second Lie theorem in the group $Gh(n, C)$. (84a:22033)
 Reina, Cesare See Bonora, L.; et al., (84c:81129)
 Samborskiĭ, S. M. Boundary value problems for overdetermined systems of partial differential equations. (Russian) (84c:58082)
 See also Dudnikov, P. I., (84c:58081)
 Sitanantham, K. See Haefliger, André, (84c:57020)
 Tsujishita, Toru Continuous cohomology of the Lie algebra of vector fields. (84b:17015)
 On variation bicomplexes associated to differential equations. (84b:58105)

58H15 Deformations of structures [See also 32Gxx, 58G05.]

- Kuranishi, Masatake On a construction of the normal Cartan connections for CR-structures. (See 84i:35006)
 Pommaret, Jean-François La structure de la mécanique des milieux continus. (English summary) [The structure of continuum mechanics] (84m:58173)
 secondary classifications:
 De Wilde, Marc (with Lecomte, Pierre B. A.) Star-produits et déformations formelles associées aux variétés symplectiques exactes. (English summary) [Star-products and formal deformations associated with exact symplectic manifolds] (84g:17014)
 Fialowski, A. Deformations of the Lie algebra of vector fields on the line. (Russian) (84m:17011)
 Gneorhiev, Gh. On deformations in Riemannian category. (84i:53032)
 Grushko, P. Ya. Conjugately transitive structures. (Russian) (84i:53034)
 Jost, Jürgen (with Yau, Shing Tung) Harmonic mappings and Kähler manifolds. (84d:58022)
 Lecomte, Pierre B. A. See De Wilde, Marc, (84g:17014)
 Lichnerowicz, André Deformations of algebras associated with a symplectic manifold. (84c:58078)
 Nicolescu, Liviu Champs principaux dans l'algèbre de déformation. [Principal fields in the deformation algebra] (84g:53051)
 Sternheimer, D. Deformation theory applied to quantization and group representations. (84k:58100)
 Vosylus, R. Geometry of systems of differential equations. III. Intrinsic formalization of differential-geometric structures. (Russian) (84j:58013a)
 Geometry of systems of differential equations. IV. The Lie-Bäcklund determining system. (Russian) (84j:58013b)
 Yau, Shing Tung See Jost, Jürgen, (84d:58022)

58H99 None of the above, but in this section

- Hermann, Robert Infeld-Hull factorization, Galois-Picard-Vessiot theory for differential operators. (84m:58174)
 Kosmann-Schwarzbach, Yvette Dérivées de Lie des morphismes de fibrés. [Lie derivatives of bundle morphisms] (84d:58088)
 secondary classifications:
 Abe, Kōjun Pursell-Shanks type theorem for orbit spaces of G-manifolds. (84g:57033)
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